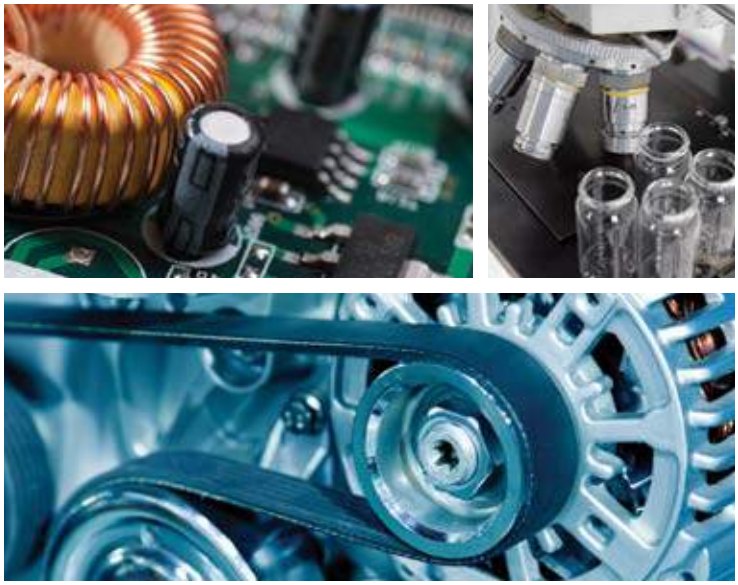
FRONTIER ELECTRONICS

MAGNETIC COMPONENTS



Air Coils
Power Inductors
Tunable Inductors
Common Mode Chokes
Switching Transformers & PFC Chokes
Wire Wound & Thin Film Chip Inductors
RoHS Compliant
Halogen-Free

DESIGNING THE CUTTING EDGE

THE NEW FRONTIER OF PASSIVE COMPONENTS

— Designing the Cutting Edge —

About Frontier Electronics

Frontier Electronics was formed in 1972 as a leading designer and manufacturer of magnetic products. Over the years we have expanded our product offerings to include MLCCs, IPCs and Diodes while continuing to expand our lines of inductors, coils and transformers.

We offer a vast array of industry standard products supported by our expansive manufacturing resources worldwide. Furthermore, Frontier has proven successful in the design and manufacturing of custom products to help our customers succeed.

Frontier's core values:

- Competitive pricing and product innovations
- Continuous improvement programs
- On-time delivery backed by over 30 years of manufacturing and logistics support teams
- Rapid response customer service
- Extensive technical support with an emphasis on design support

Frontier Electronics, Corp.
Classified by the US Dept. of Labor as a Disadvantaged Minority Women Business Enterprise.
Geographically diversified manufacturing locations (U.S., China, Taiwan)
ISO 9001:2008 and ISO TS 16949 certification

Frontier Electronics, Corp. is headquartered at:
Frontier Electronics, Corporation
667 East Cochran Street
Simi Valley, CA 93065

With global manufacturing, our products are produced in the United States, China and Taiwan.

To learn about our new product offerings, to request a quote, to request samples or for any additional information you may need, please contact us:

Frontier's website: **www.frontierusa.com**
General email: **frontiersales@frontierusa.com**
Telephone: 805-522-9998, 800-929-9888
Fax: 805-522-9989

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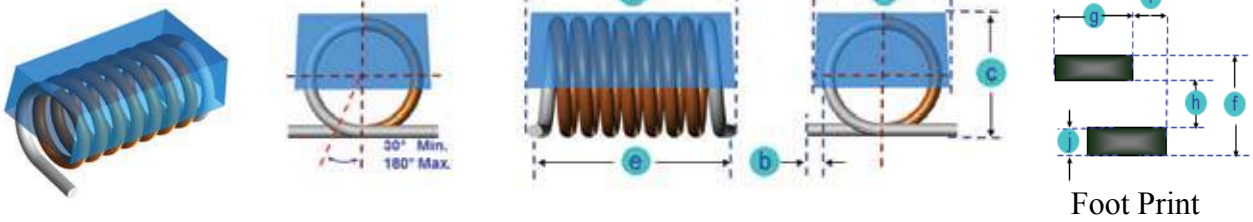
SMD AIR WOUND COILS

A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	j
291A	3.05(0.120)	0.58(0.023)	3.18(0.125)	3.68(0.145)	2.92(0.115)	4.19(0.165)	3.30(0.130)	1.65(0.065)	2.79(0.110)	1.27 (0.05)
Tol.	Max.	±0.38(0.015)	Max.	Max.	±0.25(0.010)	Typ.	Typ.	Typ.	Typ.	Typ.
291B	3.05(0.120)	0.58(0.023)	3.18(0.125)	6.86(0.270)	5.84(0.230)	7.24 (0.285)	3.30(0.130)	4.70 (0.185)	2.79(0.110)	1.27 (0.05)
Tol.	Max.	±0.38 (0.014)	Max.	Max.	±0.25(0.010)	Typ.	Typ.	Typ.	Typ.	Typ.
292AR	1.42 (0.055)	0.89 (0.035)	1.37(0.053)	2.21(0.087)	1.83 (0.072)	2.62 (0.103)	2.46(0.096)	1.04 (0.04)	1.02 (0.04)	0.79(0.031)
Tol.	±0.13(0.005)	±0.25(0.009)	±0.15(0.005)	±0.25(0.009)	±0.25(0.009)	Typ.	Typ.	Typ.	Typ.	Typ.
292BR	1.42 (0.055)	0.89 (0.035)	1.37 (0.053)	4.04 (0.159)	3.66 (0.144)	4.45 (0.175)	2.46(0.096)	2.87 (0.112)	1.02 (0.04)	0.79(0.031)
Tol.	±0.13 (0.005)	±0.25(0.009)	±0.15 (0.005)	±0.3 (0.011)	±0.25(0.009)	Typ.	Typ.	Typ.	Typ.	Typ.
293A	3.81(0.150)	1.53(0.060)	4.2(0.165)	4.83(0.190)	4.32(0.170)	5.8(0.228)	5.16(0.203)	2.85 (0.112)	2.62(0.103)	1.48(0.058)
Tol.	Max.	±0.39 (0.015)	Max.	Max.	±0.39 (0.015)	Typ.	Typ.	Typ.	Typ.	Typ.
294A	6.35(0.250)	1.02(0.040)	5.9(0.232)	10.55 (0.415)	7.98 (0.314)	10(0.394)	4.7(0.185)	5.95 (0.234)	2.42 (0.095)	2.04(0.080)
Tol.	Max.	±0.39 (0.015)	Max.	Max.	±0.51(0.02)	Typ.	Typ.	Typ.	Typ.	Typ.

B. Mechanical Drawing:



Foot Print

C. General Information:

1. Series: 29***-xx_, "29***" = Series, "xx" = dash number, "_" = Inductance Tolerance.
2. Tolerance " _ ": G: ± 2%, J: ± 5%, K: ± 10%.
3. Small and lightweight surface mounting type
4. Maximum Temperature Rise: 15°C (when measured at 25°C ambient).
5. High Q at high frequency and High self-resonance frequency
6. Inductance & Q measured with HP4291B Impedance Analyzer with HP16193 test fixture
7. SRF measured using the HP8753E Network Analyzer or equivalent.
8. DCR measured using the Chroma 16502 or equivalent
9. Operating temperature: -40ºC to +125ºC
10. Storage temp. : -40ºC to +85ºC.
11. MSL: Level 1.
12. Inductance and Current range:
    a. 291A/B: From 2.5 nH (4.0A) to 43.0 nH (4.0A)
    b. 292AR/BR: From 1.65 nH (1600 mA) to 12.55 nH (1600 mA)
    c. 293A: From 22 nH (3000 mA) to 120 nH (1500 mA)
    d. 294A: From 90 nH (3500 mA) to 538 nH (2000 mA)
13. SRF:
    a. 291A/B: From 1200 MHz To 12500 MHz
    b. 292AR/BR: From 4600 MHz to 10000 MHz
    c. 293A: From 1100 MHz to 3200 MHz
    d. 294A: From 490 MHz to 1140 MHz

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. RF Filters

E. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

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SMD AIR WOUND COILS
291A-SERIES AND 291B-SERIES

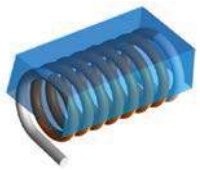
A. Electrical Specifications:

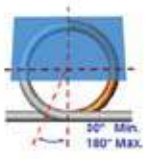
P/N	Turns	L (nH)	Tol.	Q Min.	Test Freq. (MHz)	DCR max. (mΩ)	SRF min. (GHz)	I DC max. (A)
291A-01_	1	2.5	K	145	150	1.1	12.5	4
291A-02_	2	5.0	K, J	140	150	1.8	6.5	4
291A-03_	3	8.0	J, G	140	150	2.6	5.0	4
291A-04_	4	12.5	J, G	137	150	3.4	3.3	4
291A-05_	5	18.5	J, G	132	150	3.9	2.5	4
291B-06_	6	17.5	J, G	100	150	4.5	2.2	4
291B-07_	7	22.0	J, G	102	150	5.2	2.1	4
291B-08_	8	28.0	J, G	105	150	6.0	1.8	4
291B-09_	9	35.5	J, G	112	150	6.8	1.5	4
291B-10_	10	43.0	J, G	106	150	7.9	1.2	4

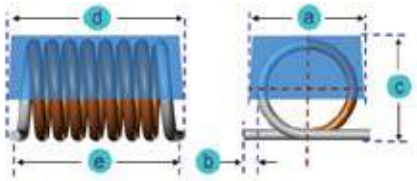
Note: 291A / 291B-xx_, "291A / 291B" = P/N, "xx" = Dash number, "_" = Tolerance, K=± 10%, J= ±5%, G= ± 2%.

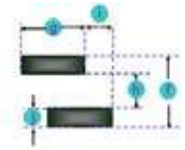
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	j
291A	3.05(0.120)	0.58(0.023)	3.18(0.125)	3.68(0.145)	2.92(0.115)	4.19(0.165)	3.30(0.130)	1.65(0.065)	2.79(0.110)	1.27 (0.05)
Tol.	Max.	±0.38(0.015)	Max.	Max.	±0.25(0.010)	Typ.	Typ.	Typ.	Typ.	Typ.
291B	3.05(0.120)	0.58(0.023)	3.18(0.125)	6.86(0.270)	5.84(0.230)	7.24(0.285)	3.30(0.130)	4.70(0.185)	2.79(0.110)	1.27 (0.05)
Tol.	Max.	±0.38 (0.014)	Max.	Max.	±0.25(0.010)	Typ.	Typ.	Typ.	Typ.	Typ.







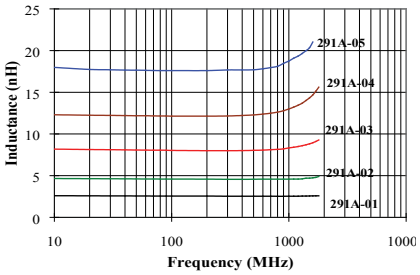


Foot Print

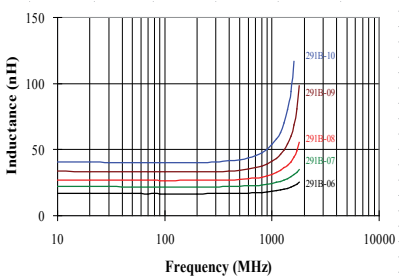
C. Characteristics Curve:

Inductance vs. Frequency

291A Series

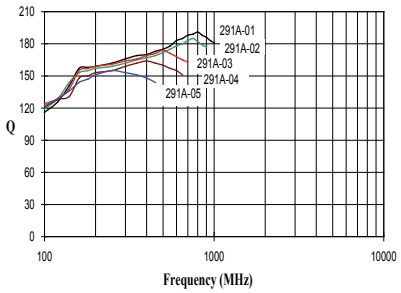


291B Series

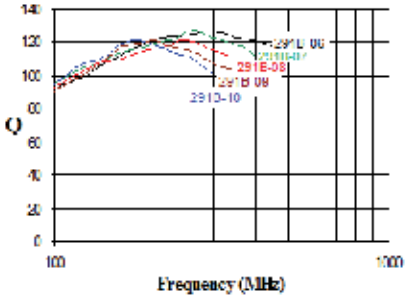


Q vs. Frequency

291A Series



291B Series



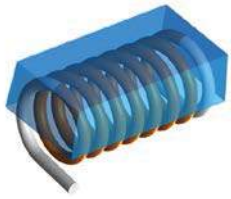
A. Electrical Specifications:

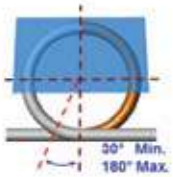
P/N	Turns	L @100MHz (nH)	Tol.	Q Min.	Test Freq. (MHz)	DCR max. (mΩ)	SRF min. (GHz)	I DC max. (A)
292AR-02_	2	1.65	K	100	800	4.0	10.0	1.6
292AR-03	3	2.55	K, J	100	800	5.0	8.2	1.6
292AR-04_	4	3.85	K, J, G	100	800	6.0	7.5	1.6
292AR-05_	5	5.45	J, G	100	800	8.0	7.0	1.6
292BR-06_	6	5.60	J, G	100	800	9.0	6.5	1.6
292BR-07_	7	7.15	J, G	100	800	10.0	6.0	1.6
292BR-08_	8	8.80	J, G	100	800	12.0	6.0	1.6
292BR-09_	9	9.85	J, G	100	800	13.0	5.2	1.6
292BR-10_	10	12.55	J, G	100	800	14.0	4.6	1.6

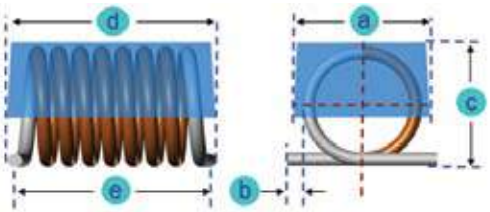
Note: 292AR / 292BR-xx_, "292AR / 292BR" = P/N, "xx" = Dash number, "_" = Tolerance, K= ± 10%, J= ±5%, G= ± 2%.

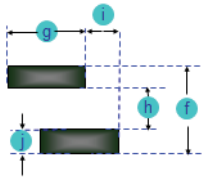
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	j
292AR	1.42(0.055)	0.89(0.035)	1.37(0.053)	2.21(0.087)	1.83(0.072)	2.62(0.103)	2.46(0.096)	1.04 (0.04)	1.02 (0.04)	0.79(0.031)
Tol.	±0.13(0.005)	±0.25(0.009)	±0.15(0.005)	±0.25(0.009)	±0.25(0.009)	Typ.	Typ.	Typ.	Typ.	Typ.
292BR	1.42 (0.055)	0.89 (0.035)	1.37 (0.053)	4.04 (0.159)	3.66 (0.144)	4.45(0.175)	2.46(0.096)	2.87(0.112)	1.02 (0.04)	0.79(0.031)
Tol.	±0.13 (0.005)	±0.25(0.009)	±0.15 (0.005)	±0.3 (0.011)	±0.25(0.009)	Typ.	Typ.	Typ.	Typ.	Typ.









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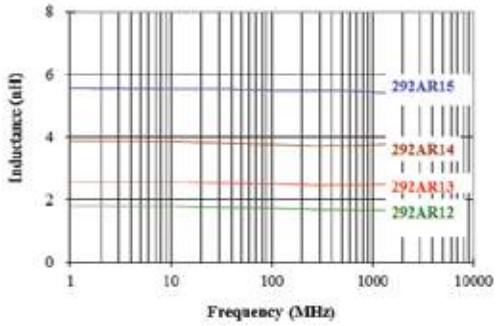
C. Characteristics Curve:

Inductance vs. Frequency

292AR



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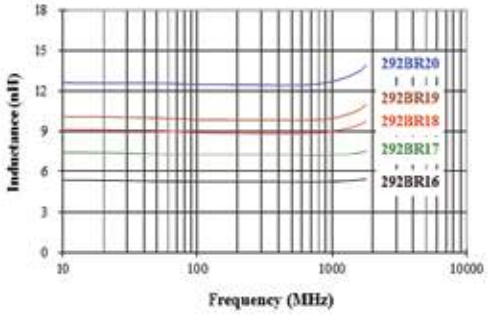
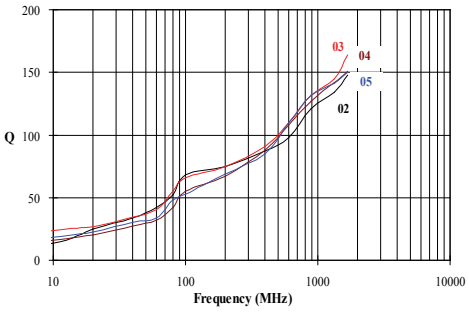
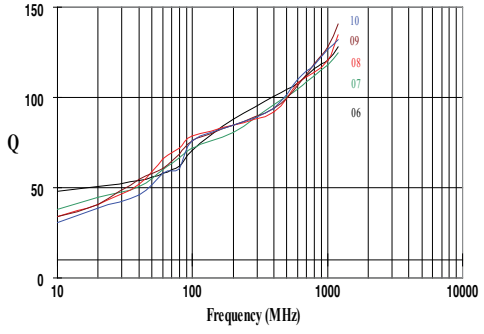


Q vs. Frequency

292AR



292BR



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SMD AIR WOUND COILS
293A-SERIES

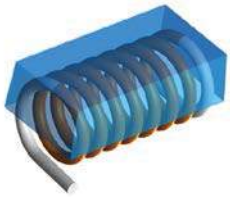
A. Electrical Specifications:

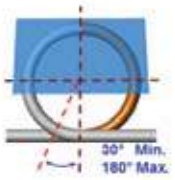
P/N	L (nH)	Tol.	Q Min.	Q Typ.	Test Freq. (MHz)	DCR max. (mΩ)	SRF min. (GHz)	I DC max. (A)
293A-22_	22	J, G	100	135	150	4.2	3.2	3.0
293A-27_	27	J, G	100	135	150	4.0	2.7	3.5
293A-33_	33	J, G	100	130	150	4.8	2.5	3.0
293A-39_	39	J, G	100	135	150	4.4	2.1	3.0
293A-47_	47	J, G	100	135	150	5.6	2.1	3.0
293A-56_	56	J, G	100	125	150	6.2	1.5	3.0
293A-68_	68	J, G	100	120	150	8.2	1.5	2.5
293A-82_	82	J, G	100	120	150	9.4	1.3	2.5
293A-100_	100	J, G	100	115	150	12.3	1.2	1.7
293A-120_	120	J, G	100	125	150	17.3	1.1	1.5

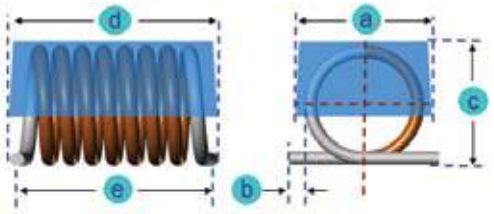
Note: 293A-xxx_, "293A" = P/N, "xxx" = Dash number, "_" = Tolerance, J= ±5%, G= ± 2%.

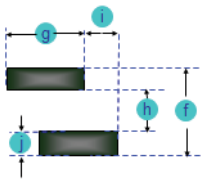
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	j
293A	3.81(0.150)	1.53(0.060)	4.2(0.165)	4.83(0.190)	4.32(0.170)	5.8(0.228)	5.16(0.203)	2.85(0.112)	2.62(0.103)	1.48(0.058)
Tol.	Max.	±0.39(0.015)	Max.	Max.	±0.39(0.015)	Typ.	Typ.	Typ.	Typ.	Typ.





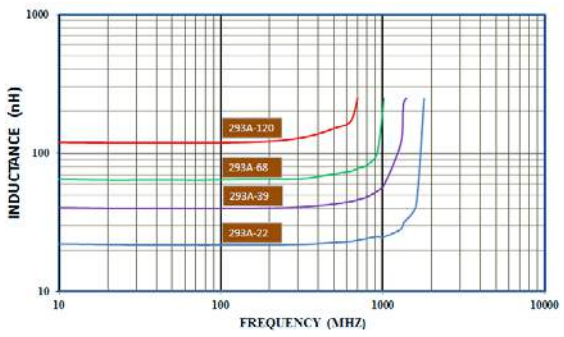




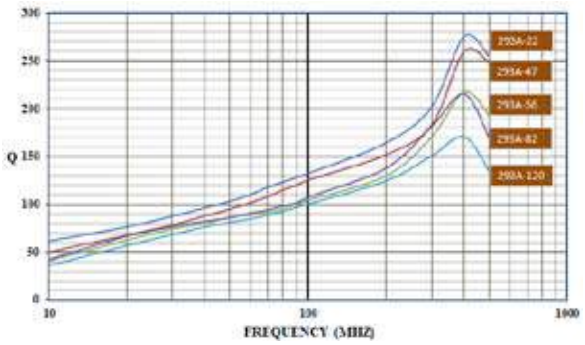
Foot Print

C. Characteristics Curve:

Inductance vs. Frequency



Q vs. Frequency



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SMD AIR WOUND COILS
294A-SERIES

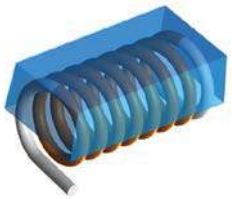
A. Electrical Specifications:

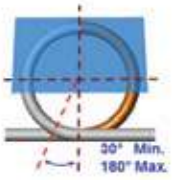
P/N	Turns	L (nH)	Tol.	Q Min.	Q Typ.	Test Freq. (MHz)	DCR Max. (mΩ)	SRF Min. (MHz)	I DC Max. (A)
294A-09_	9	90	J, G	95	114	50	15	1140	3.5
294A-10_	10	111	J, G	87	104	50	15	1020	3.5
294A-11_	11	130	J, G	87	104	50	20	900	3.0
294A-12_	12	169	J, G	95	114	50	25	875	3.0
294A-13_	13	206	J, G	95	114	50	30	800	3.0
294A-14_	14	222	J, G	92	110	50	35	730	3.0
294A-15_	15	246	J, G	95	114	50	35	685	3.0
294A-16_	16	307	J, G	95	114	50	35	660	3.0
294A-17_	17	380	J, G	95	114	50	50	590	2.5
294A-18_	18	422	J, G	95	114	50	60	540	2.5
294A-19_	19	491	J, G	95	114	50	65	535	2.0
294A-20_	20	538	J, G	87	104	50	90	490	2.0

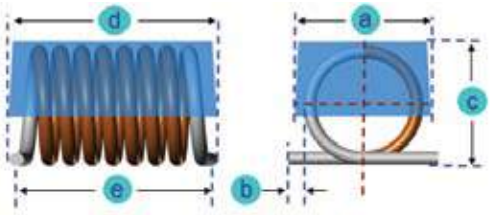
Note: 294A-xx_, "294A" = P/N, "xx" = Dash number, "_" = Tolerance, J= ±5%, G= ± 2%.

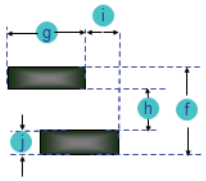
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	j
294A	6.35(0.250)	1.02(0.040)	5.9(0.232)	10.55(0.415)	7.98(0.314)	10(0.394)	4.7(0.185)	5.95(0.234)	2.42(0.095)	2.04(0.080)
Tol.	Max.	±0.39(0.015)	Max.	Max.	±0.51(0.02)	Typ.	Typ.	Typ.	Typ.	Typ.





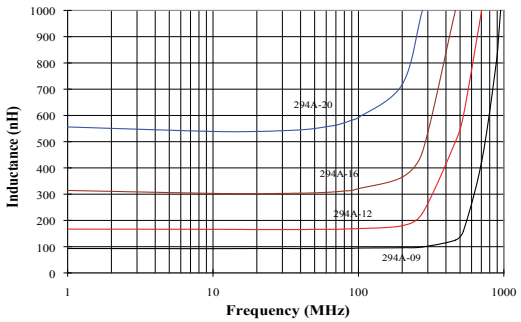




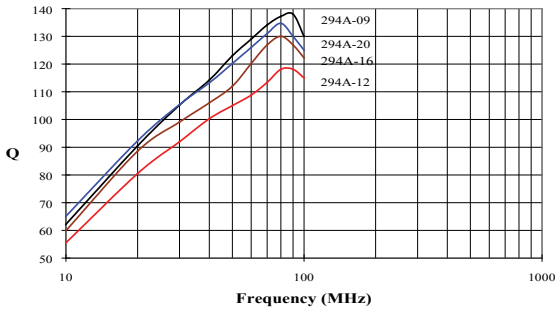
Foot Print

C. Characteristics Curve:

Inductance vs. Frequency



Q vs. Frequency



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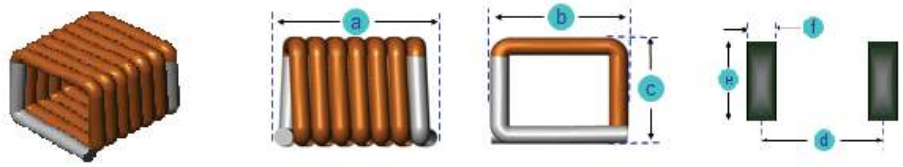
SMD SQUARE AIR WOUND COILS
LSQ****A-SERIES

A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f
LSQ0806A	1.295 ~ 2.591 (0.051) ~ (0.102)	1.829 (0.072)	1.397 (0.055)	0.962 ~ 2.290 (0.038) ~ (0.090)	2.6 (0.102)	0.51 (0.02)
Tol.	±0.102 ~ ±0.152 (0.004) ~ (0.006)	±0.254 (0.01)	±0.102 (0.004)	Typ.	Typ.	Typ.
LSQ0807A	1.295 ~ 2.591 (0.051) ~ (0.102)	1.829 (0.072)	1.524 (0.060)	1.02 ~ 2.29 (0.040) ~ (0.090)	2.600 (0.102)	0.510 (0.02)
Tol.	±0.102 ~ ±0.152 (0.004) ~ (0.006)	±0.254 (0.010)	±0.254 (0.010)	Typ.	Typ.	Typ.
LSQ0908A	1.473 ~ 2.972 (0.058) ~ (0.117)	2.134 (0.084)	1.829 (0.072)	1.12 ~ 2.57 (0.044) ~ (0.101)	2.8 (0.11)	0.64 (0.025)
Tol.	±0.152 (0.006)	±0.152 (0.006)	±0.152 (0.006)	Max.	Typ	Typ

B. Mechanical Drawing:



C. General Information:

1. P/N: LSQ****A-xxx_, “LSQ****A” = Series, “xxx” = Inductance, “_” = Tolerance.
2. Tolerance “ _ ”: K: ± 10%, J: ± 5%
3. Test Frequency: 400MHz, 0.1Vrms.
4. Small and lightweight surface mounting type
5. High Q at high frequency
6. High self-resonance frequency
7. Maximum Temperature Rise: 15°C (when measured at 25°C ambient).
8. Inductance & Q measured with HP4291B Impedance Analyzer with HP16193 test fixture
9. SRF measured using the HP8753E Network Analyzer or equivalent.
10. DCR measured using the Chroma 16502 or equivalent.
11. Operating temperature: -40ºC to +125ºC
12. Storage temp. : -40ºC to +85ºC.
13. MSL: Level 1.
14. Inductance and Current range:
    a. LSQ0806A: From 5.5 nH (2900 mA) to 19.4 nH (2900 mA)
    b. LSQ0807A: From 6.9 nH (2700 mA) to 22.0 nH (2700 mA)
    c. LSQ0908A: From 8.1 nH (4400 mA) to 27.3 nH (4400 mA)
15. SRF:
    a. LSQ0806A: From 4000 MHz to 4900 MHz
    b. LSQ0807A: From 3500 MHz to 4600 MHz
    c. LSQ0908A: From 3200 MHz to 5200 MHz

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios)
6. RF Filters

E. Supplementary Information:

1. Packaging Information (See appendix A)
2. Solder Profile (See appendix B)

SMD SQUARE AIR WOUND COILS
LSQ0806A-SERIES

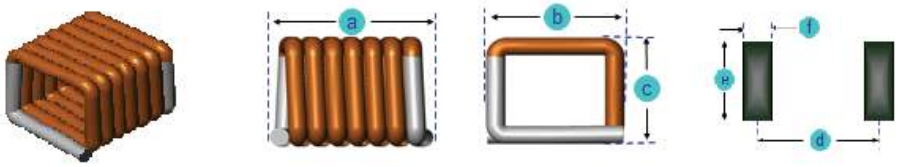
A. Electrical Specifications:

P/N	Turns	L (nH)	Tol.	Q Min.	Test Freq. (MHz)	DCR Max. (mΩ)	SRF Typ. (GHz)	I DC Max. (A)
LSQ0806A-5N5_	3	5.5	J, K	60	400	3.4	4.9	2.9
LSQ0806A-6N0_	3	6.0	J, K	64	400	6.0	5.2	2.9
LSQ0806A-8N9_	4	8.9	J, K	90	400	7.0	4.3	2.9
LSQ0806A-12N_	5	12.3	J, K	90	400	8.0	4.8	2.9
LSQ0806A-16N_	6	15.7	J, K	90	400	9.0	4.4	2.9
LSQ0806A-19N_	7	19.4	J, K	90	400	10.0	4.0	2.9

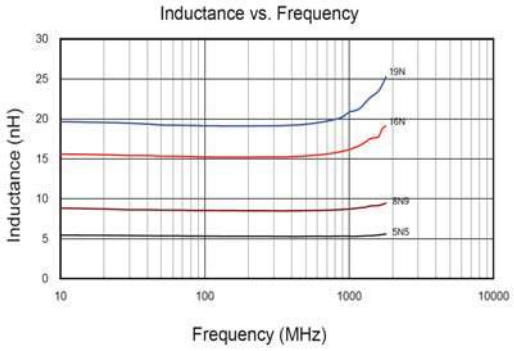
Note: LSQ0806A-xxx_, "LSQ0806A" = P/N, "xxx" = Inductance, "_" = Tolerance, K: ± 10%, J: ± 5%.

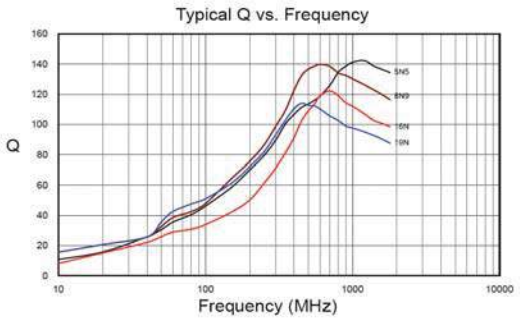
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f
LSQ0806A-5N5	1.346(0.053)	1.829(0.072)	1.397(0.055)	0.962(0.038)	2.6(0.102)	0.51(0.02)
Tol.	±0.102(0.004)	±0.254(0.01)	±0.102(0.004)	Typ.	Typ.	Typ.
LSQ0806A-6N0	1.295(0.051)	1.829(0.072)	1.397(0.055)	1.020(0.040)	2.6(0.102)	0.51(0.02)
Tol.	±0.102(0.004)	±0.254(0.01)	±0.102(0.004)	Typ.	Typ.	Typ.
LSQ0806A-8N9	1.626(0.064)	1.829(0.072)	1.397(0.055)	1.320(0.052)	2.6(0.102)	0.51(0.02)
Tol.	±0.152(0.006)	±0.254(0.01)	±0.102(0.004)	Typ.	Typ.	Typ.
LSQ0806A-12N	1.93(0.076)	1.829(0.072)	1.397(0.055)	1.630(0.064)	2.6(0.102)	0.51(0.02)
Tol.	±0.152(0.006)	±0.254(0.01)	±0.102(0.004)	Typ.	Typ.	Typ.
LSQ0806A-16N	2.286(0.09)	1.829(0.072)	1.397(0.055)	1.960(0.077)	2.6(0.102)	0.51(0.02)
Tol.	±0.152(0.006)	±0.254(0.01)	±0.102(0.004)	Typ.	Typ.	Typ.
LSQ0806A-19N	2.591(0.102)	1.829(0.072)	1.397(0.055)	2.290(0.090)	2.6(0.102)	0.51(0.02)
Tol.	±0.152(0.006)	±0.254(0.01)	±0.102(0.004)	Typ.	Typ.	Typ.



C. Characteristics Curve:





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SMD SQUARE AIR WOUND COILS
LSQ0807A-SERIES

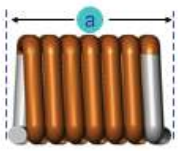
A. Electrical Specifications:

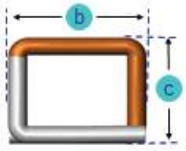
P/N	Turns	L (nH)	Tol.	Q Min.	Test Freq. MHz	DCR Max. (mΩ)	SRF Typ. (GHz)	I DC Max. (A)
LSQ0807A-6N9_	3	6.9	J, K	100	400	6.0	4.6	2.7
LSQ0807A-10N_	4	10.2	J, K	100	400	7.0	4.0	2.7
LSQ0807A-11N_	4	11.2	J, K	90	400	6.3	3.6	2.7
LSQ0807A-14N_	5	13.7	J, K	100	400	8.0	4.3	2.7
LSQ0807A-17N_	6	17.0	J, K	100	400	9.0	4.0	2.7
LSQ0807A-22N_	7	22.0	J, K	100	400	10.0	3.5	2.7

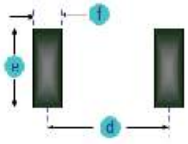
Note: LSQ0807A-xxx_, "LSQ0807A" = P/N, "xxx" = Inductance, "_" = Tolerance, K: ± 10%, J: ± 5%.

B. Dimensions: mm (Inch)

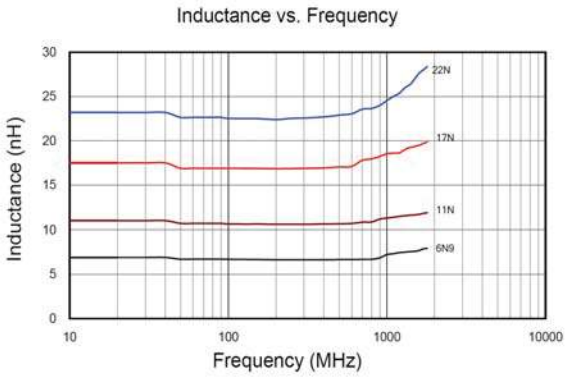
Series	a	b	c	d	e	f
LSQ0807A-6N9	1.295(0.051)	1.829(0.072)	1.524(0.060)	1.02(0.040)	2.600(0.102)	0.510(0.02)
Tol.	±0.102(0.004)	±0.254(0.010)	±0.254(0.010)	Typ.	Typ.	Typ.
LSQ0807A-10N	1.626(0.064)	1.829(0.072)	1.524(0.060)	1.32(0.052)	2.600(0.102)	0.510(0.02)
Tol.	±0.152(0.006)	±0.254(0.010)	±0.254(0.010)	Typ.	Typ.	Typ.
LSQ0807A-11N	1.549(0.061)	1.829(0.072)	1.524(0.060)	1.24(0.049)	2.600(0.102)	0.510(0.02)
Tol.	±0.152(0.006)	±0.254(0.010)	±0.254(0.010)	Typ.	Typ.	Typ.
LSQ0807A-14N	1.930(0.076)	1.829(0.072)	1.524(0.060)	1.63(0.064)	2.600(0.102)	0.510(0.02)
Tol.	±0.152(0.006)	±0.254(0.010)	±0.254(0.010)	Typ.	Typ.	Typ.
LSQ0807A-17N	2.286(0.090)	1.829(0.072)	1.524(0.060)	1.96(0.077)	2.600(0.102)	0.510(0.02)
Tol.	±0.152(0.006)	±0.254(0.010)	±0.254(0.010)	Typ.	Typ.	Typ.
LSQ0807A-22N	2.591(0.102)	1.829(0.072)	1.524(0.060)	2.29(0.090)	2.600(0.102)	0.510(0.02)
Tol.	±0.152(0.006)	±0.254(0.010)	±0.254(0.010)	Typ.	Typ.	Typ.

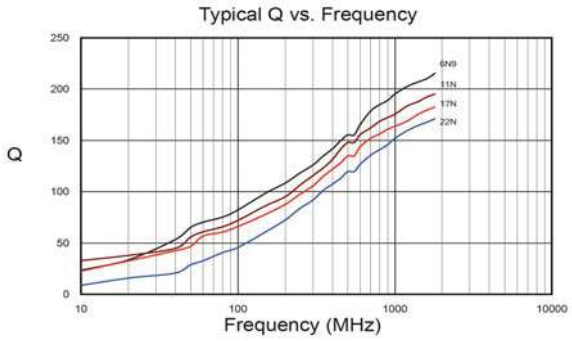






C. Characteristics Curve:





SMD SQUARE AIR WOUND COILS
LSQ0908A-SERIES

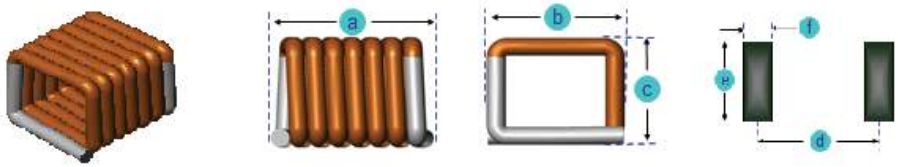
A. Electrical Specifications:

P/N	Turns	L (nH)	Tol.	Q Min.	Test Freq. (MHz)	DCR Max. (mΩ)	SRF Typ. (GHz)	I DC Max. (A)
LSQ0908A-8N1_	3	8.1	J, K	130	400	6.0	5.2	4.4
LSQ0908A-12N_	4	12.1	J, K	130	400	7.0	4.3	4.4
LSQ0908A-15N_	4	14.7	J, K	90	400	7.2	3.0	4.4
LSQ0908A-17N_	5	16.6	J, K	130	400	8.0	3.4	4.4
LSQ0908A-22N_	6	21.5	J, K	130	400	9.0	3.7	4.4
LSQ0908A-23N_	6	23.0	J, K	130	400	10.0	2.6	4.4
LSQ0908A-25N_	7	25.0	J, K	130	400	10.0	2.5	4.4
LSQ0908A-27N_	7	27.3	J, K	130	400	10.0	3.2	4.4

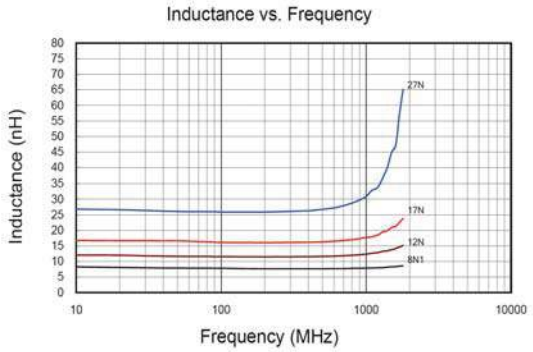
Note: LSQ0908A-xxx_, "LSQ0908A" = P/N, "xxx" = Inductance, "_" = Tolerance, K: ± 10%, J: ± 5%**.**

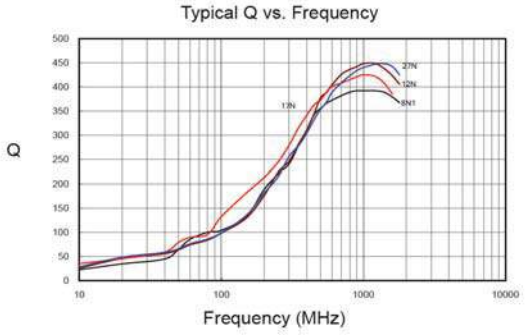
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f
LSQ0908A-8N1	1.473(0.058)	2.134(0.084)	1.829(0.072)	1.12 (0.044)	2.8(0.11)	0.64(0.025)
Tol.	±0.152(0.006)	±0.152(0.006)	±0.152(0.006)	Max.	Typ	Typ
LSQ0908A-12N	1.854(0.073)	2.134(0.084)	1.829(0.072)	1.45 (0.057)	2.8(0.11)	0.64(0.025)
Tol.	±0.152(0.006)	±0.152(0.006)	±0.152(0.006)	Max.	Typ	Typ
LSQ0908A-15N	1.549(0.061)	2.134(0.084)	1.829(0.072)	1.24 (0.049)	2.8(0.11)	0.64(0.025)
Tol.	±0.152(0.006)	±0.152(0.006)	±0.152(0.006)	Max.	Typ	Typ
LSQ0908A-17N	2.210(0.087)	2.134(0.084)	1.829(0.072)	1.83 (0.072)	2.8(0.11)	0.64(0.025)
Tol.	±0.152(0.006)	±0.152(0.006)	±0.152(0.006)	Max.	Typ	Typ
LSQ0908A-22N	2.565(0.101)	2.134(0.084)	1.829(0.072)	2.18 (0.086)	2.8(0.11)	0.64(0.025)
Tol.	±0.152(0.006)	±0.152(0.006)	±0.152(0.006)	Max.	Typ	Typ
LSQ0908A-23N	2.235(0.088)	2.134(0.084)	1.829(0.072)	1.9 (0.075)	2.8(0.11)	0.64(0.025)
Tol.	±0.152(0.006)	±0.152(0.006)	±0.152(0.006)	Max.	Typ	Typ
LSQ0908A-25N	2.972(0.117)	2.134(0.084)	1.829(0.072)	2.57 (0.101)	2.8(0.11)	0.64(0.025)
Tol.	±0.152(0.006)	±0.152(0.006)	±0.152(0.006)	Max.	Typ	Typ
LSQ0908A-27N	2.972(0.117)	2.134(0.084)	1.829(0.072)	2.57 (0.101)	2.8(0.11)	0.64(0.025)
Tol.	±0.152(0.006)	±0.152(0.006)	±0.152(0.006)	Max.	Typ	Typ



C. Characteristics Curve:





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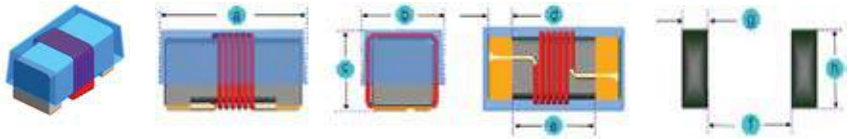
A. Electrical Specifications:

1. 0402CP (Ceramic) Series: From 1.0 nH (1360mA) to 120 nH (30 mA), SRF: From 1100 MHz to 12900 MHz
2. 0603CP (Ceramic) Series: From 1.6 nH (700mA) to 390 nH (100mA), SRF: From 822 MHz to 12500 MHz
3. 0805CP (Ceramic) Series: From 2.2 nH (600mA) to 820 nH (180mA), SRF From 188 MHz to 7900 MHz
4. 1008CP (Ceramic) Series: From 10 nH (1000mA) to 4,700 nH (260mA), SRF: From 90 MHz to 4100 MHz
5. 1210CP (Ceramic) Series: From 4.7 nH (600 mA) to 3300 nH (50 mA), SRF: From140 MHz to 6000 MHz
6. 1812CP (Ceramic) Series: From 82 nH (1500 mA) to 1200 nH (480 mA), SRF: From 230 MHz to 860 MHz
7. 0603LS (Ferrite) Series: From 47 nH (1800mA) to 10000 nH (400 mA), SRF: From 32 MHz to 2000 MHz
8. 0805F (Ferrite) Series: From 0.078 uH (2000mA) to 27 uH (120mA), SRF: From 11 MHz to 1440 MHz
9. 1008F (Ferrite) Series: From 0.047 uH (650 mA) to 22.0 uH (120 mA), SRF: From 10 MHz to 1800 MHz
10. 1206SDFC (Ferrite) Series: From 0.12 uH (970 mA) to 100.0 uH (80 mA), SRF: From 7 MHz to 250 MHz
11. 1210SDF (Ferrite) Series: From 1.0uH (1000 mA) to 560.0 uH (60 mA), SRF: From 3.4 MHz to 96 MHz
12. 1812SDF (Ferrite) Series: From 1.0uH (1080 mA) to 470.0 uH (90 mA), SRF: From 3.0 MHz to 100 MHz
13. 2220SDF (Ferrite) Series: From 0.12uH (6000 mA) to 10000.0 uH (50 mA), SRF: From 0.50 MHz to 450 MHz

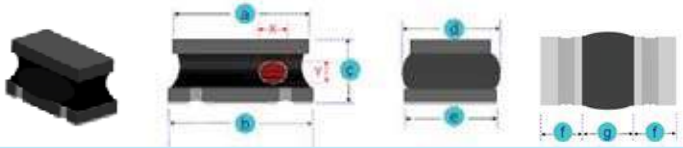
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	X	Y	Type
0402CP	1.19(0.047)	0.64(0.025)	0.66(0.026)	0.23(0.009)	0.56(0.022)	0.46(0.018)	0.36(0.014)	0.66(0.026)	N/A	N/A	1
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	N/A	N/A	
0603CP	1.70(0.067)	1.02(0.040)	0.92(0.036)	0.33(0.013)	0.86(0.034)	0.64(0.025)	0.64(0.025)	1.02(0.040)	N/A	N/A	1
Tol.	± 0.1(0.004)	± 0.1(0.004)	± 0.1(0.004)	Typ.	Typ.	Typ.	Typ.	Typ.	N/A	N/A	
0805CP	2.29 (0.090)	1.73 (0.068)	1.52(0.060)	0.51(0.020)	1.02(0.040)	0.76 (0.030)	1.02 (0.040)	1.78(0.070)	N/A	N/A	1
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	N/A	N/A	
1008CP	2.92 (0.115)	2.79 (0.110)	2.03 (0.080)	0.51(0.020)	1.52(0.060)	1.27 (0.050)	1.27(0.050)	2.54(0.100)	N/A	N/A	1
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	N/A	N/A	
1210CP	3.42(0.135)	2.8 (0.110)	2.3(0.091)	N/A	N/A	2.3(0.091)	1.02(0.040)	2.2(0.087)	N/A	N/A	1
Tol.	Max.	Max.	Max.	N/A	N/A	Typ.	Typ.	Typ.	N/A	N/A	
1812CP	4.95(0.195)	3.8(0.150)	3.43(0.135)	N/A	N/A	3.0(0.118)	1.14(0.045)	3.05(0.120)	N/A	N/A	1
Tol.	Max.	Max.	Max.	N/A	N/A	Typ.	Typ.	Typ.	N/A	N/A	
0603LS	1.80(0.07)	1.22(0.05)	1.10(0.04)	0.33(0.013)	0.86(0.034)	0.64(0.02)	0.64(0.02)	1.02(0.04)	N/A	N/A	1
Tol.	Max.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	N/A	N/A	
0805F	2.29(0.090)	1.91(0.075)	1.6(0.063)	0.51(0.020)	1.02(0.040)	0.76(0.030)	1.02(0.040)	1.78(0.070)	N/A	N/A	1
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	N/A	N/A	
1008F	2.92(0.115)	2.79(0.110)	2.03(0.080)	0.51(0.020)	1.52(0.060)	1.27(0.050)	1.27(0.050)	2.54(0.100)	N/A	N/A	1
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	N/A	N/A	
1206SDFC	2.5(0.098)	3.2(0.126)	1.8(0.071)	1.6(0.063)	1.6(0.063)	0.9(0.035)	1.3(0.051)	N/A	< ½ of A	N/A	2
Tol.	Ref.	± 0.30(0.012)	± 0.25(0.010)	± 0.35(0.014)	± 0.20(0.008)	± 0.30(0.012)	± 0.20(0.008)	N/A			
1210SDF	3.2(0.126)	2.5(0.098)	2.0(0.079)	1.3(0.051)	0.9(0.035)	2.3(0.091)	N/A	N/A	N/A	N/A	3
Tol	± 0.30(0.012)	± 0.20(0.008)	± 0.25(0.010)	± 0.20(0.008)	± 0.30(0.012)	Ref.	N/A	N/A	N/A	N/A	
1812SDF	4.5(0.177)	3.2(0.126)	2.6(0.102)	1.0(0.039)	1.0(0.039)	4.0(0.157)	N/A	N/A	N/A	N/A	3
Tol	± 0.30(0.012)	± 0.30(0.012)	± 0.30(0.012)	Min.	Min.	Ref.	N/A	N/A	N/A	N/A	
2220SDF	5.7(0.224)	5.0(0.197)	4.7(0.185)	1.7(0.067)	1.3(0.051)	5.0(0.197)	N/A	N/A	N/A	N/A	3
Tol	± 0.30(0.012)	± 0.30(0.012)	± 0.30(0.012)	Min.	Min.	Ref.	N/A	N/A	N/A	N/A	

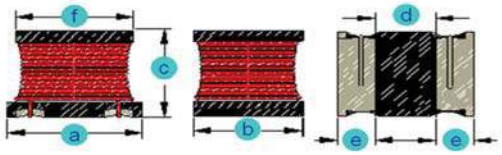
C. Mechanical Drawing:



Type-1



Type-2



Type-3

D. General Information:

1. Tolerance " _ ": M = ±20%, K: ± 10%, J: ± 5%, G: ± 2%
2. Small and lightweight surface mounting type
3. High Q at high frequency & High self-resonance frequency
4. For 15ºC Temperature Rise at 25ºC ambient
5. Inductance & Q measured:
   0402CP, 0603CP, 0805CP, 0603LS, 0805F, 1008CP, 1210CP, 1812CP, 1008F: HP4291B Impedance Analyzer.
   1206SDFC, 1210SDF, 1812SDF, 2220SDF: HP4284A LCR meter.
6. SRF measured:
   0402CP, 0603CP, 0805CP, 0603LS, 0805F, 1008CP, 1210CP, 1812CP, 1008F: HP8720D or HP8753E Network Analyzer.
7. DCR measured:
   0402CP, 0603LS, 0603CP, 0805CP, 0805F, 1008CP, 1210CP, 1812CP, 1008F: 16502 milliohm meter.
   1206SDFC, 1210SDF, 1812SDF, 2220SDF: 502BC milli-ohm meter.
8. Operating temperature:
   0402CP, 0603LS, 0603CP, 0805CP, 1008CP, 1210CP, 1812CP: -40ºC to +125ºC
   0805F, 1008F, 1206SDFC, 1210SDF, 1812SDF, 2220SDF: -40ºC to +85ºC
9. This series has no color code due to the size is small
10. MSL: Level 1.

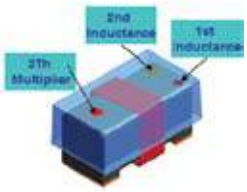
E. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. RF Filters

F. Color Coding:

1. Parts are marked with 3 color dots. The table below shows the significance of each color.
2. Dots 1 and 2 indicate the inductance in nano-Henries.
3. Dot 3 indicates number of zeroes to be added.

0 = Black	**5=Green**
1 = Brown	**6=Blue**
2 = Red	**7 = Violet**
3 = Orange	**8 = Gray**
4 = Yellow	**9 = White**



G. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

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E-mail: frontiersales@frontierusa.com

SMD WIRE WOUND CERAMIC CHIP INDUCTORS
0402CP-SERIES

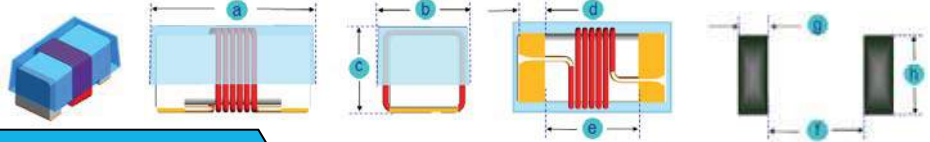
A. Electrical Specifications:

P/N	L (nH)	Tol.	Q Typ. Min.	900 MHz L	900 MHz Q	1.7 GHz L	1.7 GHz Q	SRF Min. (GHz)	DCR Max. (Ω)	Rated Current Max.(mA)
0402CP-1N0_	1.0	K, J	16	1.02	77	1.02	69	12.70	0.045	1360
0402CP-1N2_	1.2	K, J	16	1.22	75	1.23	67	12.90	0.090	740
0402CP-1N8_	1.8	K, J	16	1.70	68	1.78	80	12.00	0.070	1040
0402CP-1N9_	1.9	K, J	16	1.72	68	1.74	82	11.30	0.070	1040
0402CP-2N0_	2.0	K, J, G	16	1.93	54	1.93	75	11.10	0.070	1040
0402CP-2N2_	2.2	K, J, G	19	2.19	59	2.23	100	10.80	0.070	960
0402CP-2N4_	2.4	K, J, G	15	2.24	51	2.27	68	10.50	0.068	790
0402CP-2N7_	2.7	K, J, G	16	2.23	42	2.25	61	10.40	0.120	640
0402CP-3N3_	3.3	K, J, G	19	3.10	65	3.12	87	7.00	0.066	840
0402CP-3N6_	3.6	K, J, G	19	3.56	45	3.62	71	6.80	0.066	840
0402CP-3N9_	3.9	K, J, G	19	3.89	50	4.00	75	6.00	0.066	840
0402CP-4N3_	4.3	K, J, G	18	4.19	47	4.30	71	6.00	0.091	700
0402CP-4N7_	4.7	K, J, G	15	4.55	48	4.68	68	4.70	0.130	640
0402CP-5N1_	5.1	K, J, G	20	5.15	56	5.25	82	4.80	0.083	800
0402CP-5N6_	5.6	K, J, G	20	5.16	54	5.28	81	4.80	0.083	760
0402CP-6N2_	6.2	K, J, G	20	6.16	52	6.37	76	4.80	0.083	760
0402CP-6N8_	6.8	K, J, G	20	6.56	63	6.93	78	4.80	0.083	680
0402CP-7N3_	7.3	K, J, G	20	7.32	60	7.41	75	4.80	0.260	680
0402CP-7N5_	7.5	K, J, G	22	7.91	60	8.22	88	4.80	0.100	680
0402CP-8N2_	8.2	K, J, G	22	8.50	57	8.85	84	4.40	0.100	680
0402CP-8N7_	8.7	K, J, G	18	8.78	54	9.21	73	4.10	0.200	480
0402CP-9N1_	9.1	K, J, G	22	9.05	50	9.16	70	4.16	0.100	680
0402CP-9N5_	9.5	K, J, G	18	9.42	54	9.98	69	4.00	0.200	480
0402CP-10N_	10	K, J, G	21	9.8	50	10.10	67	3.90	0.200	480
0402CP-11N_	11	K, J, G	24	10.7	52	11.20	78	3.68	0.120	640
0402CP-12N_	12	K, J, G	24	11.9	53	12.70	71	3.60	0.120	640
0402CP-13N_	13	K, J, G	24	13.4	51	14.60	57	3.45	0.210	440
0402CP-15N_	15	K, J, G	24	14.6	55	15.50	77	3.28	0.170	560
0402CP-16N_	16	K, J, G	24	16.6	46	18.80	47	3.10	0.220	560
0402CP-18N_	18	K, J, G	25	18.3	57	20.28	62	3.10	0.230	420
0402CP-19N_	19	K, J, G	24	19.1	50	21.10	67	3.04	0.200	480
0402CP-20N_	20	K, J, G	25	20.7	52	23.66	53	3.00	0.250	420
0402CP-22N_	22	K, J, G	25	23.2	53	26.75	53	2.80	0.300	400
0402CP-23N_	23	K, J, G	22	23.8	49	26.90	64	2.72	0.300	400
0402CP-24N_	24	K, J, G	25	25.1	51	29.50	50	2.70	0.300	400
0402CP-27N_	27	K, J, G	24	28.7	49	33.50	63	2.48	0.300	400
0402CP-30N_	30	K, J, G	25	31.1	46	38.50	39	2.35	0.300	400
0402CP-33N_	33	K, J, G	24	34.9	31	41.70	32	2.35	0.300	400
0402CP-36N_	36	K, J, G	24	39.5	44	48.40	53	2.32	0.440	320
0402CP-39N_	39	K, J, G	25	41.7	47	50.23	45	2.10	0.550	200
0402CP-40N_	40	K, J, G	24	39.0	44	47.40	33	2.24	0.440	320
0402CP-43N_	43	K, J, G	25	45.8	46	61.55	34	2.03	0.810	100
0402CP-47N_	47	K, J, G	20	50.0	38	55.8	37	2.10	0.830	150
0402CP-51N_	51	K, J, G	25	50.4	40	59.4	37	1.75	0.820	100
0402CP-56N_	56	K, J, G	22	57.4	42	72.4	40	1.76	0.970	100
0402CP-68N_	68	K, J, G	22	69.6	36	83.4	38	1.62	1.120	100
0402CP-82N_	82	K, J, G	20	--	--	--	--	1.26	1.550	50
0402CP-R10_	100	K, J, G	20	--	--	--	--	1.16	2.000	30
0402CP-R12_	120	K, J, G	--	--	--	--	--	1.10	2.200	30

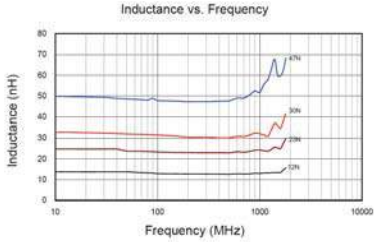
Note: 1. 0402CP-xxx_, "0402CP" = Size Type, "xxx" = Inductance, "_" = Tolerance, K= ± 10%, J= ±5%, G= ± 2%.
Termination: Tin plating is standard.
2. Inductance & Q-value measured at 250 MHz **3. 0402CP has no color code.**

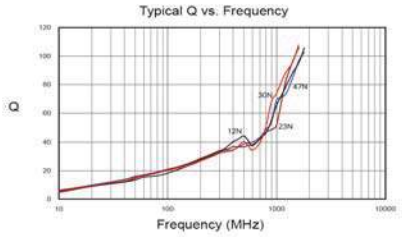
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
0402CP	1.19(0.047)	0.64(0.025)	0.66(0.026)	0.23(0.009)	0.56(0.022)	0.46(0.018)	0.36(0.014)	0.66(0.026)
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:





SMD WIRE WOUND CERAMIC CHIP INDUCTORS
0603CP-SERIES

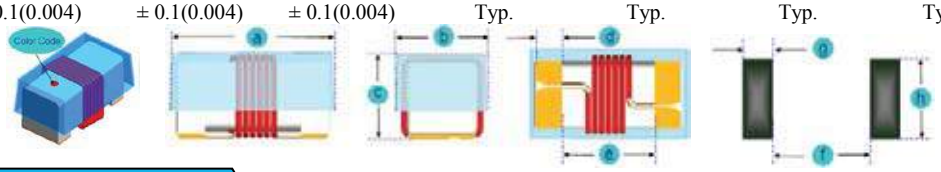
A. Electrical Specifications:

P/N	L (nH)	Tol.	Q min. Typ.	Test Freq. (MHz)	900(MHz) L typ.	900(MHz) Q typ.	1.7(GHz) L typ.	1.7(GHz) Q typ.	SRF Min. (GHz)	DCR Max. (Ω)	I rms. Max.(mA)	Color code
0603CP-1N6_	1.6	K, J	24	250	1.67	49	1.65	63	12.50	0.030	700	Black
0603CP-1N8_	1.8	K, J	16	250	1.83	35	1.86	50	12.50	0.045	700	Brown
0603CP-2N1_	2.1	K, J	20	250	2.11	31	2.09	45	5.80	0.005	700	Red
0603CP-2N2_	2.2	K, J	20	250	2.22	31	2.24	44	5.80	0.005	700	Orange
0603CP-3N3_	3.3	K, J	20	250	3.31	75	3.38	88	5.50	0.070	700	Violet
0603CP-3N6_	3.6	K, J	22	250	3.72	53	3.71	65	5.90	0.063	700	Red
0603CP-3N9_	3.9	K, J	22	250	3.95	49	3.96	67	5.90	0.080	700	Orange
0603CP-4N3_	4.3	K, J	22	250	4.32	50	4.33	70	5.90	0.063	700	Yellow
0603CP-4N7_	4.7	K, J	20	250	4.72	47	4.75	57	5.80	0.116	700	Green
0603CP-5N1_	5.1	K, J	20	250	4.93	47	4.95	56	5.70	0.140	700	Blue
0603CP-5N6_	5.6	K, J	20	250	5.77	63	6.05	80	5.80	0.150	700	Gray
0603CP-6N1_	6.1	K, J	25	250	5.90	59	7.08	79	5.80	0.110	700	White
0603CP-6N8_	6.8	K, J, G	27	250	6.75	60	7.10	81	5.80	0.110	700	Violet
0603CP-7N5_	7.5	K, J, G	28	250	7.70	60	7.82	85	4.80	0.106	700	Gray
0603CP-8N2_	8.2	K, J, G	25	250	8.25	82	8.37	87	5.80	0.120	700	Black
0603CP-8N4_	8.4	K, J, G	28	250	8.39	79	8.51	85	4.60	0.109	700	Red
0603CP-8N5_	8.5	K, J, G	28	250	8.47	81	8.62	86	4.60	0.109	700	Red
0603CP-8N7_	8.7	J, G	28	250	8.86	62	9.32	58	4.60	0.109	700	White
0603CP-9N5_	9.5	J, G	28	250	9.70	59	9.92	61	5.40	0.135	700	Black
0603CP-10N_	10	J, G	31	250	10.00	66	10.6	83	4.80	0.130	700	Brown
0603CP-11N_	11	J, G	33	250	11.00	53	11.5	56	4.00	0.086	700	Red
0603CP-12N_	12	J, G	35	250	12.30	72	13.5	83	4.00	0.130	700	Orange
0603CP-14N_	14	J, G	35	250	14.20	69	15.6	85	4.00	0.170	700	Brown
0603CP-15N_	15	J, G	35	250	15.40	64	16.8	89	4.00	0.170	700	Yellow
0603CP-16N_	16	J, G	34	250	16.20	55	17.3	52	3.30	0.104	700	Green
0603CP-18N_	18	J, G	35	250	18.70	70	21.4	69	3.10	0.170	700	Blue
0603CP-22N_	22	J, G	38	250	22.80	73	26.1	71	3.00	0.190	700	Violet
0603CP-23N_	23	J, G	38	250	24.10	71	28.0	67	2.85	0.190	700	Black
0603CP-24N_	24	J, G	37	250	24.50	45	28.7	39	2.65	0.135	700	Gray
0603CP-27N_	27	J, G	40	250	29.20	74	34.6	65	2.80	0.220	600	White
0603CP-30N_	30	J, G	37	250	31.40	47	39.9	28	2.25	0.144	600	Black
0603CP-33N_	33	J, G	40	250	36.00	67	49.5	42	2.30	0.220	600	Brown
0603CP-36N_	36	J, G	38	250	39.40	47	52.7	24	2.08	0.250	600	Red
0603CP-39N_	39	J, G	40	250	42.70	60	60.2	40	2.20	0.250	600	Orange
0603CP-43N_	43	J, G	39	250	47.00	44	64.9	21	2.00	0.280	600	Yellow
0603CP-47N_	47	J, G	38	200	52.20	62	77.2	35	2.00	0.280	600	Green
0603CP-51N_	51	J, G	35	200	55.50	69	82.2	34	1.90	0.270	600	Brown
0603CP-56N_	56	J, G	38	200	62.50	56	97.0	26	1.90	0.310	600	Blue
0603CP-68N_	68	J, G	37	200	80.50	54	168	21	1.70	0.340	600	Violet
0603CP-72N_	72	J, G	34	150	82.00	53	135	20	1.70	0.490	400	Gray
0603CP-82N_	82	J, G	34	150	96.20	54	177	21	1.70	0.540	400	White
0603CP-R10_	100	J, G	34	150	124	49	--	--	1.40	0.580	400	Black
0603CP-R11_	110	J, G	32	150	138	43	--	--	1.35	0.610	300	Brown
0603CP-R12	120	J, G	32	150	166	39	--	--	1.30	0.650	300	Red
0603CP-R15_	150	J, G	28	150	250	25	--	--	0.990	0.920	280	Orange
0603CP-R18_	180	J, G	25	100	305	22	--	--	0.990	1.250	240	Yellow
0603CP-R20_	200	J, G	25	100	--	--	--	--	0.990	1.980	200	Red
0603CP-R21_	210	J, G	27	100	--	--	--	--	0.895	2.060	200	Orange
0603CP-R22_	220	J, G	25	100	--	--	--	--	0.900	1.900	200	Green
0603CP-R25_	250	J, G	25	100	--	--	--	--	0.822	3.550	120	Yellow
0603CP-R27_	270	J, G	24	100	--	--	--	--	0.900	2.300	170	Blue
0603CP-R33_	330	J, G	24	100	--	--	--	--	0.900	2.300	100	Violet
0603CP-R39_	390	J, G	25	100	--	--	--	--	0.900	4.350	100	Gray

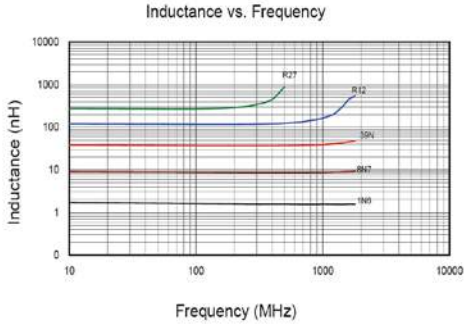
Note: 1. 0603CP-xxx_, "0603CP" = Size Type, "xxx" = Inductance, "_" = Tolerance, K= ± 10%, J= ±5%, G= ± 2%.
Termination: Tin plating is standard. Gold plating is available upon request.
2. 0603CP has first inductance color code only.

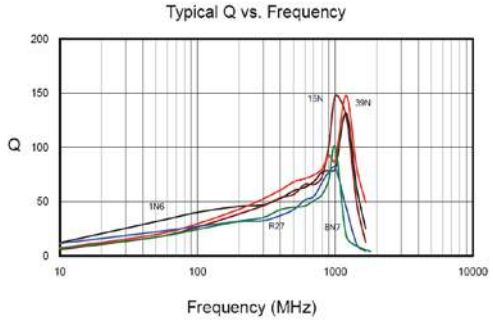
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
0603CP	1.70(0.067)	1.02(0.040)	0.92(0.036)	0.33(0.013)	0.86(0.034)	0.64(0.025)	0.64(0.025)	1.02(0.040)
Tol.	± 0.1(0.004)	± 0.1(0.004)	± 0.1(0.004)	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:





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SMD WIRE WOUND CERAMIC CHIP INDUCTORS
0805CP-SERIES

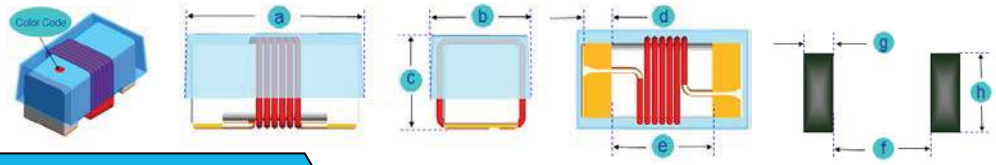
A. Electrical Specifications:

P/N	L (nH)	L Test Freq. (MHz)	Tol.	Q Min.	Q Test Freq. (MHz)	SRF Min. (GHz)	DCR Max. Ω	I rms. Max.(mA)	Color code
0805CP-2N2_	2.20	250	K, J	35	1500	3.00	0.08	600	White
0805CP-2N7_	2.70	250	K, J	35	1000	6.00	0.03	600	Brown
0805CP-2N8_	2.80	250	K, J	80	1000	7.90	0.06	800	Gray
0805CP-2N9_	2.90	250	K, J	50	1000	4.70	0.05	600	Blue
0805CP-3N0_	3.00	250	K, J	65	1500	7.90	0.06	800	White
0805CP-3N3_	3.30	250	K, J	50	1500	7.90	0.08	600	Black
0805CP-5N6_	5.60	250	K, J	65	1000	5.50	0.08	600	Violet
0805CP-6N8_	6.80	250	K, J	50	1000	5.50	0.11	600	Brown
0805CP-7N5_	7.50	250	K, J	50	1000	4.50	0.14	600	Green
0805CP-8N2_	8.20	250	K, J, G	50	1000	4.70	0.12	600	Red
0805CP-10N_	10.0	250	K, J, G	60	500	4.20	0.10	600	Red
0805CP-11N_	11.0	700	K, J, G	45	500	3.00	0.15	600	Orange
0805CP-12N_	12.0	250	K, J, G	50	500	4.00	0.15	600	Orange
0805CP-15N_	15.0	250	K, J, G	50	500	3.40	0.17	600	Yellow
0805CP-18N_	18.0	250	K, J, G	50	500	3.30	0.20	600	Green
0805CP-22N_	22.0	250	K, J, G	55	500	2.60	0.22	500	Blue
0805CP-24N_	24.0	250	K, J, G	50	500	2.00	0.22	500	Gray
0805CP-27N_	27.0	250	K, J, G	55	500	2.50	0.25	500	Violet
0805CP-33N_	33.0	250	K, J, G	60	500	2.05	0.27	500	Gray
0805CP-36N_	36.0	250	K, J, G	55	500	1.70	0.27	500	Yellow
0805CP-37N_	37.0	350	K, J, G	40	500	1.80	0.27	500	Green
0805CP-38N_	38.0	350	K, J, G	40	500	1.80	0.27	500	Blue
0805CP-39N_	39.0	250	K, J, G	60	500	2.00	0.29	500	White
0805CP-43N_	43.0	200	K, J, G	60	500	1.65	0.34	500	Yellow
0805CP-47N_	47.0	200	K, J, G	60	500	1.65	0.31	500	Black
0805CP-56N	56.0	200	K, J, G	60	500	1.55	0.34	500	Brown
0805CP-68N_	68.0	200	K, J, G	60	500	1.45	0.38	500	Red
0805CP-82N_	82.0	150	K, J, G	65	500	1.30	0.42	400	Orange
0805CP-91N_	91.0	150	K, J, G	65	500	1.20	0.48	400	Black
0805CP-R10_	100	150	K, J, G	65	500	1.20	0.46	400	Yellow
0805CP-R11_	110	150	K, J, G	50	500	1.00	0.48	400	Brown
0805CP-R12_	120	150	K, J, G	50	250	1.10	0.51	400	Green
0805CP-R15_	150	100	K, J, G	50	250	0.920	0.56	400	Blue
0805CP-R18_	180	100	K, J, G	50	250	0.870	0.64	400	Violet
0805CP-R20_	200	100	K, J, G	50	250	0.860	0.68	400	Red
0805CP-R22_	220	100	K, J, G	50	250	0.850	0.70	400	Gray
0805CP-R24_	240	100	K, J, G	44	250	0.690	1.00	350	Red
0805CP-R25_	250	100	K, J, G	45	250	0.660	1.20	350	Yellow
0805CP-R27_	270	100	K, J, G	48	250	0.650	1.00	350	White
0805CP-R30_	300	100	K, J, G	25	250	0.450	1.40	300	Gray
0805CP-R33_	330	100	K, J, G	48	250	0.600	1.40	310	Black
0805CP-R36_	360	100	K, J, G	35	250	0.400	0.90	300	Orange
0805CP-R39_	390	150	K, J, G	48	250	0.560	1.50	290	Brown
0805CP-R43_	430	100	K, J, G	25	100	0.400	1.70	190	White
0805CP-R47_	470	50	K, J	33	100	0.375	1.76	250	Violet
0805CP-R56_	560	25	K, J	23	50	0.340	1.90	230	Orange
0805CP-R62_	620	25	K, J	23	50	0.220	2.20	210	Yellow
0805CP-R68_	680	25	K, J	23	50	0.188	2.20	190	Green
0805CP-R82_	820	25	K, J	23	50	0.215	2.35	180	Brown

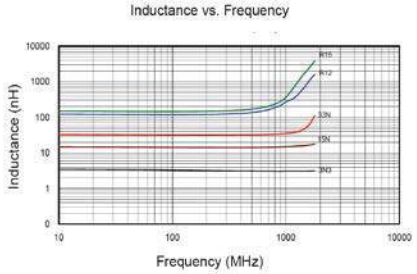
Note: 1. 0805CP-xxx_, "0805CP" = Size Type, "xxx" = Inductance, "_" = Tolerance, K= ± 10%, J= ±5%, G= ± 2%.
Termination: Tin plating is standard. Gold plating is available upon request.
2. 0805CP has first inductance color code only.

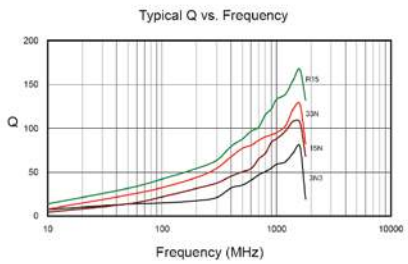
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
0805CP	2.29(0.090)	1.73 (0.068)	1.52 (0.060)	0.51(0.020)	1.02(0.040)	0.76 (0.030)	1.02 (0.040)	1.78 (0.070)
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:





SMD WIRE WOUND CERAMIC CHIP INDUCTORS
1008CP-SERIES

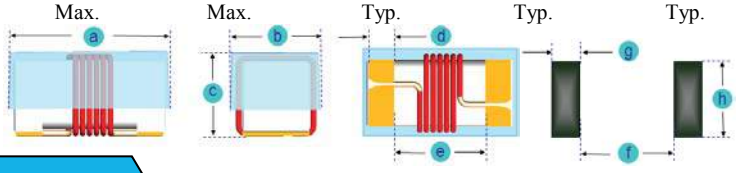
A. Electrical Specifications:

P/N	L (nH)	LTest Freq. (MHz)	Tol.	Q Min.	Q Test Freq. (MHz)	SRF Min. (GHz)	DCR Max. (Ω)	I rms. Max.(mA)	1st Color	2nd Color	3rd Color
1008CP-10N_	10	50	K, J	50	500	4.10	0.08	1000	Brown	Black	Black
1008CP-12N_	12	50	K, J	50	500	3.30	0.09	1000	Brown	Red	Black
1008CP-15N_	15	50	K, J	50	500	2.50	0.10	1000	Brown	Green	Black
1008CP-18N_	18	50	K, J, G	50	350	2.50	0.11	1000	Brown	Gray	Black
1008CP-22N_	22	50	K, J, G	55	350	2.40	0.12	1000	Red	Red	Black
1008CP-24N	24	50	K, J, G	50	350	1.50	0.13	1000	Red	Yellow	Black
1008CP-27N_	27	50	K, J, G	55	350	1.60	0.13	1000	Red	Violet	Black
1008CP-33N_	33	50	K, J, G	60	350	1.60	0.14	1000	Orange	Orange	Black
1008CP-39N_	39	50	K, J, G	60	350	1.50	0.15	1000	Orange	White	Black
1008CP-47N_	47	50	K, J, G	65	350	1.50	0.16	1000	Yellow	Violet	Black
1008CP-56N_	56	50	K, J, G	65	350	1.30	0.18	1000	Green	Blue	Black
1008CP-68N	68	50	K, J, G	65	350	1.30	0.20	1000	Blue	Gray	Black
1008CP-82N_	82	50	K, J, G	60	350	1.00	0.22	1000	Gray	Red	Black
1008CP-R10_	100	25	K, J, G	60	350	1.00	0.56	650	Brown	Black	Brown
1008CP-R12_	120	25	K, J, G	60	350	0.950	0.63	650	Brown	Red	Brown
1008CP-R15_	150	25	K, J, G	45	100	0.850	0.70	580	Brown	Green	Brown
1008CP-R18_	180	25	K, J, G	45	100	0.750	0.77	620	Brown	Gray	Brown
1008CP-R20_	200	25	K, J, G	50	100	0.750	0.81	500	Red	Black	Brown
1008CP-R22_	220	25	K, J, G	45	100	0.700	0.84	500	Red	Red	Brown
1008CP-R24_	240	25	K, J, G	50	100	0.600	0.84	500	Red	Yellow	Brown
1008CP-R27_	270	25	K, J, G	45	100	0.600	0.91	500	Red	Violet	Brown
1008CP-R30_	300	25	K, J, G	40	100	0.500	1.05	660	Orange	Black	Brown
1008CP-R33_	330	25	K, J, G	45	100	0.570	1.05	450	Orange	Orange	Brown
1008CP-R36_	360	25	K, J, G	40	100	0.500	1.05	660	Orange	Blue	Brown
1008CP-R39_	390	25	K, J, G	45	100	0.500	1.12	470	Orange	White	Brown
1008CP-R43_	430	25	K, J, G	45	100	0.425	1.19	600	Yellow	Orange	Brown
1008CP-R47_	470	25	K, J, G	45	100	0.450	1.19	470	Yellow	Violet	Brown
1008CP-R56_	560	25	K, J, G	45	100	0.415	1.33	400	Green	Blue	Brown
1008CP-R62_	620	25	K, J, G	45	100	0.375	1.40	300	Blue	Red	Brown
1008CP-R68_	680	25	K, J, G	45	100	0.375	1.47	400	Blue	Gray	Brown
1008CP-R75_	750	25	K, J, G	45	100	0.360	1.54	360	Violet	Green	Brown
1008CP-R82_	820	25	K, J, G	45	100	0.350	1.61	400	Gray	Red	Brown
1008CP-R91_	910	25	K, J, G	35	50	0.320	1.68	380	White	Brown	Brown
1008CP-1R0_	1000	25	K, J, G	35	50	0.290	1.75	370	Brown	Black	Red
1008CP-1R2_	1200	7.9	K, J, G	35	50	0.250	2.00	310	Brown	Red	Red
1008CP-1R5_	1500	7.9	K, J, G	28	50	0.200	2.30	330	Brown	Green	Red
1008CP-1R8_	1800	7.9	K, J, G	28	50	0.160	2.60	300	Brown	Gray	Red
1008CP-2R0	2000	7.9	K, J, G	25	50	0.160	2.80	280	Red	Black	Red
1008CP-2R2_	2200	7.9	K, J, G	28	50	0.160	2.80	280	Red	Red	Red
1008CP-2R7_	2700	7.9	K, J, G	22	25	0.140	3.20	290	Red	Violet	Red
1008CP-3R3_	3300	7.9	K, J, G	22	25	0.110	3.40	290	Orange	Orange	Red
1008CP-3R9_	3900	7.9	K, J, G	20	25	0.100	3.60	260	Orange	White	Red
1008CP-4R7_	4700	7.9	K, J, G	20	25	0.090	4.00	260	Yellow	Violet	Red

Note: 1008CP-xxx_, "1008CP" = Size Type, "xxx" = Inductance, "_" = Tolerance, K= ± 10%, J= ±5%, G= ± 2%.
Termination: Tin plating is standard. Gold plating is available upon request.

B. Dimensions: mm (Inch)

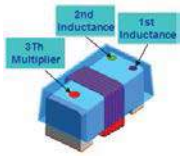
Series	a	b	c	d	e	f	g	h
1008CP	2.92(0.115)	2.79 (0.110)	2.03(0.080)	0.51(0.020)	1.52(0.060)	1.27 (0.050)	1.27 (0.050)	2.54 (0.100)
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.



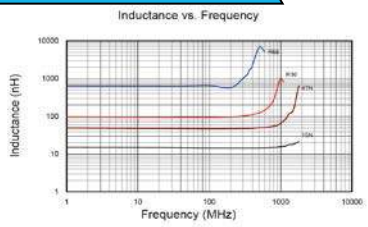
C. Color Coding:

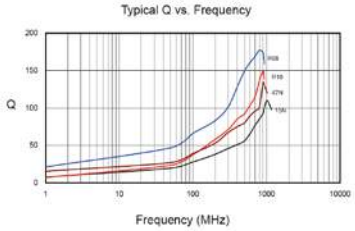
1. Parts are marked with 3 color dots. The table below shows the significance of each color.
2. Dots 1 and 2 indicate the inductance in nano-Henries.
3. Dots 3 indicate number of zeroes to be added.

0 = Black	5=Green
1 = Brown	6=Blue
2 = **Red**	7 = Violet
3 = **Orange**	8 = Gray
4 = Yellow	9 = White



D. Characteristics Curve:





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SMD WIRE WOUND CERAMIC CHIP INDUCTORS
1210CP-SERIES

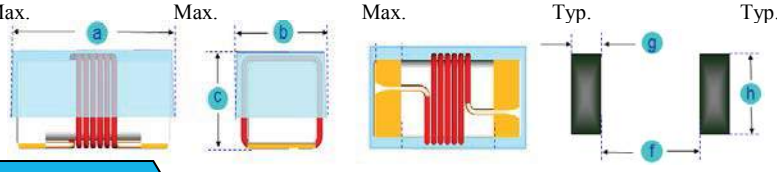
A. Electrical Specifications:

P/N	L (nH)	L Test Freq. (MHz)	Tol.	Q Min.	Q Test Freq. (MHz)	SRF Min. (MHz)	DCR Max. (Ω)	I rms. Max.(mA)	1st Color	2nd Color	3rd Color
1210CP-4N7_	4.7	100	K, J	50	1000	6000	0.06	600	Yellow	Violet	Black
1210CP-5N6_	5.6	100	K, J	50	1000	5500	0.08	600	Green	Blue	Black
1210CP-10N_	10	100	K, J, G	60	500	4000	0.06	600	Brown	Black	Brown
1210CP-12N_	12	100	K, J, G	60	500	3400	0.06	600	Brown	Red	Brown
1210CP-15N_	15	100	K, J, G	60	500	3200	0.06	600	Brown	Green	Brown
1210CP-18N_	18	100	K, J, G	60	300	2800	0.06	600	Brown	Gray	Brown
1210CP-22N_	22	100	K, J, G	60	300	2300	0.08	600	Red	Red	Brown
1210CP-27N_	27	100	K, J, G	60	300	2000	0.08	600	Red	Violet	Brown
1210CP-33N_	33	100	K, J, G	60	300	1800	0.08	600	Orange	Orange	Brown
1210CP-39N_	39	100	K, J, G	60	300	1800	0.08	600	Orange	White	Brown
1210CP-47N_	47	100	K, J, G	60	300	1600	0.08	600	Yellow	Violet	Brown
1210CP-56N_	56	100	K, J, G	60	300	1500	0.10	600	Green	Blue	Brown
1210CP-68N_	68	100	K, J, G	60	300	1300	0.10	600	Blue	Gray	Brown
1210CP-82N_	82	100	K, J, G	60	300	1200	0.10	600	Gray	Red	Brown
1210CP-91N_	91	100	K, J, G	60	300	1100	0.10	1000	White	Brown	Brown
1210CP-R10_	100	100	K, J, G	60	300	1100	0.10	500	Brown	Black	Red
1210CP-R12_	120	50	K, J, G	60	300	900	0.12	500	Brown	Red	Red
1210CP-R15_	150	50	K, J, G	60	300	800	0.18	500	Brown	Green	Red
1210CP-R18_	180	50	K, J, G	60	300	760	0.21	500	Brown	Gray	Red
1210CP-R22_	220	50	K, J, G	60	300	760	0.27	500	Red	Red	Red
1210CP-R27_	270	50	K, J, G	50	300	660	0.33	500	Red	Violet	Red
1210CP-R33_	330	50	K, J, G	50	100	650	0.37	500	Orange	Orange	Red
1210CP-R36_	360	50	K, J, G	50	100	500	0.63	600	Orange	Blue	Red
1210CP-R39_	390	50	K, J, G	50	100	600	0.63	500	Orange	White	Red
1210CP-R47_	470	50	K, J, G	50	100	550	0.69	400	Yellow	Violet	Red
1210CP-R56_	560	50	K, J, G	50	100	470	0.90	400	Green	Blue	Red
1210CP-R68_	680	25	K, J, G	50	100	450	1.05	400	Blue	Gray	Red
1210CP-R82_	820	25	K, J, G	50	100	400	1.45	350	Gray	Red	Red
1210CP-1R0_	1000	25	K, J, G	45	100	340	2.10	280	Brown	Black	Orange
1210CP-1R2_	1200	7.96	K, J, G	45	50	320	2.40	250	Brown	Red	Orange
1210CP-1R5_	1500	7.96	K, J, G	45	50	300	2.70	220	Brown	Green	Orange
1210CP-1R8_	1800	7.96	K, J, G	45	50	280	3.50	180	Brown	Gray	Orange
1210CP-2R2_	2200	7.96	K, J, G	45	50	260	3.80	150	Red	Red	Orange
1210CP-3R3_	3300	7.96	K, J, G	25	25	140	10	50	Orange	Orange	Orange

Note: 1210CP-xxx_, "1210CP" = Size Type, "xxx" = Inductance, "_" = Tolerance, K= ± 10%, J= ±5%, G= ± 2%.
Termination: Tin plating is standard. Gold plating is available upon request.

B. Dimensions: mm (Inch)

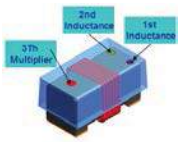
Series	a	b	c	f	g	h
1210CP	3.42(0.135)	2.8 (0.110)	2.3 (0.091)	2.3 (0.091)	1.02 (0.040)	2.2 (0.087)
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.



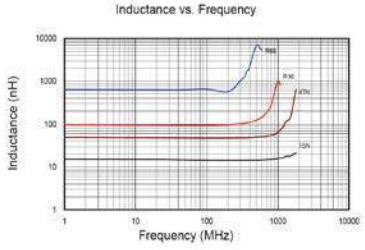
C. Color Coding:

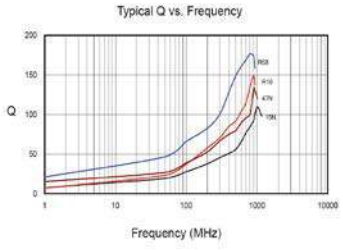
1. Parts are marked with 3 color dots. The table below shows the significance of each color.
2. Dots 1 and 2 indicate the inductance in nano-Henries.
3. Dot 3 indicates number of zeroes to be added.

0 = Black **5=Green**
1 = Brown **6=Blue**
2 = Red **7 = Violet**
3 = Orange **8 = Gray**
4 = Yellow **9 = White**



D. Characteristics Curve:





SMD WIRE WOUND CERAMIC CHIP INDUCTORS
1812CP-SERIES

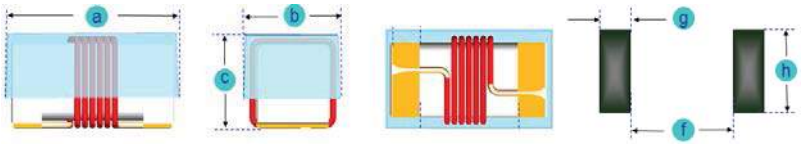
A. Electrical Specifications:

P/N	L (nH)	L Test Freq. (MHz)	Tol.	Q Typ.	Q Test Freq. (MHz)	SRF Min. (MHz)	DCR Max. (mΩ)	I rms. Max. (mA)	1st Color	2nd Color	3rd Color
1812CP-82N_	82	50	K, J, G	70	50	800	60	1500	Gray	Red	Black
1812CP-R15_	150	50	K, J, G	75	50	860	110	1150	Brown	Green	Brown
1812CP-R18_	180	50	K, J, G	80	50	850	110	1150	Brown	Gray	Brown
1812CP-R22_	220	50	K, J, G	80	50	700	105	940	Red	Red	Brown
1812CP-R27_	270	50	K, J, G	85	50	730	120	940	Red	Violet	Brown
1812CP-R33_	330	50	K, J, G	80	50	600	135	850	Orange	Orange	Brown
1812CP-R39_	390	50	K, J, G	80	50	600	140	850	Orange	White	Brown
1812CP-1R2_	1200	50	K, J, G	62	50	230	1200	480	Brown	Red	Red

Note: 1. 1812CP-xxx_, "1812CP" = Size Tyep, "xxx" = Inductance, "_" = Tolerance, K= ± 10%, J= ±5%, G= ± 2%.
2. Termination: Tin plating is standard.
3. Inductance & Q-value measured at 50 MHz

B. Dimensions: mm (Inch)

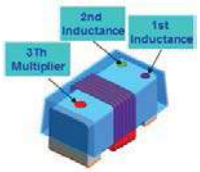
Series	a	b	c	f	g	h
1812CP	4.95(0.195)	3.8 (0.150)	3.43 (0.135)	3.0 (0.118)	1.14 (0.045)	3.05 (0.120)
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.



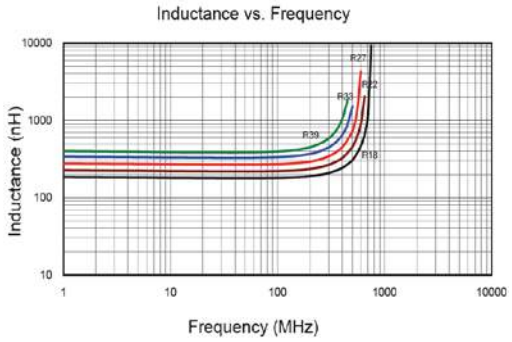
C. Color Coding:

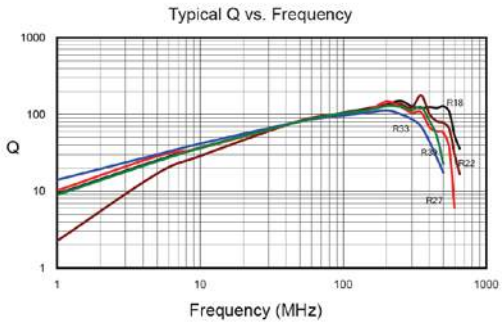
1. Parts are marked with 3 color dots. The table below shows the significance of each color.
2. Dots 1 and 2 indicate the inductance in nano-Henries.
3. Dot 3 indicates number of zeroes to be added.

0 = Black	5=Green
1 = Brown	6=Blue
2 = **Red**	7 = Violet
3 = **Orange**	8 = Gray
4 = Yellow	9 = White



D. Characteristics Curve:





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SMD WIRE WOUND FERRITE CHIP INDUCTORS
0603LS-SERIES

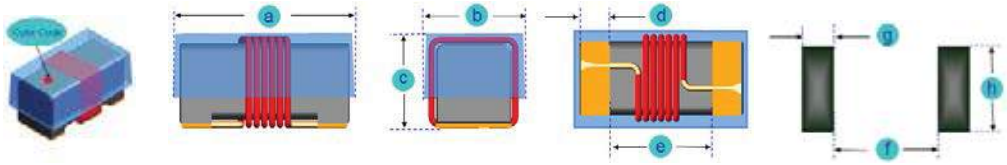
A. Electrical Specifications:

P/N	L (nH)	Tol.	Q min. Typ.	Test Freq. (MHz)	SRF min. (MHz)	DCR max. (Ω)	I rms. Max.(mA)	Color code
0603LS-47N_	47	K	12	7.9	2000	0.075	1800	White
0603LS-51N_	51	K	12	7.9	1500	0.075	1800	Violet
0603LS-68N_	68	K	12	7.9	1500	0.12	1800	Gray
0603LS-72N_	72	K	12	7.9	1500	0.12	1800	Brown
0603LS-R10_	100	K	12	7.9	1150	0.13	1700	Black
0603LS-R12_	120	J,K	12	7.9	1100	0.15	1700	Orange
0603LS-R15_	150	J,K	15	7.9	1050	0.15	1600	Brown
0603LS-R18_	180	J,K	15	7.9	950	0.15	1500	Green
0603LS-R22_	220	J,K	15	7.9	900	0.30	1200	Red
0603LS-R24_	240	J,K	15	7.9	850	0.16	1460	Green
0603LS-R27_	270	J,K	15	7.9	835	0.30	1460	Yellow
0603LS-R33_	330	J,K	15	7.9	725	0.40	1420	Orange
0603LS-R39_	390	J,K	15	7.9	680	0.41	1400	Blue
0603LS-R47_	470	J,K	15	7.9	640	0.43	1400	Black
0603LS-R56_	560	J,K	15	7.9	630	0.44	1400	Brown
0603LS-R68_	680	J,K	15	7.9	510	0.52	1340	Red
0603LS-R78_	780	J,K	15	7.9	465	0.63	1300	Orange
0603LS-R82_	820	J,K	15	7.9	460	0.69	1200	Yellow
0603LS-1R0_	1000	J,K	15	7.9	320	0.81	1100	Green
0603LS-1R2_	1200	J,K	15	7.9	270	0.87	1000	Blue
0603LS-1R5_	1500	J,K	15	7.9	230	0.96	920	Violet
0603LS-1R8_	1800	J,K	15	7.9	210	1.10	900	Gray
0603LS-2R2_	2200	J,K	15	7.9	115	1.20	740	White
0603LS-2R7_	2700	J,K	15	7.9	100	1.38	700	Black
0603LS-3R3_	3300	J,K	15	7.9	84	1.50	680	Brown
0603LS-3R9_	3900	J,K	15	7.9	75	1.50	600	Red
0603LS-4R7_	4700	J,K	15	7.9	67	2.10	580	Orange
0603LS-5R6_	5600	J,K	15	7.9	55	2.37	540	Yellow
0603LS-6R8_	6800	J,K	15	7.9	48	3.10	500	Green
0603LS-7R8_	7800	J,K	15	7.9	40	3.35	460	Blue
0603LS-8R2_	8200	J,K	15	7.9	38	3.50	440	Violet
0603LS-100_	10000	J,K	15	7.9	32	4.46	400	Gray

Note: 1. 0603LS-xxx: "0603LS" = Size Type, "xxx" = Inductance, "_" = Tolerance, K= ± 10%, J= ±5%.
2. 0603LS has first inductance color code only.

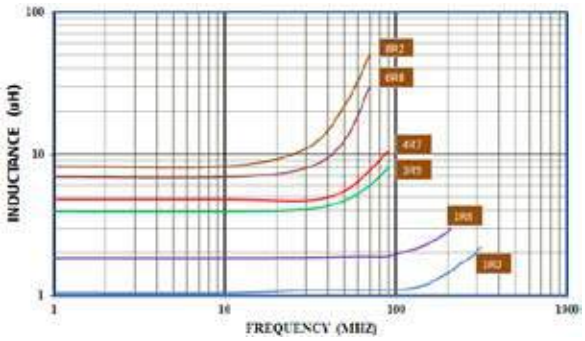
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
0603LS	1.80 (0.07)	1.22 (0.05)	1.10 (0.04)	0.33(0.013)	0.86(0.034)	0.64 (0.02)	0.64 (0.02)	1.02 (0.04)
Tol.	Max.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.

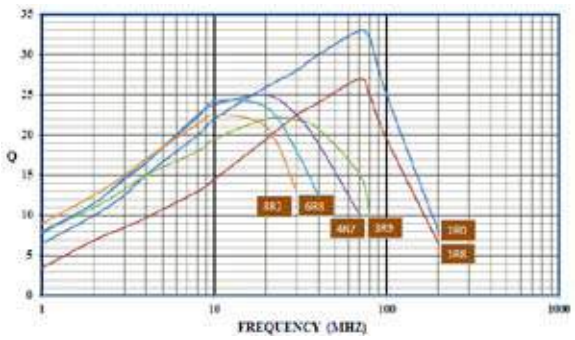


C. Characteristics Curve:

Inductance vs. Frequency



Q vs. Frequency



SMD WIRE WOUND FERRITE CHIP INDUCTORS
0805F-SERIES

A. Electrical Specifications:

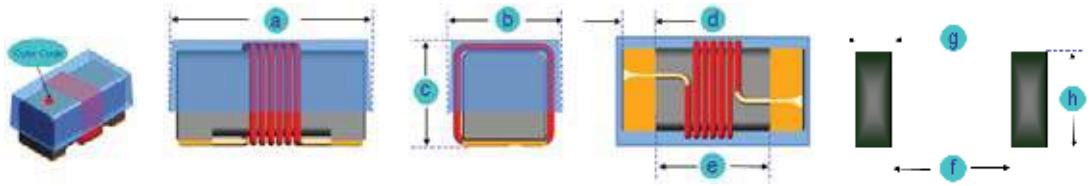
P/N	L (uH)	L Test Freq. (MHz)	Tol.	Q Min.	Q Test Freq. (MHz)	SRF Min. (GHz)	DCR Max. (Ω)	I rms. Max.(mA)	Color code
0805F-78N_	0.078	7.9	K, J	19	7.9	1.44	0.042	2000	Black
0805F-R11_	0.110	7.9	K, J	19	7.9	1.40	0.050	2000	Brown
0805F-R18_	0.180	7.9	K, J	15	7.9	1.00	0.15	500	Gray
0805F-R22_	0.220	7.9	K, J	15	7.9	1.00	0.15	500	Violet
0805F-R33_	0.330	7.9	K, J	15	7.9	0.862	0.25	300	White
0805F-R39_	0.390	7.9	K, J	15	7.9	0.800	0.30	500	Black
0805F-R47_	0.470	7.9	K, J	19	7.9	0.500	0.31	720	Red
0805F-R56_	0.560	7.9	K, J	12	7.9	0.800	1.20	300	Red
0805F-R68_	0.680	7.9	K, J	20	7.9	0.400	0.46	590	Orange
0805F-R82_	0.820	7.9	K, J	12	7.9	0.600	1.00	300	Yellow
0805F-1R0_	1.00	7.9	K, J	20	7.9	0.340	0.69	500	Yellow
0805F-1R2_	1.20	7.9	K, J	15	7.9	0.400	0.75	800	Black
0805F-1R5_	1.50	7.9	K, J	20	7.9	0.275	0.83	490	Green
0805F-1R8_	1.80	7.9	K, J	20	7.9	0.246	1.15	410	Blue
0805F-2R2_	2.20	7.9	K, J	20	7.9	0.106	1.28	365	Violet
0805F-2R7_	2.70	7.9	K, J	20	7.9	0.105	1.48	350	Gray
0805F-3R3_	3.30	7.9	K, J	20	7.9	0.083	1.57	330	White
0805F-3R9_	3.90	7.9	K, J	20	7.9	0.052	1.70	300	Black
0805F-4R7_	4.70	7.9	K, J	20	7.9	0.050	1.87	280	Brown
0805F-5R6_	5.60	7.9	K, J	20	7.9	0.090	2.00	340	Blue
0805F-6R8_	6.80	7.9	K, J	20	7.9	0.035	2.25	260	Red
0805F-8R2_	8.20	2.5	K, J	18	2.5	0.027	2.55	250	Orange
0805F-100_	10.0	2.5	K, J	18	2.5	0.021	3.45	200	Yellow
0805F-120_	12.0	2.5	K, J	18	2.5	0.037	3.80	220	Brown
0805F-150_	15.0	2.5	K, J	18	2.5	0.017	5.03	180	Green
0805F-180_	18.0	2.5	K, J	18	2.5	0.023	4.48	180	Orange
0805F-220_	22.0	2.5	K, J	18	2.5	0.013	6.18	150	Blue
0805F-270_	27.0	2.5	K, J	15	2.5	0.011	11.04	120	Violet

Note: 1. 0805F-xxx_: "0805F" = Size Type, "xxx" = Inductance, "_" = Tolerance, K= ± 10%, J= ±5%.

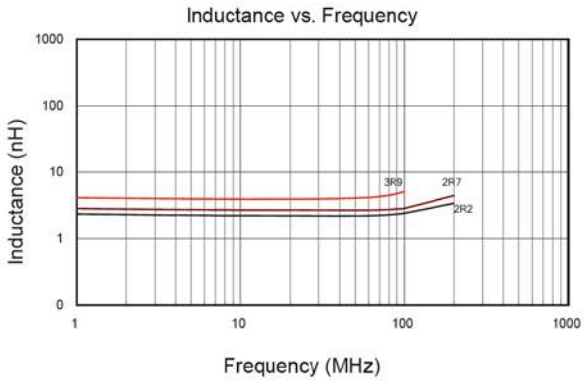
2. 0805F has first inductance color code only.

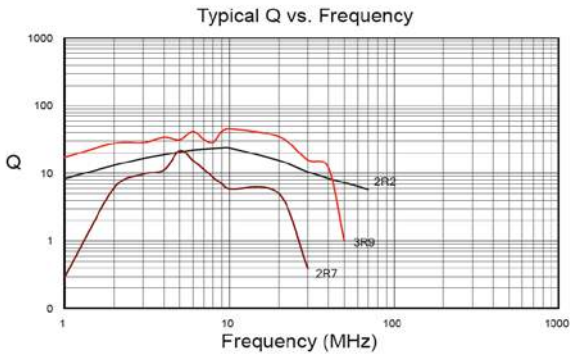
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
0805F	2.29 (0.090)	1.91 (0.075)	1.6(0.063)	0.51(0.020)	1.02 (0.040)	0.76(0.030)	1.02 (0.040)	1.78 (0.070)
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:





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SMD WIRE WOUND FERRITE CHIP INDUCTORS
1008F-SERIES

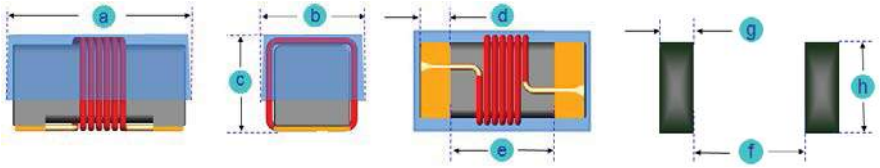
A. Electrical Specifications:

P/N	L (uH)	L Test Freq. (MHz)	Tol.	Q Min.	Q Test Freq. (MHz)	SRF Min. (GHz)	DCR Max.(Ω)	I rms. Max.(mA)	1st Color	2nd Color	3rd Color
1008F-47N_	0.047	50	K, J	50	50	1.80	0.045	650	YELLOW	VIOLET	BLACK
1008F-68N_	0.068	50	K, J	40	50	1.80	0.045	650	BLUE	GRAY	BLACK
1008F-R10_	0.100	50	K, J	50	50	1.80	0.196	700	BROWN	BLACK	BROWN
1008F-R18_	0.180	50	K, J	50	50	1.00	0.290	700	BROWN	GRAY	BROWN
1008F-R20_	0.200	50	K, J	50	50	0.900	0.285	700	RED	BLACK	BROWN
1008F-R24_	0.240	50	K, J	50	50	0.900	0.135	700	RED	YELLOW	BROWN
1008F-R56_	0.560	7.9	K, J	40	50	0.460	0.300	700	GREEN	BLUE	BROWN
1008F-R68_	0.680	7.9	K, J	27	50	0.400	0.320	700	BLUE	GRAY	BROWN
1008F-1R0_	1.00	50	K, J	50	50	0.380	0.260	650	BROWN	BLACK	RED
1008F-1R2_	1.20	7.9	K, J	48	50	0.210	0.680	650	BROWN	RED	RED
1008F-1R5_	1.50	7.9	K, J	41	50	0.190	0.760	630	BROWN	GREEN	RED
1008F-1R8_	1.80	7.9	K, J	39	50	0.170	0.840	600	BROWN	GRAY	RED
1008F-2R2_	2.20	7.9	K, J	34	50	0.150	1.10	520	RED	RED	RED
1008F-2R7_	2.70	7.9	K, J	34	50	0.135	1.28	490	RED	VIOLET	RED
1008F-3R3_	3.30	7.9	K, J	32	50	0.120	1.46	450	ORANGE	ORANGE	RED
1008F-3R9_	3.90	7.9	K, J	32	7.9	0.105	1.56	420	ORANGE	WHITE	RED
1008F-4R3_	4.30	7.9	K, J	30	7.9	0.085	1.70	400	YELLOW	ORANGE	RED
1008F-4R7_	4.70	7.9	K, J	31	7.9	0.090	1.68	400	YELLOW	VIOLET	RED
1008F-5R6_	5.60	7.9	K, J	31	7.9	0.080	1.82	380	GREEN	BLUE	RED
1008F-6R8_	6.80	7.9	K, J	31	7.9	0.070	2.00	360	BLUE	GRAY	RED
1008F-8R2_	8.20	7.9	K, J	23	7.9	0.065	2.65	330	GRAY	RED	RED
1008F-100_	10.0	7.9	K, J	31	7.9	0.060	2.95	300	BROWN	BLACK	ORANGE
1008F-120_	12.0	7.9	K, J	30	7.9	0.050	3.35	270	BROWN	RED	ORANGE
1008F-150_	15.0	7.9	K, J	38	7.9	0.050	3.04	250	BROWN	GREEN	ORANGE
1008F-220_	22.0	2.52	K, J	10	2.52	0.010	2.80	120	RED	RED	ORANGE

Note: 1008F -xxx_: "1008F" = Size Type, "xxx" = Inductance, "_" = Tolerance, K= ± 10%, J= ±5%.

B. Dimensions: mm (Inch)

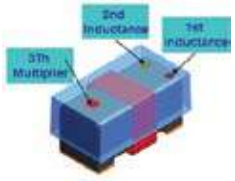
Series	a	b	c	d	e	f	g	h
1008F	2.92(0.115)	2.79(0.110)	2.03(0.080)	0.51(0.020)	1.52(0.060)	1.27(0.050)	1.27(0.050)	2.54(0.100)
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.



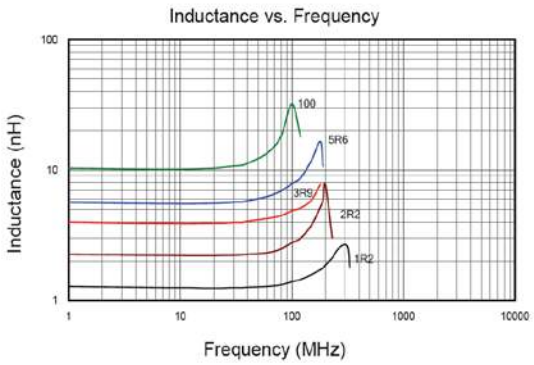
C. Color Coding:

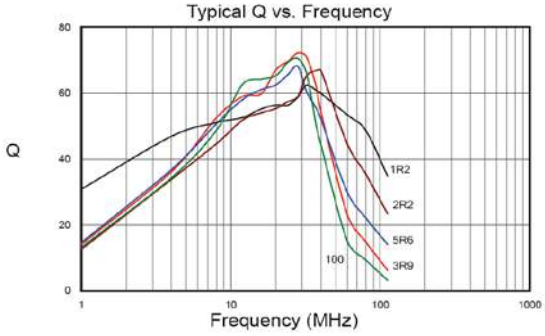
1. Parts are marked with 3 color dots. The table below shows the significance of each color.
2. Dots 1 and 2 indicate the inductance in nano-Henries.
3. Dot 3 indicates number of zeroes to be added.

0 = Black	**5=Green**
1 = Brown	**6=Blue**
2 = Red	**7 = Violet**
3 = Orange	**8 = Gray**
4 = Yellow	**9 = White**



D. Characteristics Curve:





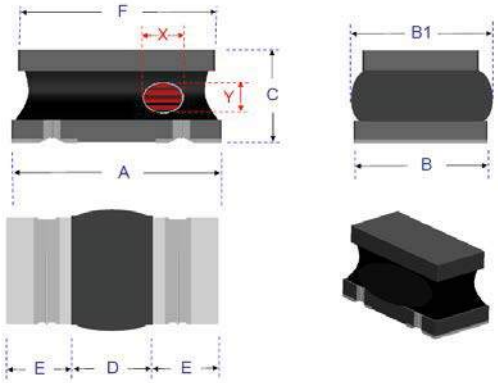
A. Electrical Specifications:

Part No.	Mark	L (uH)	Tolerance	Test Condition	SRF Typ. (MHz)	DCR Max. (Ω)	IDC Max. (mA)
1206SDFC-R12_	R12	0.12	M	1.0 MHz / 0.1 V	250	0.112	970
1206SDFC-R22_	R22	0.22	M	1.0 MHz / 0.1 V	250	0.140	850
1206SDFC-R39_	R39	0.39	M	1.0 MHz / 0.1 V	185	0.259	330
1206SDFC-R47_	R47	0.47	M	1.0 MHz / 0.1 V	180	0.210	700
1206SDFC-R68_	R68	0.68	M	1.0 MHz / 0.1 V	150	0.250	600
1206SDFC-1R0_	1R0	1.0	M	1.0 MHz / 0.1 V	100	0.364	510
1206SDFC-2R2_	2R2	2.2	M	1.0 MHz / 0.1 V	50	0.533	430
1206SDFC-3R3_	3R3	3.3	M	1.0 MHz / 0.1 V	40	0.700	600
1206SDFC-4R7_	4R7	4.7	K, M	1.0 MHz / 0.1 V	31	0.845	340
1206SDFC-6R8_	6R8	6.8	K, M	1.0 MHz / 0.1 V	28	1.350	500
1206SDFC-100_	100	10	K, M	1.0 MHz / 0.1 V	20	1.690	230
1206SDFC-220_	220	22	K, M	1.0 MHz / 0.1 V	14	3.900	160
1206SDFC-330_	330	33	K, M	1.0 MHz / 0.1 V	12	4.700	130
1206SDFC-470_	470	47	K, M	1.0 MHz / 0.1 V	10	10.40	100
1206SDFC-101_	101	100	K, M	1.0 MHz / 0.1 V	7	15.60	80

Note: 1. 1206SDFC-xxx_: "1206SDFC" = Size Type, "xxx" = Inductance, "_" = Tolerance, M= ± 20%, K= ±10%.
2. I DC: Inductance drops no more than 10% at rated current or the Δt ≤ 40ºC.
3. Temperature rise Δ t < 40ºC (Typical) at rated current and room temperature 20ºC.
4. Suitable for IR re-flows soldering; Tape and reel packing.

B. Dimensions: mm (Inch)

SERIES	Part dimension							Voids dimension		Type
	A	B	B1	C	D	E	F	X	Y	
1206SDFC	3.2 (0.126)	1.6 (0.063)	1.6 (0.063)	1.8 (0.071)	1.3 (0.051)	0.9 (0.035)	2.5 (0.098)	< ½ of A	N/A	3
Tol	± 0.30 (0.012)	± 0.20 (0.008)	± 0.35 (0.014)	± 0.25 (0.010)	± 0.20 (0.008)	± 0.30 (0.012)	Ref.			



Type 3 (with epoxy coating over windings)

C. Applications:

1. Power supply line chokes.
2. DC-DC Converters.
3. Notebooks.
4. Filters.
5. Telecommunication devices.

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SMD SQUARE DRUM FERRITE-CORE INDUCTORS
1210SDF-SERIES

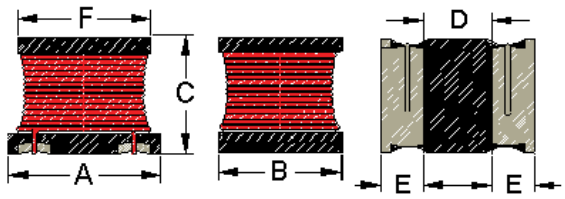
A. Electrical Specifications:

Part No.	Mark	L (uH)	Tolerance	Test Freq. (@ 0.1V rms.)	SRF Min. (MHz)	DCR Max. (Ω)	IDC Max. (mA)
1210SDF-1R0_	1R0	1.0	M	1.0 MHz	96.0	0.078	1000
1210SDF-2R2_	2R2	2.2	M	1.0 MHz	64.0	0.126	790
1210SDF-3R3_	3R3	3.3	M	1.0 MHz	50.0	0.165	500
1210SDF-4R7_	4R7	4.7	M	1.0 MHz	43.0	0.195	450
1210SDF-6R8_	6R8	6.8	M	1.0 MHz	36.0	0.330	400
1210SDF-100_	100	10	M	1.0 MHz	26.0	0.572	300
1210SDF-220_	220	22	M, K	1.0 MHz	19.0	0.923	250
1210SDF-470_	470	47	M, K	1.0 MHz	12.0	1.69	170
1210SDF-101_	101	100	K, J	1.0 MHz	8.0	4.55	100
1210SDF-151_	151	150	K, J	1.0 MHz	7.0	9.10	80
1210SDF-221_	221	220	K, J	1.0 MHz	5.5	10.92	70
1210SDF-331_	331	330	K, J	1.0 MHz	4.5	13.00	60
1210SDF-391_	391	390	K, J	1.0 MHz	4.0	22.10	60
1210SDF-471_	471	470	K, J	1.0 MHz	3.7	24.70	60
1210SDF-561_	561	560	K, J	1.0 MHz	3.4	28.60	60

Note: 1. 1210SDF-xxx_: "1210SDF" = Size Type, "xxx" = Inductance, "_" = Tolerance, M= ± 20%, K= ±10%, J= ± 5%.
2. Inductance drops no more than 10% at rated I sat.
3. Temperature rises Δ t < 15ºC (typical) at rated I rms.
4. Suitable for IR re-flows soldering; Tape and reel packing.

B. Dimensions: mm (Inch)

SERIES	A	B	C	D	E	F	Type
1210SDF	3.2 (0.126)	2.5 (0.098)	2.0 (0.079)	1.3 (0.051)	0.9 (0.035)	2.3 (0.091)	2
Tol	± 0.30 (0.012)	± 0.20 (0.008)	± 0.25 (0.010)	± 0.20 (0.008)	± 0.30 (0.012)	Ref.	



Type 2

C. Applications:

1. Power supply line chokes.
2. DC-DC Converters.
3. Notebooks.
4. Filters.
5. Telecommunication devices.

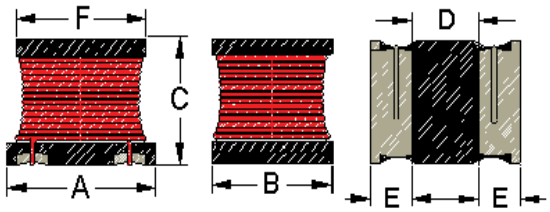
A. Electrical Specifications:

Part No.	Mark	L (uH)	Tolerance	Test Freq.	SRF TYP. (MHz)	DCR Max. (Ω)	IDC Max. (A)
1812SDF-1R0_	1R0	1.00	M	1.0 KHz	100	0.08	1.080
1812SDF-1R5_	1R5	1.50	M	1.0 KHz	85.0	0.09	1.000
1812SDF-2R2_	2R2	2.20	M	1.0 KHz	60.0	0.11	0.900
1812SDF-3R3_	3R3	3.30	M	1.0 KHz	47.0	0.13	0.800
1812SDF-4R7_	4R7	4.70	M, K	1.0 KHz	35.0	0.15	0.750
1812SDF-6R8_	6R8	6.80	M, K	1.0 KHz	30.0	0.20	0.720
1812SDF-100_	100	10.0	K, J	1.0 KHz	23.0	0.24	0.650
1812SDF-150_	150	15.0	K, J	1.0 KHz	20.0	0.32	0.570
1812SDF-220_	220	22.0	K, J	1.0 KHz	15.0	0.60	0.420
1812SDF-330_	330	33.0	K, J	1.0 KHz	12.0	1.00	0.310
1812SDF-470_	470	47.0	K, J	1.0 KHz	10.0	1.10	0.280
1812SDF-680_	680	68.0	K, J	1.0 KHz	8.4	1.07	0.220
1812SDF-101_	101	100	K, J	1.0 KHz	6.8	2.20	0.190
1812SDF-151_	151	150	K, J	1.0 KHz	5.5	3.50	0.130
1812SDF-221_	221	220	K, J	1.0 KHz	4.5	4.00	0.110
1812SDF-331_	331	330	K, J	1.0 KHz	3.6	6.80	0.100
1812SDF-471_	471	470	K, J	1.0 KHz	3.0	8.50	0.090

Note: 1. 1812SDF-xxx_: "1812SDF" = Size Type, "xxx" = Inductance, "_" = Tolerance, M= ± 20%, K= ±10%, J= ±5%.
2. I DC: Inductance drops no more than 10% at rated current or the Δt ≤ 40ºC.
3. Temperature rise Δ t < 40ºC (Typical) at rated current and room temperature 20ºC.
4. Suitable for IR re-flows soldering; Tape and reel packing.

B. Dimensions: mm (Inch)

SERIES	A	B	C	D	E	F	Type
1812SDF	4.5 (0.177)	3.2 (0.126)	2.6 (0.102)	1.0 (0.039)	1.0 (0.039)	4.0 (0.157)	2
Tol	± 0.30 (0.012)	± 0.30 (0.012)	± 0.30 (0.012)	Min.	Min.	Ref.	



Type 2

C. Applications:

1. Power supply line chokes.
2. DC-DC Converters.
3. Notebooks.
4. Filters.
5. Telecommunication devices.

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SMD SQUARE DRUM FERRITE-CORE INDUCTORS
2220SDF-SERIES

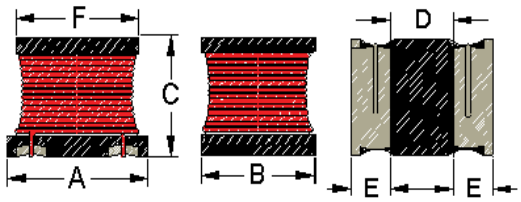
A. Electrical Specifications:

Part No.	Mark	L (uH)	Tol.	Test Freq.	SRF Min (MHz)	DCR (Ω) Max.	IDC Max. (A)
2220SDF-R12_	R12	0.12	M	1.0 MHz/1.0V rms	450	0.0098	6.00
2220SDF-R27_	R27	0.27	M	1.0 MHz/1.0V rms	300	0.0140	5.30
2220SDF-R47_	R47	0.47	M	1.0 MHz/1.0V rms	250	0.0182	4.80
2220SDF-1R0_	1R0	1.00	M	1.0 MHz/1.0V rms	150	0.0272	4.00
2220SDF-1R5_	1R5	1.50	M	1.0 MHz/1.0V rms	110	0.0310	3.70
2220SDF-2R2_	2R2	2.20	M	1.0 MHz/1.0V rms	80.0	0.0410	3.20
2220SDF-3R3_	3R3	3.30	M	1.0 MHz/1.0V rms	40.0	0.0504	2.90
2220SDF-4R7_	4R7	4.70	M	1.0 MHz/1.0V rms	30.0	0.0574	2.70
2220SDF-6R8_	6R8	6.80	M	1.0 MHz/1.0V rms	25.0	0.1040	2.00
2220SDF-100_	100	10.0	M, K	1.0 MHz/1.0V rms	20.0	0.1300	1.70
2220SDF-150_	150	15.0	M, K	1.0 MHz/1.0V rms	17.0	0.2100	1.40
2220SDF-220_	220	22.0	M, K	1.0 MHz/1.0V rms	15.0	0.2660	1.20
2220SDF-330_	330	33.0	M, K	1.0 MHz/1.0V rms	12.0	0.4480	0.90
2220SDF-470_	470	47.0	M, K	1.0 MHz/1.0V rms	10.0	0.5600	0.80
2220SDF-680_	680	68.0	M, K	1.0 MHz/1.0V rms	7.60	0.9380	0.64
2220SDF-101_	101	100	M, K	100 KHz/1.0V rms	6.50	1.204	0.56
2220SDF-151_	151	150	M, K	100 KHz/1.0V rms	5.00	2.660	0.42
2220SDF-221_	221	220	M, K	100 KHz/1.0V rms	4.00	3.360	0.32
2220SDF-331_	331	330	M, K	100 KHz/1.0V rms	3.10	6.160	0.27
2220SDF-471_	471	470	M, K	100 KHz/1.0V rms	2.40	7.560	0.24
2220SDF-681_	681	680	M, K	100 KHz/1.0V rms	1.90	11.34	0.19
2220SDF-102_	102	1000	M, K	10 KHz/1.0V rms	1.70	14.42	0.15
2220SDF-222_	222	2200	M, K	10 KHz/1.0V rms	1.20	30.10	0.10
2220SDF-472_	472	4700	M, K	10 KHz/1.0V rms	0.80	61.04	0.07
2220SDF-103_	103	10000	M, K	10 KHz/1.0V rms	0.50	140.0	0.05

Note: 1. 2220SDF-xxx_: "2220SDF" = Size Type, "xxx" = Inductance, "_" = Tolerance, M= ± 20%, K= ±10%.
2. Inductance drops no more than 10% at rated I sat; Temperature rises Δ t < 15ºC (typical) at rated I rms.
3. Suitable for IR re-flows soldering; Tape and reel packing.

B. Dimensions: mm (Inch)

SERIES	A	B	C	D	E	F	Type
2220SDF	5.7 (0.224)	5.0 (0.197)	4.7 (0.185)	1.7 (0.067)	1.3 (0.051)	5.0 (0.197)	2
Tol	± 0.30 (0.012)	± 0.30 (0.012)	± 0.30 (0.012)	Min.	Min.	Ref.	



Type 2

C. Applications:

1. Power supply line chokes.
2. DC-DC Converters.
3. Notebooks.
4. Filters.
5. Telecommunication devices.

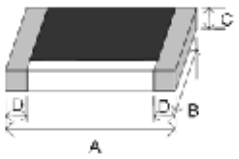
A. Electrical Specifications:

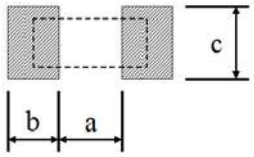
0201TF (Ceramic) Series: 0.10 nH (400 mA) ~ 10.0 nH (80 mA), SRF from 9.0 GHz to 2.0 GHz.

0402TF (Ceramic) Series: 0.20 nH (800 mA) ~ 33.0 nH (75 mA), SRF from 14 GHz to 2.50 GHz.

B. Dimensions and Recommend Land Pattern: (mm/inch)

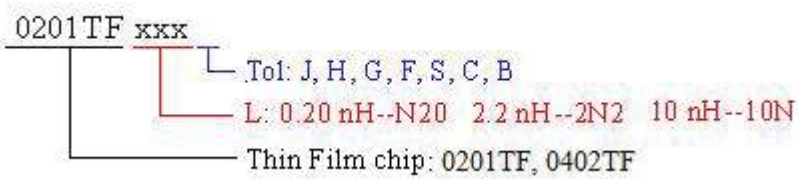
Series	A	B	C	D	a	b	c
0201TF	0.60±0.05 (0.024±0.002)	0.30±0.05 (0.012±0.002)	0.23±0.05 (0.009±0.002)	0.15±0.05 (0.006±0.002)	0.30 (0.0118)	0.25 (0.010)	0.30±0.20 (0.0118±0.008)
0402TF	1.00±0.05 (0.039±0.002)	0.50±0.05 (0.020±0.002)	0.32±0.05 (0.013±0.002)	0.20±0.10 (0.008±0.004)	0.50 (0.020)	0.45 (0.018)	0.60±0.20 (0.024±0.008)





Recommend Land Pattern

C. Part Number (Example):



D. General Information:

1. P/N: ****TF-xxx_: "****TF" = Series, "xxx" = Inductance, "_" = Tolerance.
2. Tolerance " _ ": J: ± 5%, H: ± 3%, G: ± 2%, F: ± 1%, B: ± 0.1nH, C: ± 0.2nH, S: ±0.3nH.
3. A Photo Lithographic Single Layer Ceramic Chip.
4. High SRF, Excellent Q, Superior Temperature Stability
5. Tight Tolerance of ± 1% or ± 0.1nH
6. Stable Inductance in High Frequency Circuit
7. Maximum Temperature Rise: 15ºC (when measured at 25ºC ambient).
8. Inductance & Q measured using the HP4286A and Agilent 16196B.
9. SRF measured using the HP8720D or HP8753E.
10. DCR measured using the 502BC.
11. Operating temperature: -40ºC to +125ºC.
12. Storage Temperature: 25ºC ± 3ºC; Humidity < 80%RH
13. MSL: Level 1.

E. Applications:

1. Cellular-phone, Pagers and GPS Products.
2. VCO, TCXO Circuit and RF Transceiver Module.
3. Wireless LAN, Bluetooth Module, Communication Appliances Hybrid.

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SMD THIN FILM (CERAMIC) CHIP INDUCTORS
0201TF-SERIES

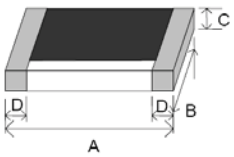
A. Electrical Specifications:

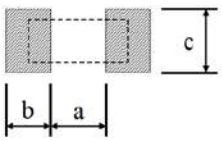
Part No.	L (nH)	_ Tolerance	Q Min.	SRF Min. (GHz)	DCR Max. (Ω)	I DC Max. (mA)
0201TF-N10_	0.1	B, C, S	8/500MHz	9	0.20	400
0201TF-N20_	0.2	B, C, S	8/500MHz	9	0.20	400
0201TF-N30_	0.3	B, C, S	8/500MHz	9	0.20	400
0201TF-N40_	0.4	B, C, S	8/500MHz	9	0.25	350
0201TF-N50_	0.5	B, C, S	8/500MHz	9	0.25	350
0201TF-N60_	0.6	B, C, S	8/500MHz	9	0.25	350
0201TF-N70_	0.7	B, C, S	8/500MHz	9	0.30	300
0201TF-N80_	0.8	B, C, S	8/500MHz	9	0.30	300
0201TF-N90_	0.9	B, C, S	8/500MHz	9	0.30	300
0201TF-1N0_	1.0	B, C, S	8/500MHz	9	0.30	300
0201TF-1N1_	1.1	B, C, S	8/500MHz	9	0.35	300
0201TF-1N2_	1.2	B, C, S	8/500MHz	9	0.35	300
0201TF-1N3_	1.3	B, C, S	8/500MHz	9	0.45	250
0201TF-1N4_	1.4	B, C, S	8/500MHz	9	0.45	250
0201TF-1N5_	1.5	B, C, S	8/500MHz	9	0.45	250
0201TF-1N6	1.6	B, C, S	8/500MHz	9	0.55	200
0201TF-1N7_	1.7	B, C, S	8/500MHz	9	0.55	200
0201TF-1N8_	1.8	B, C, S	8/500MHz	9	0.55	200
0201TF-1N9_	1.9	B, C, S	8/500MHz	9	0.55	200
0201TF-2N0_	2.0	B, C, S	8/500MHz	8	0.70	200
0201TF-2N1_	2.1	B, C, S	8/500MHz	8	0.70	200
0201TF-2N2_	2.2	B, C, S	8/500MHz	8	0.70	200
0201TF-2N3_	2.3	B, C, S	8/500MHz	8	0.80	150
0201TF-2N4_	2.4	B, C, S	8/500MHz	8	0.80	150
0201TF-2N5_	2.5	B, C, S	8/500MHz	8	0.80	150
0201TF-2N6_	2.6	B, C, S	8/500MHz	8	0.80	150
0201TF-2N7_	2.7	B, C, S	8/500MHz	8	0.80	150
0201TF-2N8_	2.8	B, C, S	8/500MHz	6	1.00	150
0201TF-2N9_	2.9	B, C, S	8/500MHz	6	1.00	150
0201TF-3N0_	3.0	B, C, S	8/500MHz	6	1.00	150
0201TF-3N1_	3.1	B, C, S	8/500MHz	6	1.00	150
0201TF-3N2_	3.2	B, C, S	8/500MHz	6	1.00	150
0201TF-3N3_	3.3	B, C, S	8/500MHz	6	1.00	150
0201TF-3N4_	3.4	B, C, S	8/500MHz	6	1.20	150
0201TF-3N5_	3.5	B, C, S	8/500MHz	6	1.20	150
0201TF-3N6_	3.6	B, C, S	8/500MHz	6	1.20	150
0201TF-3N7_	3.7	B, C, S	8/500MHz	6	1.20	150
0201TF-3N8_	3.8	B, C, S	8/500MHz	6	1.20	150
0201TF-3N9_	3.9	B, C, S	8/500MHz	6	1.20	150
0201TF-4N0_	4.0	B, C, S	8/500MHz	6	1.20	150
0201TF-4N4_	4.4	B, C, S	8/500MHz	6	1.30	140
0201TF-4N7_	4.7	B, C, S	8/500MHz	6	1.40	130
0201TF-4N9_	4.9	B, C, S	8/500MHz	6	1.60	130
0201TF-5N6	5.6	G, J	8/500MHz	4	1.80	130
0201TF-6N1_	6.1	G, J	8/500MHz	4	2.00	120
0201TF-6N8_	6.8	G, J	8/500MHz	4	2.30	110
0201TF-7N4_	7.4	G, J	8/500MHz	4	2.80	110
0201TF-8N2_	8.2	G, J	8/500MHz	3	3.00	110
0201TF-9N1_	9.1	G, J	8/500MHz	3	3.25	100
0201TF-9N2_	9.2	G, J	8/500MHz	3	3.25	100
0201TF-10N_	10.0	G, J	8/500MHz	2	3.50	80

Note: 0201TF-xxx_, "0201TF" = P/N, "xxx" = Inductance, "_" = Tolerance.

B. Dimensions and Recommend Land Pattern: (mm/inch)

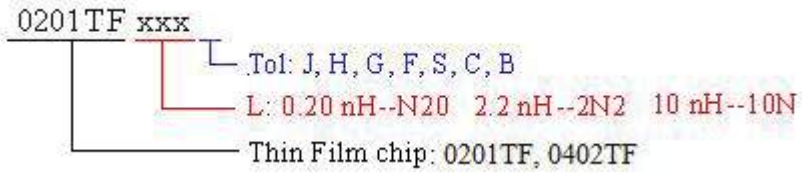
Series	A	B	C	D	a	b	c
0201TF	0.60±0.05 (0.024±0.002)	0.30±0.05 (0.012±0.002)	0.23±0.05 (0.009±0.002)	0.15±0.05 (0.006±0.002)	0.30 (0.0118)	0.25 (0.010)	0.30±0.20 (0.0118±0.008)





Recommend Land Pattern

C. Part Number (Example):



SMD THIN FILM (CERAMIC) CHIP INDUCTORS
0402TF-SERIES

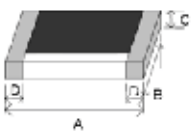
A. Electrical Specifications:

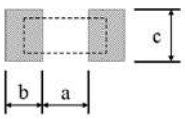
Part No.	L (nH)	Tolerance	Q (Min)	Test Frequency	SRF (GHz) Min.	DCR (Ω) Max.	I rms.(mA)Max.
0402TF-N20_	0.2	B, C, S	13	500 MHz	14	0.10	800
0402TF-N30_	0.3	B, C, S	13	500 MHz	14	0.10	800
0402TF-N40_	0.4	B, C, S	13	500 MHz	14	0.10	800
0402TF-N50_	0.5	B, C, S	13	500 MHz	14	0.15	700
0402TF-N60_	0.6	B, C, S	13	500 MHz	14	0.15	700
0402TF-N80_	0.8	B, C, S	13	500 MHz	14	0.15	700
0402TF-N90_	0.9	B, C, S	13	500 MHz	14	0.15	700
0402TF-1N0_	1.0	B, C, S	13	500 MHz	12	0.15	700
0402TF-1N1_	1.1	B, C, S	13	500 MHz	12	0.15	700
0402TF-1N2_	1.2	B, C, S	13	500 MHz	12	0.15	700
0402TF-1N3_	1.3	B, C, S	13	500 MHz	10	0.25	700
0402TF-1N4_	1.4	B, C, S	13	500 MHz	10	0.25	700
0402TF-1N5_	1.5	B, C, S	13	500 MHz	10	0.25	700
0402TF-1N6_	1.6	B, C, S	13	500 MHz	10	0.25	560
0402TF-1N7_	1.7	B, C, S	13	500 MHz	10	0.25	560
0402TF-1N8_	1.8	B, C, S	13	500 MHz	10	0.25	560
0402TF-1N9_	1.9	B, C, S	13	500 MHz	8.0	0.35	560
0402TF-2N0_	2.0	B, C, S	13	500 MHz	8.0	0.35	560
0402TF-2N1_	2.1	B, C, S	13	500 MHz	8.0	0.35	440
0402TF-2N2_	2.2	B, C, S	13	500 MHz	8.0	0.35	440
0402TF-2N3_	2.3	B, C, S	13	500 MHz	8.0	0.35	440
0402TF-2N4_	2.4	B, C, S	13	500 MHz	8.0	0.35	440
0402TF-2N5_	2.5	B, C, S	13	500 MHz	8.0	0.35	440
0402TF-2N6_	2.6	B, C, S	13	500 MHz	8.0	0.35	440
0402TF-2N7_	2.7	B, C, S	13	500 MHz	8.0	0.35	440
0402TF-2N8	2.8	B, C, S	13	500 MHz	6.0	0.45	380
0402TF-2N9_	2.9	B, C, S	13	500 MHz	6.0	0.45	380
0402TF-3N0_	3.0	B, C, S	13	500 MHz	6.0	0.45	380
0402TF-3N1_	3.1	B, C, S	13	500 MHz	6.0	0.45	380
0402TF-3N2	3.2	B, C, S	13	500 MHz	6.0	0.45	380
0402TF-3N3_	3.3	B, C, S	13	500 MHz	6.0	0.45	380
0402TF-3N4	3.4	B, C, S	13	500 MHz	6.0	0.55	380
0402TF-3N5_	3.5	B, C, S	13	500 MHz	6.0	0.55	380
0402TF-3N6_	3.6	B, C, S	13	500 MHz	6.0	0.55	380
0402TF-3N7_	3.7	B, C, S	13	500 MHz	6.0	0.55	340
0402TF-3N8_	3.8	B, C, S	13	500 MHz	6.0	0.55	340
0402TF-3N9_	3.9	B, C, S	13	500 MHz	6.0	0.55	340
0402TF-4N3_	4.3	B, C, S	13	500 MHz	6.0	0.65	320
0402TF-4N7_	4.7	B, C, S	13	500 MHz	6.0	0.65	320
0402TF-5N4_	5.4	B, C, S	13	500 MHz	6.0	0.85	280
0402TF-5N6_	5.6	B, C, S	13	500 MHz	6.0	0.85	280
0402TF-5N9_	5.9	B, C, S	13	500 MHz	6.0	0.85	280
0402TF-6N5_	6.5	B, C, S	13	500 MHz	6.0	1.05	260
0402TF-6N8_	6.8	B, C, S	13	500 MHz	6.0	1.05	260
0402TF-7N2_	7.2	B, C, S	13	500 MHz	6.0	1.05	260
0402TF-8N0_	8.0	B, C, S	13	500 MHz	5.5	1.25	220
0402TF-8N1_	8.1	B, C, S	13	500 MHz	5.5	1.25	220
0402TF-8N2_	8.2	B, C, S	13	500 MHz	5.5	1.25	220
0402TF-9N1_	9.1	B, C, S	13	500 MHz	5.5	1.25	220
0402TF-10N_	10.0	J, H, G, F	13	500 MHz	4.5	1.35	200
0402TF-10N8_	10.8	J, H, G, F	13	500 MHz	4.5	1.35	200
0402TF-12N_	12.0	J, H, G, F	13	500 MHz	3.7	1.55	180
0402TF-13N8_	13.8	J, H, G, F	13	500 MHz	3.7	1.75	180
0402TF-15N_	15.0	J, H, G, F	13	500 MHz	3.3	1.75	130
0402TF-17N_	17.0	J, H, G, F	13	500 MHz	3.1	1.95	100
0402TF-18N_	18.0	J, H, G, F	13	500 MHz	3.1	2.15	100
0402TF-20N8_	20.8	J, H, G, F	13	500 MHz	2.8	2.55	90
0402TF-22N	22.0	J, H, G, F	13	500 MHz	2.8	2.65	90
0402TF-27N_	27.0	J, H, G, F	13	500 MHz	2.5	3.25	75
0402TF-33N_	33.0	J	13	500 MHz	2.5	4.50	75

Note: 0402TF-xxx_, "0402TF" = P/N, "xxx" = Inductance, "_" = Tolerance.

B. Dimensions and Recommend Land Pattern: (mm/inch)

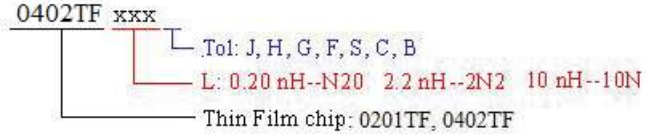
Series	A	B	C	D	a	b	c
0402TF	1.00±0.05 (0.039±0.002)	0.50±0.05 (0.020±0.002)	0.32±0.05 (0.013±0.002)	0.20±0.10 (0.008±0.004)	0.50 (0.020)	0.45 (0.018)	0.60±0.20 (0.024±0.008)





Recommend Land Pattern

C. Part Number (Example):



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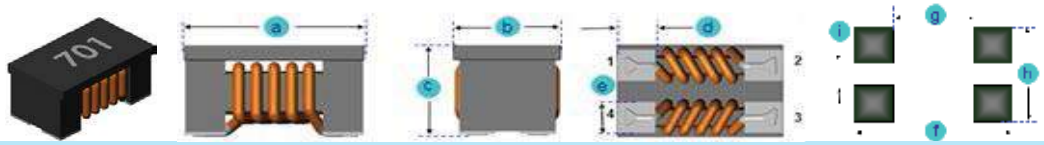
SMD COMMON MODE CHOKE COILS

A. Dimensions: mm (Inch)

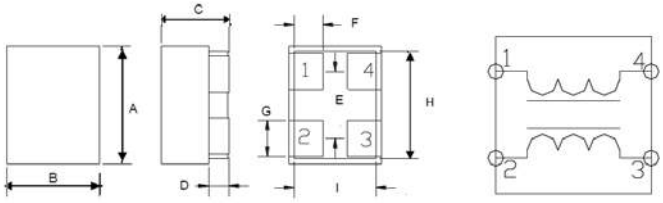
Series	a	b	c	d	e	f	g	h	i	Type
SCM2012F-I	2.0(0.079)	1.2(0.047)	1.2(0.047)	0.45(0.018)	0.4(0.016)	2.6(0.102)	0.8(0.031)	1.2(0.047)	0.4(0.016)	1
Tol.	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
SCM2012FH-I	2.0(0.079)	1.2(0.047)	1.2(0.047)	0.45(0.018)	0.4(0.016)	2.6(0.102)	0.8(0.031)	1.2(0.047)	0.4(0.016)	1
Tol.	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
SCM7038F	7.5(0.295)	6.5(0.256)	3.8(0.150)	1.7(0.067)	1.5(0.059)	6.9(0.272)	2.5(0.098)	4.5(0.177)	1.5(0.059)	2
Tol.	Max.	Max.	Max.	±0.2(0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	
CMF03G/CMF03U CMF03H	0.88(0.035)	0.68(0.027)	0.5(0.020)	0.15(0.006)	0.5(0.020)	0.2(0.008)	0.27(0.011)	0.82(0.032)	0.62(0.024)	3
Tol.	±0.05(0.002)	±0.05(0.002)	±0.05(0.002)	Typ.	±0.1(0.004)	±0.05(0.002)	±0.1(0.004)	Typ.	Typ.	
CMF04H	1.25(0.049)	1.00(0.039)	0.5(0.020)	0.15(0.006)	0.55(0.022)	0.30(0.012)	0.25(0.010)	1.19(0.047)	0.94(0.037)	4
Tol.	±0.15(0.006)	±0.15(0.006)	±0.15(0.006)	Typ.	±0.10(0.004)	±0.1(0.004)	±0.15(0.006)	Typ.	Typ.	

B. Mechanical Drawing:

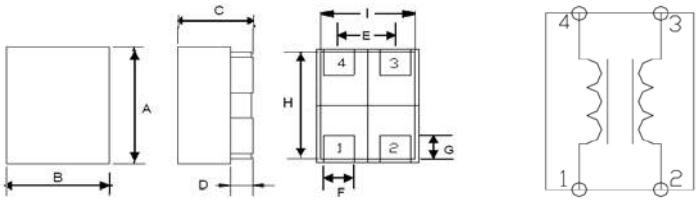
Type-1



Type-2



Type-3



Type-4

C. General Information:

1. SCM******-xxx, "SCM******" = P/N, "xxx" = Impedance.
2. CMF**z = P/N, "CMF**" = size, "z" = Material
3. Tolerance "_": M: ± 20%, K: ± 10%.
4. Small size, low profile
5. Maximum Temperature Rise: 15°C (when measured at 25°C ambient).
6. DCR measured using the 16502 milliohm meter.
7. Unspecified values available on request.
8. MSL: Level 1.
9. Impedance and Current range:
   a. SCM2012F –I: From 67 Ohms (400 mA) to 600 Ohms (240 mA)
   b. SCM2012FH-I: From 67 Ohms (400 mA) to 120 Ohms (250 mA)
   c. SCM7038F: From 300 Ohms (5000 mA) to 1020 Ohms (3000 mA)
   d. CMF03G: 90 Ohms (100mA)
   e. CMF03U: 30 Ohms (100mA)
   f. CMF03H: 53 Ohms (100mA)
   g. CMF04H: 90 Ohms (100mA)

D. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

SMD COMMON MODE CHOKE COILS
SCM2012F-I SERIES

A. Electrical Specifications:

P/N	Impedance @100MHz (Ω)	DCR Max. (Ω)	Rated Current Max.(mA)	Rated Voltage (Vdc)	Withstand Voltage (Vdc)	Insulation Resistance Min. (MΩ) @125Vdc
SCM2012F-670_-I	67	0.25	400	50	125	10
SCM2012F-900_-I	90	0.35	330	50	125	10
SCM2012F-121_-I	120	0.30	370	50	125	10
SCM2012F-181_-I	180	0.35	330	50	125	10
SCM2012F-261_-I	260	0.40	300	50	125	10
SCM2012F-371_-I	370	0.45	280	50	125	10
SCM2012F-601_-I	600	0.60	240	50	125	10

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i
SCM2012F-I	2.0(0.079)	1.2(0.047)	1.2(0.047)	0.45(0.018)	0.4(0.016)	2.6(0.102)	0.8(0.031)	1.2(0.047)	0.4(0.016)
Tol.	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.

C. Schematic:

D. General Information:

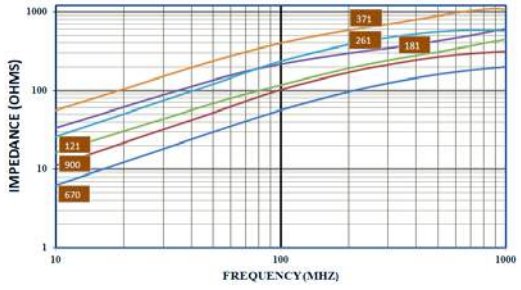
1. SCM2012F-xxx_-I, "SCM2012F" = P/N, "xxx" = Impedance, "_" = Tolerance, "-I" = Internal code.
2. Tolerance "_" : M: ± 20%
3. Small size, low profile
4. Maximum Temperature Rise: 15°C (when measured at 25°C ambient).
5. Impedance measured with HP4291B Impedance Analyzer
6. DCR measured using the 16502 milliohm meter.
7. Operating temperature: -40°C to +125°C
8. Storage temperature: -40°C to +125°C
9. Impedance and Current Range: From 67 Ohms (400 mA) to 600 Ohms (240 mA)
10. Unspecified values available on request.
11. MSL: Level 1.

E. Applications:

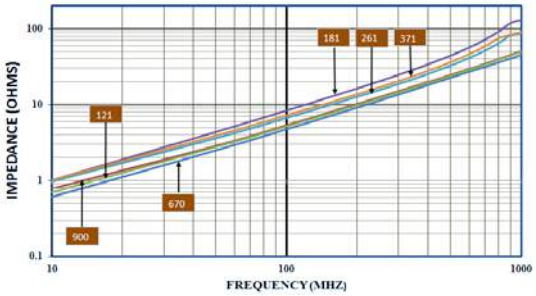
1. Common mode noise suppression of signal lines in high speed and high-density digital equipment, such as personal computers and peripherals.
2. Suitable for differential signal line such as USB3.0, IEEE1394 and LVDS, capable of high speed signal transmission without distortion due to its high coupling.

F. Characteristics Curve:

Impedance vs. Frequency (Common mode)



Impedance vs. Frequency (Normal Mode)



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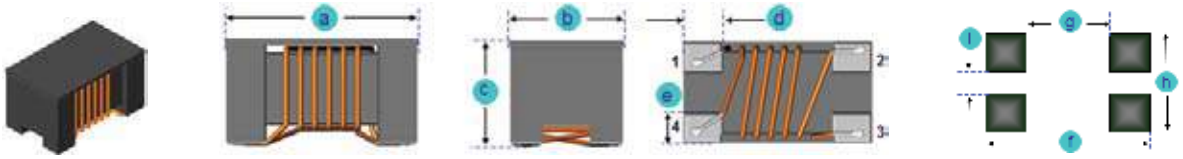
SMD COMMON MODE CHOKE COILS
SCM2012FH-I SERIES

A. Electrical Specifications:

P/N	Impedance @100MHz (Ω)	DCR Max. (Ω)	Rated Current Max.(mA)	Rated Voltage (Vdc)	Withstand Voltage (Vdc)	Insulation Resistance Min. (MΩ) @125Vdc
SCM2012FH-670_-I	67	0.30	400	50	125	10
SCM2012FH-900_-I	90	0.40	300	50	125	10
SCM2012FH-121_-I	120	0.45	250	50	125	10

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i
SCM2012FH-I	2.0(0.079)	1.2(0.047)	1.2(0.047)	0.45(0.018)	0.4(0.016)	2.6(0.102)	0.8(0.031)	1.2(0.047)	0.4(0.016)
Tol.	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.



C. Schematic:

D. General Information:

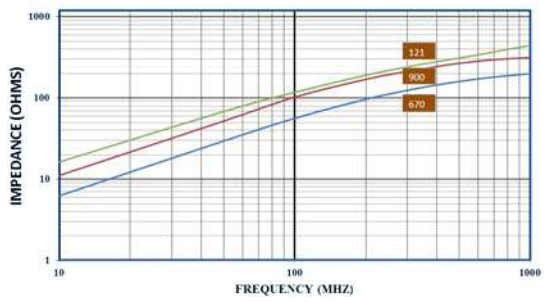
1. SCM2012FH-xxx_-I, "SCM2012FH" = P/N, "xxx" = Impedance, "_" = Tolerance, "-I" = Internal code.
2. Tolerance "_": M: ± 20%
3. Small size & low profile
4. Maximum Temperature Rise: 15°C (when measured at 25°C ambient).
5. Impedance measured with HP4291B RF Impedance Analyzer
6. DCR measured using the 16502 milliohm meter.
7. Operating temperature: -40°C to +125°C
8. Storage temperature: -40°C to +125°C
9. Impedance and Current Range: From 67 Ohms (400 mA) to 120 Ohms (250 mA)
10. Unspecified values available on request.
11. MSL: Level 1.

E. Applications:

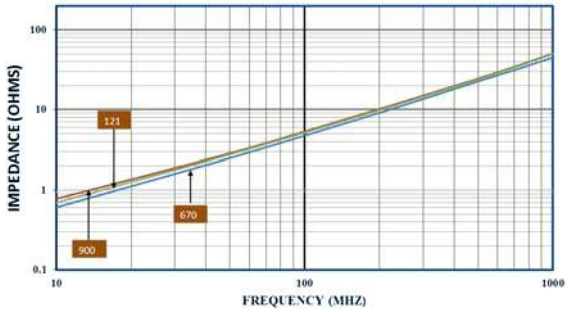
1. Common mode noise suppression of signal lines in high speed and high-density digital equipment, such as personal computers and peripherals.
2. The cut-off frequency of HDMI for differential mode are 3.5 GHz and 6GHz respectively, so they don't interfere with higher-speed differential signals such as DVI or HDMI. The product is suited for use on the transmission side of digital TVs, DVD recorders, and liquid crystal projectors.

F. Characteristics Curve:

Impedance vs. Frequency (Common mode)



Impedance vs. Frequency (Normal Mode)



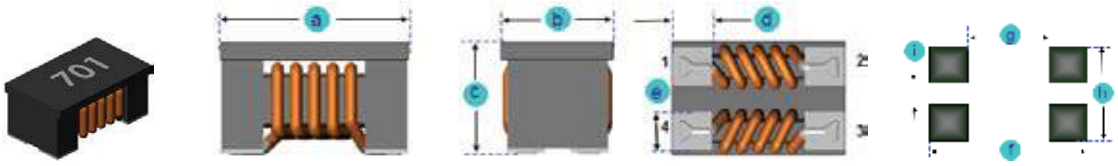
SMD COMMON MODE CHOKE COILS
SCM7038F-SERIES

A. Electrical Specifications:

P/N	Impedance @100MHz (Ω) Min.	Typ.	DCR Max. (mΩ)	Rated Current Max.(A)	Rated Voltage (Vdc)	Insulation Resistance Min. (MΩ) @125Vdc
SCM7038F-301_	225	300	10	5	80	10
SCM7038F-501_	300	500	13	4	80	10
SCM7038F-701_	500	700	15	4	80	10
SCM7038F-102_	800	1020	17	3	80	10

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i
SCM7038F	7.5 (0.295)	6.5 (0.256)	3.8 (0.150)	1.7 (0.067)	1.5 (0.059)	6.9 (0.272)	2.5 (0.098)	4.5 (0.177)	1.5 (0.059)
Tol.	Max.	Max.	Max.	±0.2 (0.008)	Typ.	Typ.	Typ.	Typ.	Typ.



C. Schematic:

D. General Information:

1. SCM7038F-xxx_, "SCM7038F" = P/N, "xxx" = Impedance, "_" = Tolerance.
2. Tolerance "_" : M: ± 20%
3. Impedance measured with HP4291B RF Impedance Analyzer
4. DCR measured using the 16502 milliohm meter.
5. Operating temperature: -40°C to +105°C (Including self temp. rise).
6. Storage temperature: -40°C to +105°C
7. Impedance and Current Range: From 300 Ohms (5000 mA) to 1020 Ohms (3000 mA)
8. Unspecified values available on request.
9. MSL: Level 1.

E. Applications:

1. Use for power line noise suppression for any electronic devices.
2. Use to counter adapter/battery line noise for relatively large electronic devices such as Notebook PCs

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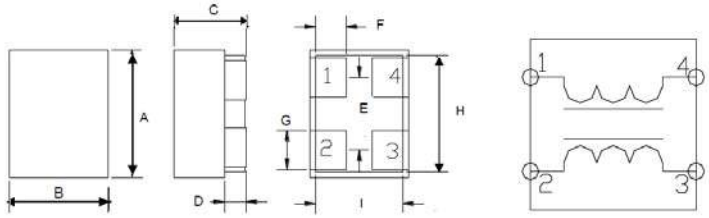
THIN FILM COMMON MODE FILTERS
CMF-SERIES

A. Standard Electrical Specifications:

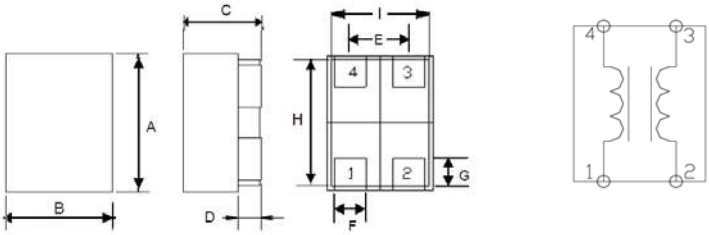
Part No.	Impedance (Ω)	Tolerance	Test Condition (MHz)	DCR (Ω) [1 line]	I DC (mA) Max.	Rated Voltage Edc (V) Max.	Cutoff Frequency (GHz) typ.	Insulation Resistance (MΩ) Min.
CMF03G_900	90	M	100	2.8 ± 30%	100	10	4.0	10
CMF03U_350	35	M, K	100	1.8 ± 30%	100	10	8.0	10
CMF03H_650	65	M, K	100	2.5 ± 30%	100	10	5.0	10
CMF04H_900	90	M, K	100	2.8 ± 25%	100	10	5.0	10

B. Dimensions: mm (Inch)

Series	Size	A	B	C	D	E	F	G	H	I	Packaging
CMF03G CMF03U CMF03H	03025	0.88 (0.035)	0.68 (0.027)	0.5 (0.020)	0.15 (0.006)	0.5 (0.020)	0.2 (0.008)	0.27 (0.011)	0.82 (0.032)	0.62 (0.024)	10,000EA
Tol.		±0.05 (0.002)	±0.05 (0.002)	±0.05 (0.002)	Typ.	±0.1 (0.004)	±0.05 (0.002)	±0.1 (0.004)	Typ.	Typ.	
CMF04H	0504	1.25 (0.049)	1.00 (0.039)	0.5 (0.020)	0.15 (0.006)	0.55 (0.022)	0.30 (0.012)	0.25 (0.010)	1.19 (0.047)	0.94 (0.037)	4,000EA
Tol.		±0.15 (0.006)	±0.15 (0.006)	±0.15 (0.006)	Typ.	±0.10 (0.004)	±0.1 (0.004)	±0.15 (0.006)	Typ.	Typ.	



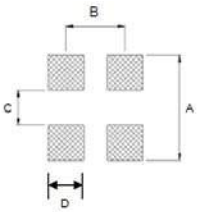
CMF03G/CMF03U/CMF03H



CMF04H

C. Recommended Land Pattern: mm(Inch)

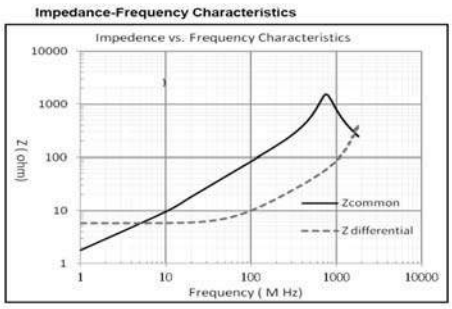
Type	A	B	C	D
CMF03G CMF03U CMF03H	0.9 (0.035)	0.5 (0.020)	0.3 (0.012)	0.3 (0.012)
CMF04H	1.8(0.071)	0.55(0.022)	0.6(0.024)	0.3(0.012)

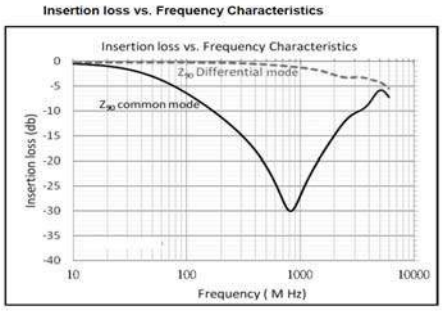


D. Part Number:

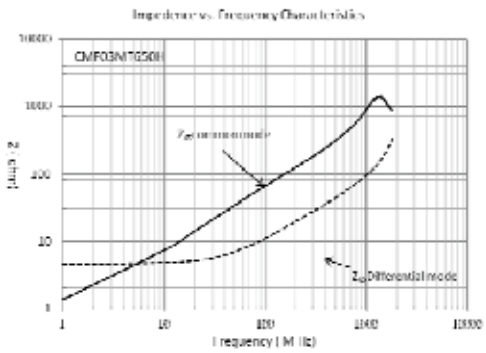
CMF	03/04	G/U/H	—	XXX
Product Type	**Dimension**		**Impedance Tolerance**	**Impedance**
	03: 03025 04: 0504	G: General H: High frequency U: Ultra high frequency	M: ±20% K: ±10%	350: 35Ω 650: 65Ω 900: 90Ω

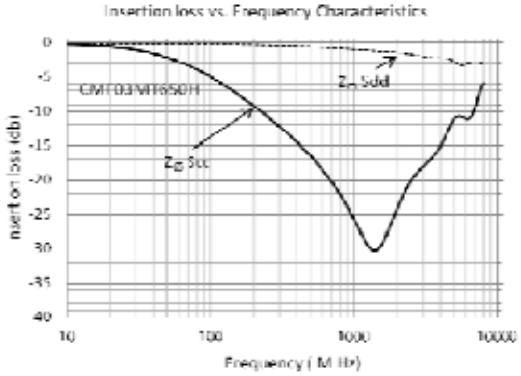
E. Characteristics:



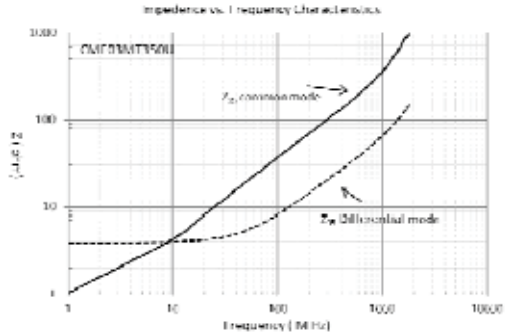


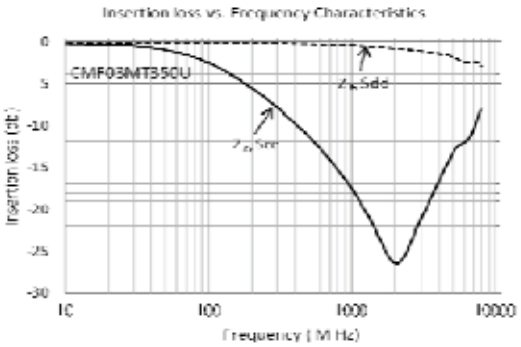
CMF03G



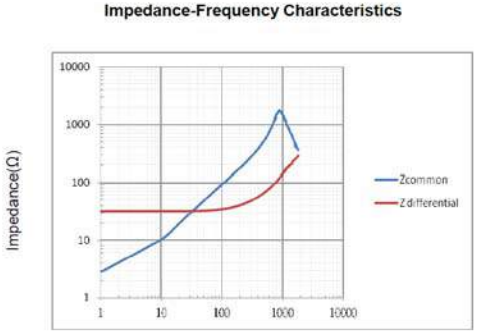


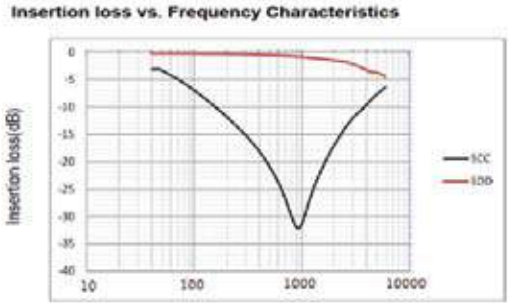
CMF03H





CMF03U





CMF04H

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F. Features:

CMF03G	CMF03H/CMF04H	CMF03U
1. The CMF03G (03025) is a compact thin film common mode filter that is used for common mode noise suppression in high speed differential data lines. 2. By providing wide bandwidth (cutoff frequency: 2.1GHz) for differential mode, this product has almost no effect for high speed differential signals and can suppress the common mode noise. 3. This product contains no lead with Ni/Au electrode and supports lead-free soldering.	1. The CMF03H (03025), CMF04H (0504) is a thin-film common mode filter with a wide bandwidth for ultra-high speed differential signal interfaces such as MIPI and display port. 2. By providing a large bandwidth (cutoff frequency > 5GHz) for ultra-high speed differential signal interfaces such as MIPI and display port. CMF03H (03025), CMF04H (0504) suppresses radiation noise due to common mode noise, without affecting the transmission of high-speed differential signals. 3. This product contains no lead with Ni/Au electrode and supports lead-free soldering.	1. The CMF03U (03025), is a thin-film common mode filter with a wide bandwidth for ultra-high speed differential signal interfaces such as USB 3.0 and MIPI interface. 2. By providing a large bandwidth (cutoff frequency > 8GHz) for ultra-high speed differential signal interfaces such as USB 3.0 and MIPI. CMF03U (03025) suppresses radiation noise due to common mode noise, without affecting the transmission of high-speed differential signals. 3. This product contains no lead with Ni/Au electrode and supports lead-free soldering.

G. Applications:

CMF03G	CMF03H/CMF04H	CMF03U
1. High Speed Interface (LVDS, IEEE1394 and USB) in electronics devices. 2. Portable audio, digital cellular phones, DVC, DSC, PDP/LCD/DLP/PJ TVs, DVD players, notebook PCs	1. Ultra-high interface (HDMI, DVI, Display port, MIPI and Serial ATA, etc.) in electronics devices. 2. Notebook PCs, PDP/LCD/DLP/PJ TVs, portable audio, digital cellular phones, DVC, DSC, DVD players, entertainment machines, etc.	1. Ultra-high interface (HDMI, USB3.0, Display port, MIPI and Serial ATA, etc.) in electronics devices. 2. Notebook PCs, PDP/LCD/DLP/PJ TVs, portable audio, digital cellular phones, DVC, DSC, DVD players, entertainment machines, etc.

SMD MOLDED WIRE WOUND FERRITE CHIP INDUCTORS
CF******-SERIES

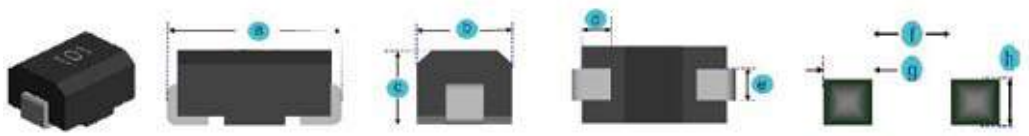
A. Inductance Range:

1. CF252018-Series:
   Inductance: From 0.010 uH (530 mA) to 100 uH (60 mA)
   DCR: From 0.26 OHM to 21.0 OHM
   SRF: From 12 MHz to 2150 MHz.
2. CF322522-Series:
   Inductance: From 0.12 uH (450 mA) to 330 uH (40 mA)
   DCR: From 0.22 OHM to 34.0 OHM
   SRF: From 5 MHz to 500 MHz
3. CF453232-Seies:
   Inductance: From 0.10 uH (800 mA) to 1000 uH (30 mA)
   DCR: From 0.18 OHM to 40.0 OHM
   SRF: From 2.5 MHz to 300 MHz.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CF252018	2.8(0.110)	2.0(0.079)	1.8(0.071)	0.4(0.016)	1.4(0.055)	1.5(0.059)	1.0(0.039)	1.5(0.059)
Tol.	±0.3(0.012)	±0.1(0.004)	±0.1(0.004)	Typ.	±0.1(0.004)	Typ.	Typ.	Typ.
CF322522	3.2(0.126)	2.5 (0.098)	2.2 (0.087)	0.6 (0.024)	1.0(0.039)	2.0(0.079)	1.0 (0.039)	2.0 (0.079)
Tol.	±0.3 (0.012)	±0.2 (0.008)	±0.2 (0.008)	Typ.	±0.1 (0.004)	Typ.	Typ.	Typ.
CF453232	4.5 (0.177)	3.2 (0.126)	3.2 (0.126)	1 (0.039)	1.2 (0.047)	3 (0.118)	1.5 (0.059)	2.6 (0.102)
Tol.	±0.3 (0.012)	±0.2 (0.008)	±0.2 (0.008)	Typ.	Typ.	Typ.	Typ.	Typ.

C. Mechanical Drawing:



D. General Information:

1. CF******–xxx_ , "CF******" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Tolerance "_": M: ± 20%, L: ± 15%, K: ± 10%, J: ± 5%.
3. Small and lightweight surface mounting type
4. High Q at high frequency
5. High self-resonance frequency
6. 20ºC Temperature Rise, Ambient temperature 80ºC Max.
7. Rated Current: Current cause inductance drops within 10% from 0ºC to 50ºC
8. Resistance to solder heat: 260ºC for 10 seconds.
9. Inductance & Q measured with HP4285A Impedance Analyzer
10. SRF measured with HP4291B or HP8753E Network Analyzer
11. DCR measured with the 16502 milliohm meter.
12. MSL: Level 1.

E. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)

F. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

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SMD MOLDED WIRE WOUND FERRITE CHIP INDUCTORS
CF252018-SERIES

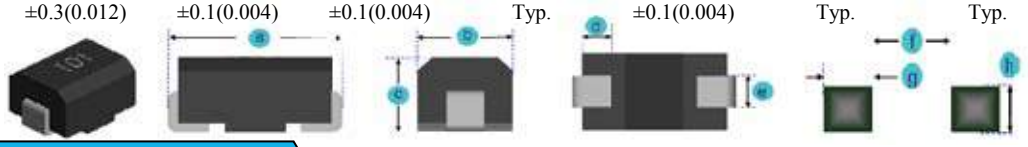
A. Electrical Specifications:

P/N	L(uH)	Tol.	Q Min.	Test Freq.(MHz)	SRF Min.(MHz)	DCR Max. (Ω)	Rated Current Max.(mA)
CF252018-10N_	0.010	M, K, J	15	100	2150	0.26	530
CF252018-12N_	0.012	M, K, J	15	100	2050	0.27	500
CF252018-15N_	0.015	M, K, J	15	100	2000	0.29	480
CF252018-18N_	0.018	M, K, J	15	100	1850	0.31	450
CF252018-22N_	0.022	M, K, J	15	100	1650	0.37	420
CF252018-27N_	0.027	M, K, J	15	100	1550	0.40	410
CF252018-33N_	0.033	M, K, J	20	100	1450	0.42	400
CF252018-39N_	0.039	M, K, J	20	100	1350	0.45	380
CF252018-47N_	0.047	M, K, J	20	100	1200	0.50	360
CF252018-56N_	0.056	M, K, J	20	100	1100	0.60	340
CF252018-68N_	0.068	M, K, J	20	100	1050	0.65	320
CF252018-82N_	0.082	M, K, J	20	100	900	0.75	300
CF252018-R10_	0.10	M, K, J	20	100	800	0.80	280
CF252018-R12_	0.12	M, K, J	30	25.2	700	0.30	550
CF252018-R15_	0.15	M, K, J	30	25.2	550	0.35	500
CF252018-R18_	0.18	M, K, J	30	25.2	500	0.40	460
CF252018-R22_	0.22	M, K, J	30	25.2	450	0.50	430
CF252018-R27_	0.27	M, K, J	30	25.2	425	0.55	420
CF252018-R33_	0.33	M, K, J	30	25.2	400	0.60	400
CF252018-R39_	0.39	M, K, J	30	25.2	375	0.65	375
CF252018-R47_	0.47	M, K, J	30	25.2	350	0.68	350
CF252018-R56_	0.56	M, K, J	30	25.2	325	0.75	325
CF252018-R68_	0.68	M, K, J	30	25.2	300	0.85	300
CF252018-R82_	0.82	M, K, J	30	25.2	260	1.00	260
CF252018-1R0_	1.0	K, J	30	7.96	245	1.10	245
CF252018-1R2_	1.2	K, J	30	7.96	230	1.20	230
CF252018-1R5_	1.5	K, J	30	7.96	182	1.30	220
CF252018-1R8_	1.8	K, J	30	7.96	135	1.45	210
CF252018-2R2_	2.2	K, J	30	7.96	105	1.55	200
CF252018-2R7_	2.7	K, J	30	7.96	70	1.70	195
CF252018-3R3_	3.3	K, J	30	7.96	55	1.90	185
CF252018-3R9_	3.9	K, J	30	7.96	48	2.10	180
CF252018-4R7_	4.7	K, J	30	7.96	43	2.30	175
CF252018-5R6_	5.6	K, J	25	7.96	42	2.50	170
CF252018-6R8_	6.8	K, J	25	7.96	39	2.70	165
CF252018-8R2_	8.2	K, J	25	7.96	36	3.05	160
CF252018-100_	10.0	K, J	25	2.52	33	3.50	155
CF252018-120_	12.0	K, J	25	2.52	30	3.80	150
CF252018-150_	15.0	K, J	25	2.52	26	4.40	140
CF252018-180_	18.0	K, J	25	2.52	24	4.80	130
CF252018-220_	22.0	K, J	25	2.52	22	5.50	125
CF252018-270_	27.0	K, J	25	2.52	21	6.30	115
CF252018-330_	33.0	K, J	25	2.52	20	7.10	110
CF252018-390_	39.0	K, J	20	2.52	18	9.50	90
CF252018-470_	47.0	K, J	20	2.52	17	11.10	80
CF252018-560_	56.0	K, J	20	2.52	16	12.10	75
CF252018-680_	68.0	K, J	20	2.52	15	16.60	70
CF252018-820_	82.0	K, J	20	2.52	13	19.00	66
CF252018-101_	100.0	K, J	15	0.796	12	21.00	60

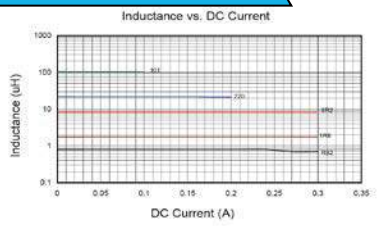
Note: 1. CF252018 –xxx_, "CF252018" = P/N, "xxx" = Inductance, "_" = Tolerance, M: ± 20%, L: ± 15%, K: ± 10%, J: ± 5%.
2. Operating Temp. : -25℃ to +100℃, Storage Temp. : -40℃ to +100℃

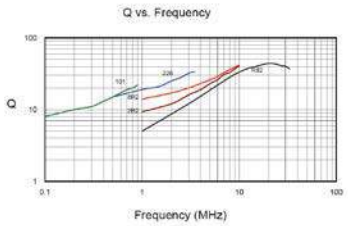
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CF252018	2.8(0.110)	2.0(0.079)	1.8(0.071)	0.4(0.016)	1.4(0.055)	1.5(0.059))	1.0(0.039)	1.5(0.059)
Tol.	±0.3(0.012)	±0.1(0.004)	±0.1(0.004)	Typ.	±0.1(0.004)	Typ.	Typ.	Typ.



C. Characteristics Curve:





SMD MOLDED WIRE WOUND FERRITE CHIP INDUCTORS
CF322522-SERIES

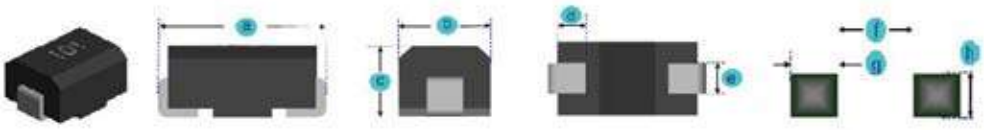
A. Electrical Specifications:

P/N	L (uH)	Tol.	Q Min.	Test Freq. (MHz)	SRF Min. (MHz)	DCR Max. (Ω)	Rated Current Max. (mA)
CF322522-R12_	0.12	M, K	30	25.2/0.1V	500	0.22	450
CF322522-R15_	0.15	M, K	30	25.2/0.1V	450	0.25	450
CF322522-R18_	0.18	M, K	30	25.2/0.1V	400	0.28	450
CF322522-R22_	0.22	M, K	30	25.2/0.1V	350	0.32	450
CF322522-R27_	0.27	M, K	30	25.2/0.1V	320	0.36	450
CF322522-R33_	0.33	M, K	30	25.2/0.1V	300	0.40	450
CF322522-R39_	0.39	M, K	30	25.2/0.1V	250	0.45	450
CF322522-R47_	0.47	M, K	30	25.2/0.1V	220	0.50	450
CF322522-R56_	0.56	M, K	30	25.2/0.1V	180	0.55	450
CF322522-R68_	0.68	M, K	30	25.2/0.1V	160	0.60	450
CF322522-R82_	0.82	M, K	30	25.2/0.1V	140	0.65	450
CF322522-1R0_	1.0	M, K	30	7.96/0.1V	120	0.70	400
CF322522-1R2_	1.2	M, K	30	7.96/0.1V	100	0.75	390
CF322522-1R5_	1.5	M, K	30	7.96/0.1V	85	0.85	370
CF322522-1R8_	1.8	M, K	30	7.96/0.1V	80	0.90	350
CF322522-2R2_	2.2	M, K	30	7.96/0.1V	75	1.00	320
CF322522-2R7_	2.7	M, K	30	7.96/0.1V	70	1.10	290
CF322522-3R3_	3.3	K, J	30	7.96/0.1V	60	1.20	260
CF322522-3R9_	3.9	K, J	30	7.96/0.1V	55	1.30	250
CF322522-4R7_	4.7	K, J	30	7.96/0.1V	50	1.50	220
CF322522-5R6_	5.6	K, J	30	7.96/0.1V	47	1.60	200
CF322522-6R8_	6.8	K, J	30	7.96/0.1V	43	1.80	180
CF322522-8R2_	8.2	K, J	30	7.96/0.1V	40	2.00	170
CF322522-100_	10.0	K, J	30	2.52/0.1V	36	2.10	150
CF322522-120_	12.0	K, J	30	2.52/0.1V	33	2.50	140
CF322522-150_	15.0	K, J	30	2.52/0.1V	28	2.80	130
CF322522-180_	18.0	K, J	30	2.52/0.1V	25	3.30	120
CF322522-220_	22.0	K, J	30	2.52/0.1V	23	3.70	110
CF322522-270_	27.0	K, J	30	2.52/0.1V	18	5.00	80
CF322522-330_	33.0	K, J	30	2.52/0.1V	17	5.60	70
CF322522-390_	39.0	K, J	30	2.52/0.1V	16	6.40	65
CF322522-470_	47.0	K, J	30	2.52/0.1V	15	7.00	60
CF322522-560_	56.0	K, J	30	2.52/0.1V	13	8.00	55
CF322522-680_	68.0	K, J	30	2.52/0.1V	12	9.00	50
CF322522-820_	82.0	K, J	30	2.52/0.1V	11	10.0	45
CF322522-101_	100	K, J	20	0.796/0.1V	10	11.0	40
CF322522-121_	120	K, J	20	0.796/0.1V	10	12.0	70
CF322522-151_	150	K, J	20	0.796/0.1V	8	15.0	65
CF322522-181_	180	K, J	20	0.796/0.1V	7	17.0	60
CF322522-221_	220	K, J	20	0.796/0.1V	7	21.0	50
CF322522-271_	270	K, J	20	0.796/0.1V	6	28.0	45
CF322522-331_	330	K, J	20	0.796/0.1V	5	34.0	40

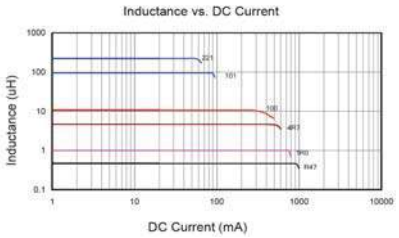
Note: 1. CF322522 –xxx_, "CF322522" = P/N, "xxx" = Inductance, "_" = Tolerance, M: ± 20%, L: ± 15%, K: ± 10%, J: ± 5%.
2. Operating Temp. : -25°C to +100°C, Storage Temp. : -40°C to +100°C

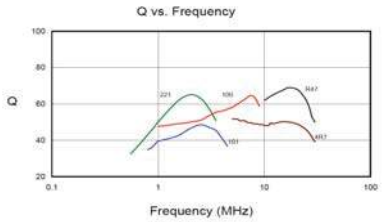
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CF322522	3.2n(0.126)	2.5 (0.098)	2.2 (0.087)	0.6 (0.024)	1.0 (0.039)	2.0 (0.079)	1.0 (0.039)	2.0 (0.079)
Tol.	±0.3 (0.012)	±0.2 (0.008)	±0.2 (0.008)	Typ.	±0.1 (0.004)	Typ.	Typ.	Typ.



C. Characteristics Curve:





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SMD MOLDED WIRE WOUND FERRITE CHIP INDUCTORS
CF453232-SERIES

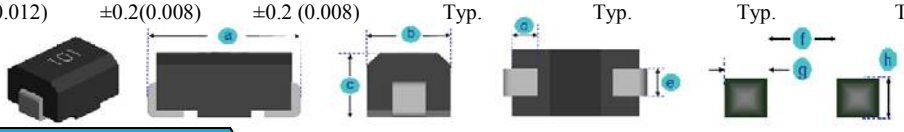
A. Electrical Specifications:

P/N	L (uH)	Tol.	Q Min.	Test Freq.(MHz)	SRF Min.(MHz)	DCR Max. (Ω)	Rated Current Max.(mA)
CF453232-R10_	0.10	M, K	35	25.2	300	0.18	800
CF453232-R12_	0.12	M, K	35	25.2	280	0.20	770
CF453232-R15_	0.15	M, K	35	25.2	250	0.22	730
CF453232-R18_	0.18	M, K	35	25.2	220	0.24	700
CF453232-R22_	0.22	M, K	40	25.2	200	0.25	665
CF453232-R27_	0.27	M, K	40	25.2	180	0.26	635
CF453232-R33_	0.33	M, K	40	25.2	165	0.28	605
CF453232-R39_	0.39	M, K	40	25.2	150	0.30	575
CF453232-R47_	0.47	M, K	40	25.2	145	0.32	545
CF453232-R56_	0.56	M, K	40	25.2	140	0.36	520
CF453232-R68_	0.68	M, K	40	25.2	135	0.40	500
CF453232-R82_	0.82	M, K	40	25.2	130	0.45	475
CF453232-1R0_	1.0	K, J	50	7.96	100	0.50	450
CF453232-1R2_	1.2	K, J	50	7.96	80	0.55	430
CF453232-1R5_	1.5	K, J	50	7.96	70	0.60	410
CF453232-1R8	1.8	K, J	50	7.96	60	0.65	390
CF453232-2R2_	2.2	K, J	50	7.96	55	0.70	380
CF453232-2R7_	2.7	K, J	50	7.96	50	0.75	370
CF453232-3R3_	3.3	K, J	50	7.96	45	0.80	355
CF453232-3R9	3.9	K, J	50	7.96	40	0.90	330
CF453232-4R7_	4.7	K, J	50	7.96	35	1.00	315
CF453232-5R6_	5.6	K, J	50	7.96	33	1.10	300
CF453232-6R8_	6.8	K, J	50	7.96	27	1.20	285
CF453232-8R2_	8.2	K, J	50	7.96	25	1.40	270
CF453232-100_	10	K, J	50	2.52	20	1.60	250
CF453232-120_	12	K, J	50	2.52	18	2.00	225
CF453232-150_	15	K, J	50	2.52	17	2.50	200
CF453232-180_	18	K, J	50	2.52	15	2.80	190
CF453232-220_	22	K, J	50	2.52	13	3.20	180
CF453232-270_	27	K, J	50	2.52	12	3.60	170
CF453232-330_	33	K, J	50	2.52	11	4.00	160
CF453232-390_	39	K, J	50	2.52	10	4.50	150
CF453232-470_	47	K, J	50	2.52	10	5.00	140
CF453232-560_	56	K, J	50	2.52	9.0	5.50	135
CF453232-680_	68	K, J	50	2.52	9.0	6.00	130
CF453232-820_	82	K, J	50	2.52	8.0	7.00	120
CF453232-101_	100	K, J	40	0.796	8.0	8.00	110
CF453232-121_	120	K, J	40	0.796	6.0	8.00	110
CF453232-151_	150	K, J	40	0.796	5.0	9.00	105
CF453232-181_	180	K, J	40	0.796	5.0	9.50	102
CF453232-221_	220	K, J	40	0.796	4.0	10.00	100
CF453232-271_	270	K, J	40	0.796	4.0	12.00	92
CF453232-331_	330	K, J	40	0.796	3.5	14.00	85
CF453232-391_	390	K, J	40	0.796	3.0	18.00	80
CF453232-471_	470	K, J	40	0.796	3.0	26.00	62
CF453232-561_	560	K, J	30	0.796	3.0	30.00	50
CF453232-681_	680	K, J	30	0.796	3.0	30.00	50
CF453232-821_	820	K, J	30	0.796	2.5	35.00	30
CF453232-102_	1000	K, J	20	0.252	2.5	40.00	30

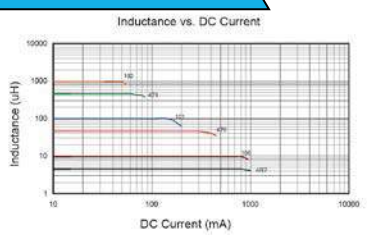
Note: 1. CF453232 –xxx_, "CF453232" = P/N, "xxx" = Inductance, "_" = Tolerance, M: ± 20%, L: ± 15%, K: ± 10%, J: ± 5%.
2. Operating Temp. : -25°C to +100°C, Storage Temp. : -40°C to +100°C

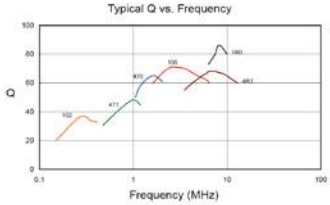
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CF453232	4.5 (0.177)	3.2 (0.126)	3.2 (0.126)	1 (0.039)	1.2 (0.047)	3 (0.118)	1.5 (0.059)	2.6 (0.102)
Tol.	±0.3 (0.012)	±0.2(0.008)	±0.2 (0.008)	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:



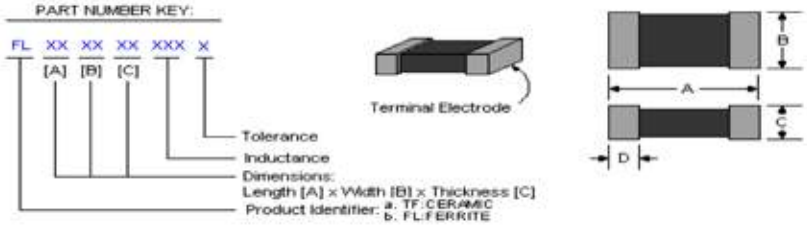


A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
TF060303	0.60(0.024)	0.30(0.012)	0.30(0.012)	0.10(0.004)	0.90(0.035)	0.30(0.012)	0.30(0.012)
Tol.	± 0.03(0.001)	± 0.03(0.001)	± 0.03(0.001)	± 0.20(0.008)	Typ.	Typ.	Typ.
TF100505	1.0(0.040)	0.5(0.020)	0.5(0.020)	0.25(0.010)	2.20(0.086)	0.70(0.028)	0.40(0.016)
Tol.	± 0.1(0.004)	± 0.1(0.004)	± 0.1(0.004)	±0.15(0.006)	Typ.	Typ.	Typ.
TF160808	1.6(0.063)	0.8(0.031)	0.8(0.031)	0.3(0.012)	2.80(0.110)	1.00(0.039)	0.60(0.024)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	Typ.	Typ.	Typ.
FL160808	1.6(0.063)	0.8(0.031)	0.8(0.031)	0.3(0.012)	2.80(0.110)	1.00(0.039)	0.60(0.024)
Tol.	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.
FL201209	2.0(0.079)	1.2(0.047)	0.9(0.035)	0.5(0.020)	3.20(0.126)	1.50(0.059)	0.60(0.024)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	± 0.3(0.012)	Typ.	Typ.	Typ.
FL201212	2.0(0.079)	1.2(0.047)	1.2(0.047)	0.5(0.020)	3.20(0.126)	1.50(0.059)	0.60(0.024)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	± 0.3(0.012)	Typ.	Typ.	Typ.

B. Mechanical Drawing:

C. Part Number Key & Mechanical Drawing:



Part Number Key & Mechanical Drawing

D. General Information:

1. Tolerance "_": M: ± 20%, K: ± 10%, J: ± 5%, H: ±3%, G: ± 2%, S: ±0.3nH, C: ± 0.2nH, D: ± 0.1nH.
2. Excellent solder-ability and high heat resistance for either flow or reflow soldering.
3. Monolithic structures for highly reliable surface mount applications.
4. No cross coupling between inductors due to magnetic shielding. Ideal for high-density installation.
5. Superior Q characteristics guaranteed over the wide frequency and allow high frequency application.
6. The completely monolithic structure gives high reliability and allows high SRF.
7. Both flow and IR re-flow application are possible.
8. Operating temperature: -40ºC to +125ºC
9. Maximum Temperature Rise: 15°C (when measured at 25°C ambient).
10. Unspecified values available on request.
11. MSL: Level 1.
12. Inductance and Current range:
    a. TF0603 (0201) Series: Multi-layer Ceramic Chip Inductor, from 0.3nH (250mA) to 100.0nH (60mA)
    b. TF1005 (0402) Series: Multi-layer Ceramic Chip Inductor, from 1.0nH (300mA) to 270.0nH (110mA)
    c. TF1608 (0603) Series: Multi-layer Ceramic Chip Inductor, from 1.00nH (1000 mA) to 390nH (150 mA)
    d. FL1608 (0603) Series: Multi-layer Ferrite Chip Inductor, from 0.047uH (50mA) to 12.0uH (3mA)
    e. FL2012 (0805) Series: Multi-layer Ferrite Chip Inductor, from 0.047uH (300mA) to 10.0uH (15mA)
13. SRF:
    a. TF0603 (0201) Series: From 900 MHz to 10,000 MHz
    b. TF1005 (0402) Series: From 450 MHz to 10,000 MHz
    c. TF1608(0603) Series: From 350 MHz to 10,000 MHz
    d. FL1608 (0603) Series: From 15 MHz to 260 MHz
    e. FL2012 (0805) Series: From 24 MHz to 320 MHz

E. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)

F. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

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SMD MULTILAYER CERAMIC CHIP INDUCTORS
TF060303(0201)-SERIES

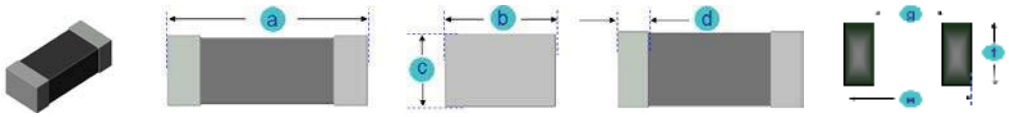
A. Electrical Specifications:

P/N	L(nH)	Tol.	Test Freq.(MHz)	Q Min.	SRF Min.(MHz)	DCR Max.(Ω)	I rms. Max.(mA)
TF060303-0N3_	0.3	S, C, D	100	4	10000	0.07	250
TF060303-0N4	0.4	S, C, D	100	4	10000	0.07	250
TF060303-0N5_	0.5	S, C, D	100	4	10000	0.08	250
TF060303-0N6_	0.6	S, C, D	100	4	10000	0.08	250
TF060303-0N7_	0.7	S, C, D	100	4	10000	0.09	250
TF060303-0N8_	0.8	S, C, D	100	4	10000	0.10	250
TF060303-0N9_	0.9	S, C, D	100	4	10000	0.10	250
TF060303-1N0_	1.0	S, C, D	100	4	10000	0.14	250
TF060303-1N1_	1.1	S, C, D	100	4	10000	0.14	250
TF060303-1N2_	1.2	S, C, D	100	4	10000	0.14	250
TF060303-1N3_	1.3	S, C, D	100	4	10000	0.14	250
TF060303-1N5_	1.5	S, C, D	100	4	10000	0.18	230
TF060303-1N6_	1.6	S, C, D	100	4	10000	0.18	230
TF060303-1N8_	1.8	S, C, D	100	4	10000	0.19	200
TF060303-2N0_	2.0	S, C, D	100	4	8800	0.20	200
TF060303-2N1_	2.1	S, C, D	100	4	8800	0.20	200
TF060303-2N2_	2.2	S, C, D	100	4	8800	0.22	200
TF060303-2N4_	2.4	S, C, D	100	4	8300	0.24	200
TF060303-2N7_	2.7	S, C, D	100	5	7700	0.25	200
TF060303-3N0_	3.0	S, C, D	100	5	7200	0.28	180
TF060303-3N2_	3.2	S, C, D	100	5	6700	0.30	180
TF060303-3N3_	3.3	S, C, D	100	5	6700	0.30	180
TF060303-3N6_	3.6	S, C, D	100	5	6400	0.30	170
TF060303-3N9_	3.9	S, C, D	100	5	6000	0.30	170
TF060303-4N3_	4.3	S, C, D	100	5	5700	0.40	150
TF060303-4N7	4.7	S, C, D	100	5	5300	0.40	150
TF060303-5N1_	5.1	S, C, D	100	5	5000	0.40	150
TF060303-5N6_	5.6	S, C, D	100	5	4200	0.40	150
TF060303-6N2_	6.2	S, C, D	100	5	3800	0.44	150
TF060303-6N8	6.8	S, C, D	100	5	3500	0.45	150
TF060303-7N5_	7.5	J, H	100	5	3300	0.50	150
TF060303-8N2_	8.2	J, H	100	5	3200	0.53	150
TF060303-9N1_	9.1	J, H	100	5	3000	0.55	150
TF060303-10N_	10	J, H	100	5	2800	0.62	150
TF060303-12N_	12	J, H	100	5	2400	0.65	100
TF060303-15N_	15	J, H	100	5	2200	0.70	100
TF060303-18N_	18	J, H	100	5	2200	0.80	100
TF060303-22N_	22	J, H	100	5	1800	0.90	100
TF060303-27N_	27	J, H	100	4	1800	1.20	50
TF060303-33N_	33	J	100	4	1700	1.80	50
TF060303-39N_	39	J	100	4	1500	2.40	50
TF060303-47N_	47	J	100	4	1300	2.80	100
TF060303-56N_	56	J	100	4	1100	3.00	80
TF060303-68N_	68	J	100	4	1100	2.66	80
TF060303-82N_	82	J	100	4	1000	3.37	70
TF060303-R10_	100	J	100	4	900	3.74	60

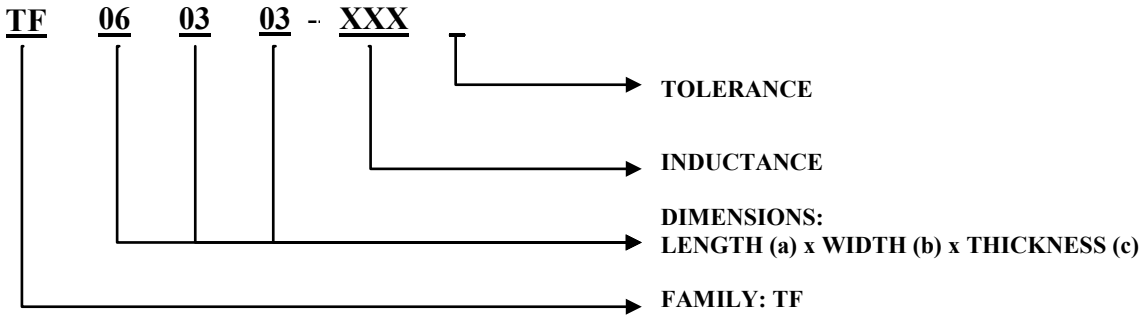
Note: 1. TF060303-xxx_, "TF060303" = Size Type, "xxx" = Inductance, "_" = Tolerance.
Tolerance "_": M: ± 20%, K: ± 10%, J: ± 5%, H: ±3%, G: ± 2%, S: ±0.3nH, C: ± 0.2nH, D: ± 0.1nH.
2. The product's material: Ceramic.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
TF060303	0.60(0.024)	0.30(0.012)	0.30(0.012)	0.10(0.004)	0.90(0.035)	0.30(0.012)	0.30(0.012)
Tol.	± 0.03(0.001)	± 0.03(0.001)	± 0.03(0.001)	± 0.20(0.008)	Typ.	Typ.	Typ.



C. Part Number Key:



SMD MULTILAYER CERAMIC CHIP INDUCTORS
TF100505(0402)-SERIES

A. Electrical Specifications:

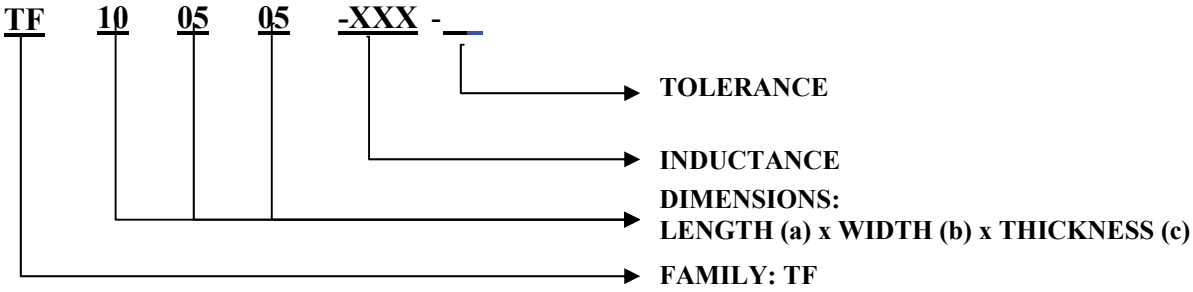
P/N	L(nH)	Tol.	Test Freq.(MHz)	Q Min.	SRF Min.(MHz)	DCR Max.(Ω)	I rms. Max.(mA)
TF100505-1N0_	1.0	S, C, D	100	8	10000	0.08	300
TF100505-1N1_	1.1	S, C, D	100	8	10000	0.08	300
TF100505-1N2_	1.2	S, C, D	100	8	10000	0.09	300
TF100505-1N3_	1.3	S, C, D	100	8	10000	0.09	300
TF100505-1N5_	1.5	S, C, D	100	8	10000	0.10	300
TF100505-1N6_	1.6	S, C, D	100	8	10000	0.10	300
TF100505-1N8_	1.8	S, C, D	100	8	6000	0.12	300
TF100505-2N0_	2.0	S, C, D	100	8	6000	0.12	300
TF100505-2N2_	2.2	S, C, D	100	8	6000	0.13	300
TF100505-2N4_	2.4	S, C, D	100	8	6000	0.13	300
TF100505-2N7_	2.7	S, C, D	100	8	6000	0.16	300
TF100505-3N0_	3.0	S, C, D	100	8	6000	0.16	300
TF100505-3N3_	3.3	S, C, D	100	8	6000	0.16	300
TF100505-3N6_	3.6	S, C, D	100	8	5000	0.20	300
TF100505-3N9_	3.9	S, C, D	100	8	4000	0.20	300
TF100505-4N3_	4.3	S, C, D	100	8	4000	0.20	300
TF100505-4N7_	4.7	S, C, D	100	8	4000	0.20	300
TF100505-5N1_	5.1	S, C, D	100	8	4000	0.23	300
TF100505-5N6_	5.6	S, C, D	100	8	4000	0.23	300
TF100505-6N2_	6.2	S, C, D	100	8	3900	0.25	300
TF100505-6N8_	6.8	J, G	100	8	3900	0.25	300
TF100505-7N5_	7.5	J, G	100	8	3700	0.28	300
TF100505-8N2_	8.2	J, G	100	8	3500	0.28	300
TF100505-9N1_	9.1	J, G	100	8	3400	0.30	300
TF100505-10N_	10.0	J, G	100	8	3200	0.31	300
TF100505-12N_	12.0	J, G	100	8	2600	0.45	300
TF100505-15N_	15.0	J, G	100	8	2300	0.55	300
TF100505-18N_	18.0	J, G	100	8	2000	0.65	300
TF100505-22N_	22.0	J, G	100	8	1600	0.70	300
TF100505-27N_	27.0	J, G	100	8	1400	0.80	300
TF100505-33N_	33.0	J, G	100	8	1200	0.90	200
TF100505-39N_	39.0	J, G	100	8	1100	1.00	200
TF100505-47N_	47.0	J, G	100	8	900	1.10	200
TF100505-56N_	56.0	J, G	100	8	750	1.10	200
TF100505-68N_	68.0	J, G	100	8	750	1.20	180
TF100505-82N_	82.0	J, G	100	8	600	1.30	150
TF100505-R10_	100.0	J, G	100	8	600	1.60	150
TF100505-R12_	120.0	J, G	100	8	600	1.60	150
TF100505-R15_	150.0	J, G	100	8	550	2.40	140
TF100505-R18_	180.0	J, G	100	8	500	3.70	130
TF100505-R22_	220.0	J, G	100	8	450	4.20	120
TF100505-R27_	270.0	J, G	100	8	450	4.80	110

Note: 1. TF100505 –XXX_, "TF100505" = Type, "XXX" = Inductance, "_" = Tolerance.
Tolerance "_": M: ± 20%, K: ± 10%, J: ± 5%, H: ±3%, G: ± 2%, S: ±0.3nH, C: ± 0.2nH, D: ± 0.1nH.
2. The product's material: Ceramic.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
TF100505	1.0(0.040)	0.5(0.020)	0.5(0.020)	0.25(0.010)	2.20(0.086)	0.70(0.028)	0.40(0.016)
Tol.	± 0.1(0.004)	± 0.1(0.004)	± 0.1(0.004)	±0.15(0.006)	Typ.	Typ.	Typ.

C. Part Number Key:



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SMD MULTILAYER CERAMIC CHIP INDUCTORS
TF160808(0603)-SERIES

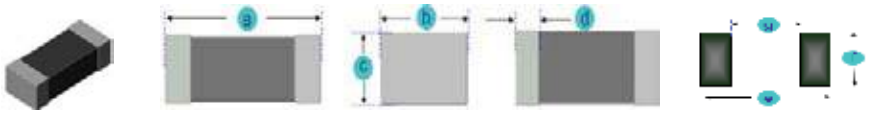
A. Electrical Specifications:

P/N	L(nH)	Tol.	Test Freq.(MHz)	Q Min.	SRF Min.(MHz)	DCR Max. (Ω)	I rms. Max.(mA)
TF160808-1N0_	1.0	S, C, D	100	8	10000	0.05	1000
TF160808-1N2_	1.2	S, C, D	100	8	10000	0.05	1000
TF160808-1N5_	1.5	S, C, D	100	8	10000	0.10	1000
TF160808-1N8_	1.8	S, C, D	100	8	10000	0.10	1000
TF160808-2N2_	2.2	S, C, D	100	8	6000	0.10	1000
TF160808-2N7_	2.7	S, C, D	100	10	6000	0.13	1000
TF160808-3N3_	3.3	S, C, D	100	10	6000	0.13	1000
TF160808-3N9_	3.9	S, C, D	100	10	6000	0.15	1000
TF160808-4N7_	4.7	S, C, D	100	10	4000	0.20	1000
TF160808-5N6_	5.6	S, C, D	100	10	4000	0.23	600
TF160808-6N8_	6.8	J, G	100	10	4000	0.25	600
TF160808-8N2_	8.2	J, G	100	10	3500	0.28	600
TF160808-10N_	10.0	J, G	100	12	3200	0.30	600
TF160808-12N_	12.0	J, G	100	12	2600	0.35	600
TF160808-15N_	15.0	J, G	100	12	2300	0.40	600
TF160806-18N_	18.0	J, G	100	12	2000	0.45	600
TF160808-22N_	22.0	J, G	100	12	1600	0.50	600
TF160808-27N_	27.0	J, G	100	12	1400	0.55	600
TF160808-33N_	33.0	J, G	100	12	1200	0.60	600
TF160808-39N_	39.0	J, G	100	12	1100	0.65	500
TF160808-47N_	47.0	J, G	100	12	900	0.70	500
TF160808-56N_	56.0	J, G	100	12	900	0.75	500
TF160808-68N_	68.0	J, G	100	12	700	0.85	400
TF160808-82N_	82.0	J, G	100	12	600	0.95	300
TF160808-R10_	100.0	J, G	100	12	600	1.00	300
TF160808-R12_	120.0	J, G	50	8	500	1.20	300
TF160808-R15_	150.0	J, G	50	8	500	1.20	300
TF160808-R18_	180.0	J, G	50	8	400	1.30	300
TF160808-R22_	220.0	J, G	50	8	400	1.50	300
TF160808-R27_	270.0	J, G	50	8	400	1.90	150
TF160808-R33_	330.0	J, G	50	8	350	2.10	150
TF160808-R39_	390.0	J, G	50	8	350	2.10	150

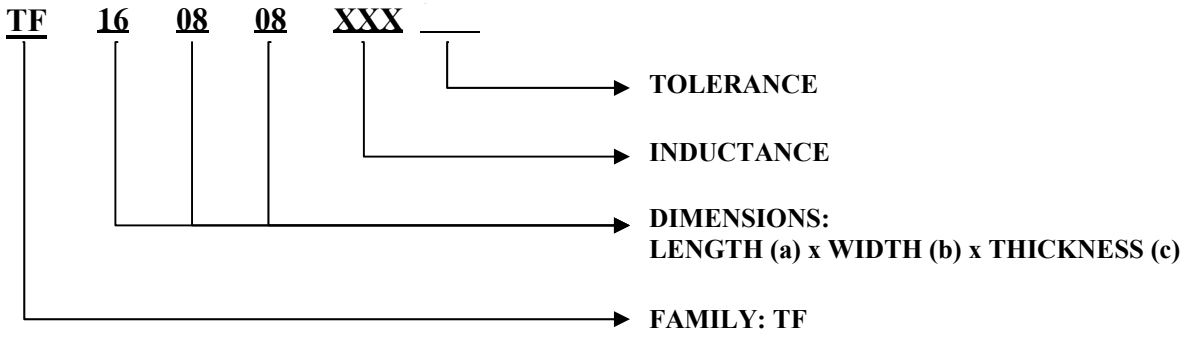
Note: 1. TF160808 -XXX_, "TF160808" = Type, "XXX" = Inductance, "_" = Tolerance.
Tolerance "_": M: ± 20%, K: ± 10%, J: ± 5%, H: ±3%, G: ± 2%, S: ±0.3nH, C: ± 0.2nH, D: ± 0.1nH.
2. The product's material: Ceramic.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
TF160808	1.6 (0.063)	0.8 (0.031)	0.8 (0.031)	0.3 (0.012)	2.80(0.110)	1.00(0.039)	0.60(0.024)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	Typ.	Typ.	Typ.



C. Part Number Key:



SMD MULTILAYER FERRITE CHIP INDUCTORS
FL160808(0603)-SERIES

A. Electrical Specifications:

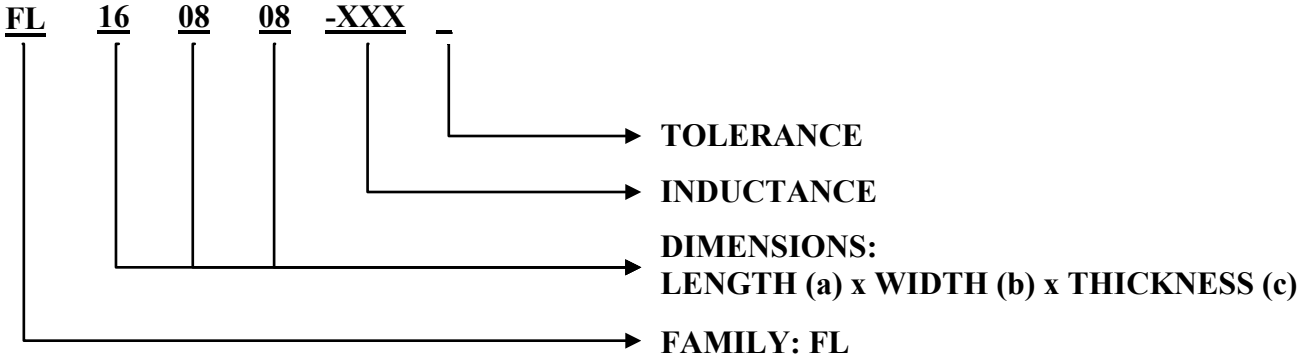
P/N	L (uH)	Tol.	Q Min.	Test Freq. (MHz)	SRF Min. (MHz)	DCR Max. (Ω)	I rms. Max. (mA)
FL160808-47N_	0.047	M (±20%)	10	50	260	0.30	50
FL160808-68N_	0.068	M (±20%)	10	50	250	0.30	50
FL160808-R10_	0.10	K (±10%)	15	25	240	0.50	50
FL160808-R12_	0.12	K (±10%)	15	25	205	0.50	50
FL160808-R15_	0.15	K (±10%)	15	25	180	0.60	50
FL160808-R18_	0.18	K (±10%)	15	25	165	0.60	50
FL160808-R22_	0.22	K (±10%)	15	25	150	0.80	50
FL160808-R27_	0.27	K (±10%)	15	25	136	0.80	50
FL160808-R33_	0.33	K (±10%)	15	25	125	0.85	35
FL160808-R39_	0.39	K (±10%)	15	25	110	1.00	35
FL160808-R47_	0.47	K (±10%)	15	25	105	1.35	35
FL160808-R56_	0.56	K (±10%)	15	25	95	1.55	35
FL160808-R68_	0.68	K (±10%)	15	25	90	1.70	35
FL160808-R82_	0.82	K (±10%)	15	25	85	2.10	35
FL160808-1R0_	1.0	K (±10%)	35	10	75	0.60	25
FL160808-1R2_	1.2	K (±10%)	35	10	65	0.80	25
FL160808-1R5_	1.5	K (±10%)	35	10	60	0.80	25
FL160808-1R8_	1.8	K (±10%)	35	10	55	0.95	25
FL160808-2R2_	2.2	K (±10%)	35	10	50	1.15	15
FL160808-2R7_	2.7	K (±10%)	35	10	45	1.35	15
FL160808-3R3_	3.3	K (±10%)	35	10	40	1.55	15
FL160808-3R9_	3.9	K (±10%)	35	10	35	1.70	15
FL160808-4R7_	4.7	K (±10%)	35	10	33	2.10	15
FL160808-5R6_	5.6	K (±10%)	35	4	22	1.55	5
FL160808-6R8_	6.8	K (±10%)	35	4	20	1.70	5
FL160808-8R2_	8.2	K (±10%)	35	4	18	2.10	5
FL160808-100_	10	K (±10%)	30	2	17	1.85	3
FL160808-120_	12	K (±10%)	30	2	15	2.10	3

Note: 1. FL160808 -xxx_, "FL160808" = Size Type, "xxx" = Inductance, "_" = Tolerance.
2. The product's material: Ferrite.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
FL160808	1.6(0.063)	0.8(0.031)	0.8(0.031)	0.3(0.012)	2.80(0.110)	1.00(0.039)	0.60(0.024)
Tol.	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.

C. Part Number Key:



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SMD MULTILAYER FERRITE CHIP INDUCTORS
FL2012(0805)-SERIES

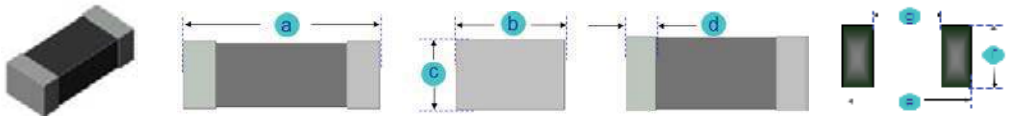
A. Electrical Specifications:

P/N	L (uH)	Tol.	Q Min.	Test Freq. (MHz)	SRF Min. (MHz)	DCR Max. (Ω)	I rms. Max. (mA)
FL201209-47N_	0.047	M (±20%)	15	50	320	0.20	300
FL201209-68N_	0.068	M (±20%)	15	50	280	0.20	300
FL201209-R10_	0.10	K (±10%)	20	25	235	0.30	250
FL201209-R12_	0.12	K (±10%)	20	25	220	0.30	250
FL201209-R15_	0.15	K (±10%)	20	25	200	0.40	250
FL201209-R18_	0.18	K (±10%)	20	25	185	0.40	250
FL201209-R22_	0.22	K (±10%)	20	25	170	0.50	250
FL201209-R27_	0.27	K (±10%)	20	25	150	0.50	250
FL201209-R33_	0.33	K (±10%)	20	25	145	0.55	250
FL201209-R39_	0.39	K (±10%)	25	25	135	0.65	200
FL201209-R47_	0.47	K (±10%)	25	25	125	0.65	200
FL201209-R56_	0.56	K (±10%)	25	25	115	0.75	150
FL201209-R68_	0.68	K (±10%)	25	25	105	0.80	150
FL201209-R82_	0.82	K (±10%)	25	25	100	1.00	150
FL201209-1R0_	1.0	K (±10%)	45	10	75	0.40	50
FL201209-1R2_	1.2	K (±10%)	45	10	65	0.50	50
FL201209-1R5_	1.5	K (±10%)	45	10	60	0.50	50
FL201209-1R8_	1.8	K (±10%)	45	10	55	0.60	50
FL201209-2R2_	2.2	K (±10%)	45	10	50	0.65	30
FL201212-2R7_	2.7	K (±10%)	45	10	45	0.75	30
FL201212-3R3_	3.3	K (±10%)	45	10	41	0.80	30
FL201212-3R9_	3.9	K (±10%)	45	10	38	0.90	30
FL201212-4R7_	4.7	K (±10%)	45	10	35	1.00	30
FL201212-5R6_	5.6	K (±10%)	50	4	32	0.90	15
FL201212-6R8_	6.8	K (±10%)	50	4	29	1.00	15
FL201212-8R2_	8.2	K (±10%)	50	4	26	1.10	15
FL201212-100_	10	K (±10%)	50	2	24	1.15	15

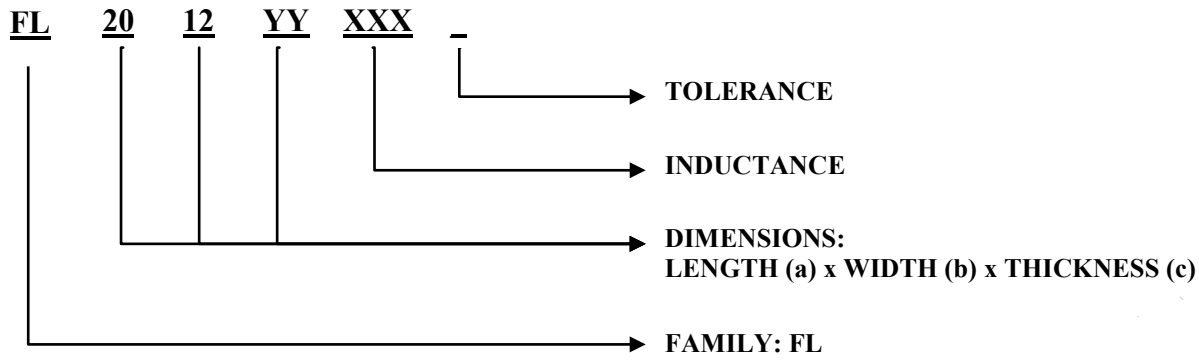
Note: 1. FL2012yy-xxx_, "FL2012" = Size Type, "yy" = Thickness, "xxx" = Inductance, "_" = Tolerance.
2. The product's material: Ferrite.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
FL201209	2.0(0.079)	1.2(0.047)	0.9(0.035)	0.5(0.020)	3.20(0.126)	1.50(0.059)	0.60(0.024)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	± 0.3(0.012)	Typ.	Typ.	Typ.
FL201212	2.0(0.079)	1.2(0.047)	1.2(0.047)	0.5(0.020)	3.20(0.126)	1.50(0.059)	0.60(0.024)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	± 0.3(0.012)	Typ.	Typ.	Typ.



C. Part Number Key:

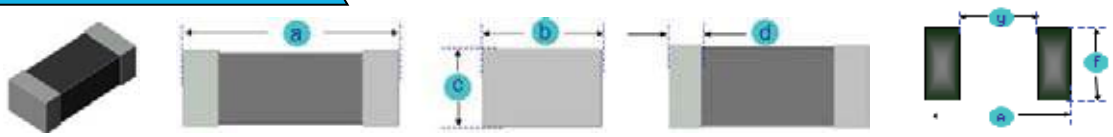


SMD MULTILAYER FERRITE CHIP BEADS

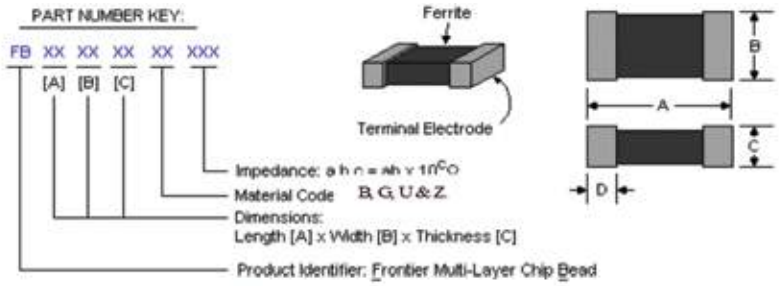
A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
TI100505(0402)	1.0(0.039)	0.5(0.020)	0.5(0.020)	0.1(0.004)	2.20(0.087)	0.70(0.028)	0.40(0.016)
Tol.	±0.1(0.004)	±0.1(0.004)	±0.1(0.004)	Min.	Typ.	Typ.	Typ.
TI160808 (0603)	1.6 (0.063)	0.8(0.031)	0.8(0.031)	0.5(0.020)	2.80 (0.110)	1.00 (0.039)	0.60 (0.024)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.1(0.004)	± 0.3(0.012)	Typ.	Typ.	Typ.
TI201209(0805)	2.0(0.079)	1.2(0.047)	0.9(0.035)	0.5(0.020)	3.20(0.126)	1.50(0.059)	0.60(0.024)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	± 0.3(0.012)	Typ.	Typ.	Typ.
TI321611(1206)	3.2(0.126)	1.6(0.063)	1.1(0.043)	0.5(0.020)	4.40(0.173)	1.80(0.071)	1.20(0.047)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	± 0.3(0.012)	Typ.	Typ.	Typ.
TI322513(1206)	3.2(0.126)	2.5(0.098)	1.3 (0.051)	0.5(0.020)	4.40 (0.173)	2.70(0.106)	1.20(0.047)
Tol.	± 0.2 (0.008)	± 0.2(0.008)	± 0.2(0.008)	± 0.3(0.012)	Typ.	Typ.	Typ.
TI451616(1806)	4.5 (0.177)	1.6(0.063)	1.6(0.063)	0.5(0.020)	5.80 (0.228)	1.80 (0.071)	2.00 (0.079)
Tol.	± 0.2(0.008)	± 0.2 (0.008)	± 0.2 (0.008)	± 0.3 (0.012)	Typ.	Typ.	Typ.
TI453215(1812)	4.5 (0.177)	3.2(0.126)	1.5 (0.059)	0.5(0.020)	5.80(0.228)	3.40 (0.134)	2.00(0.079)
Tol.	± 0.2 (0.008)	± 0.2 (0.008)	± 0.2 (0.008)	± 0.3 (0.012)	Typ.	Typ.	Typ.
FB100505(0402)	1.0(0.039)	0.5(0.020)	0.5(0.020)	0.25(0.010)	2.20(0.087)	0.70 (0.028)	0.40(0.016)
Tol.	± 0.1(0.004)	± 0.1(0.004)	± 0.1(0.004)	± 0.15(0.006)	Typ.	Typ.	Typ.
FB160808(0603)	1.6(0.063)	0.8(0.031)	0.8(0.031)	0.3(0.012)	2.80(0.110)	1.00(0.039)	0.60(0.024)
Tol.	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.
FB201209(0805)	2.0(0.079)	1.2(0.047)	0.9(0.035)	0.5(0.020)	3.20(0.126)	1.50(0.059)	0.60(0.024)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	± 0.3(0.012)	Typ.	Typ.	Typ.
FB321611(1206)	3.2(0.126)	1.6(0.063)	1.1(0.043)	0.5(0.020)	4.40(0.173)	1.80(0.071)	1.20(0.047)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	± 0.3(0.012)	Typ.	Typ.	Typ.
FB322513(1206)	3.2(0.126)	2.5 (0.098)	1.3 (0.051)	0.5(0.020)	4.40 (0.173)	2.70(0.106)	1.20 (0.047)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	± 0.3(0.012)	Typ.	Typ.	Typ.
FB451616(1806)	4.5 (0.177)	1.6(0.063)	1.6(0.063)	0.5(0.020)	5.80(0.228)	1.80(0.071)	2.00 (0.079)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	± 0.3(0.012)	Typ.	Typ.	Typ.
FB453215(1812)	4.5 (0.177)	3.2(0.126)	1.5 (0.059)	0.5(0.020)	5.80(0.228)	3.40(0.134)	2.00(0.079)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	± 0.3(0.012)	Typ.	Typ.	Typ.

B. Mechanical Drawing:



C. Part Number Key & Mechanical Drawing:



FB: for Standard and high impedance series.
TI: for high current series.
FC: for GHz range noise suppression series.

Part Number Key & Mechanical Drawing

D. Materials:

ITEM	UNIT	Material Code L	B	G	U	Z
Initial Permeability (μiac):	----	25	45	110	200	500
Maximum Permeability (μm):	----	125	125	250	450	900
Saturation Flux Density at 10 Oe:	Gauss	2000	2000	1700	1400	1500
Curie Temperature(Tc):	°C	>200	>200	>130	>100	>130
Volume Resistivity (ρ):	Ω-m	100000	100000	100000	100000	100000
Temperature Coefficient:	1/10000°C	10	10	13	5	12
Density:	g/cm³	4.8	4.8	4.8	4.8	4.8

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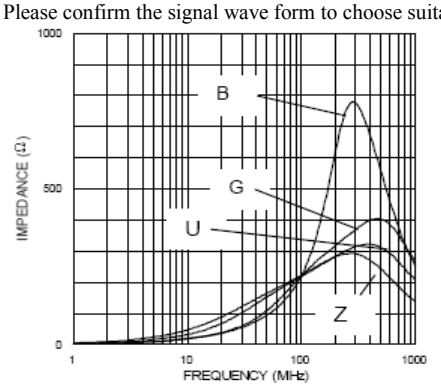
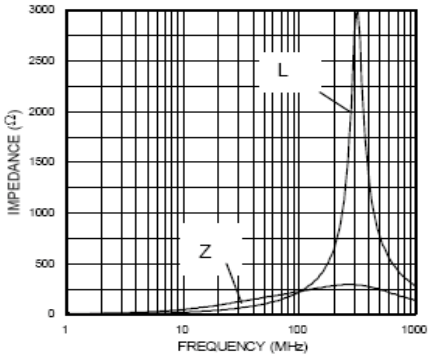
E. Application:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)

F. Impedance Characteristics of Materials:

1. Z Material is for applications whose blocking regions are near 100 MHz.
2. L Material, an improvement of B Material, has sharp impedance characteristic at high frequency.
3. G Material is for applications whose signal frequency is far from the cut off region. Suitable for applications requiring low insertion loss at high frequency.
4. Different materials are available for different application ranges.
5. With one material, higher impedance has sharper characteristics.
6. Please confirm the signal wave form to choose suitable products.





G. General Information:

1. Tolerance: ±25%
2. Small and lightweight surface mounting type
3. Dimensions are suitable for automatic mounting
4. High-density packaging with a pitch of 2.54 mm (0.1 Inch) max. is possible. This series requires less space and have greater EMI suppression effects.
5. Different types with the same shape are available.
6. Excellent in physical properties, such as terminal strength, flexure strength, soldering resistance and solder-ability.
7. Applicable to both flow and IR reflow soldering.
8. High impedance covers wide frequency ranges.
9. TI series can be used in high current circuits due to its low DC resistance.
10. Operating temperature: -40ºC to +125ºC
11. Unspecified values available on request.
12. MSL: Level 1.
13. Impedance and Current range:
    a. TI100505 (0402) Series: From 10 Ω (2000 mA) to 120 Ω (1200 mA)
    b. TI160808 (0603) Series: From 5 Ω (1000 mA) to 600 Ω (1000 mA)
    c. TI201209 (0805) Series: From 5 Ω (2200 mA) to 1000 Ω (1000 mA)
    d. TI321611 (1206) Series: From 19 Ω (6000 mA) to 1000 Ω (2000 mA)
    e. TI322513 (1206) Series: From 30 Ω (3000 mA) to 150 Ω (5000 mA)
    f. TI451616 (1806) Series: From 60 Ω (8000 mA) to 470 Ω (2000 mA)
    g. TI453215 (1812) Series: From 70 Ω (6000 mA) to 130 Ω (6000 mA)
    h. FB100505 (0402) Series: From 10 Ω (800 mA) to 1500 Ω (50 mA)
    i. FB160808 (0603) Series: From 10 Ω (900 mA) to 2700 Ω (200 mA)
    j. FB201209 (0805) Series: From 7 Ω (800 mA) to 2700 Ω (300 mA)
    k. FB321611 (1206) Series: From 7 Ω (500 mA) to 2000 Ω (200 mA)
    l. FB322513 (1206) Series: From 31 Ω (400 mA) to 60 Ω (800 mA)
    m. FB451616 (1806) Series: From 60 Ω (800 mA) to 180 Ω (500 mA)
    n. FB453215 (1812) Series: From 70 Ω (600 mA) to 130 Ω (500 mA)

H. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)

I. Supplementary Information:

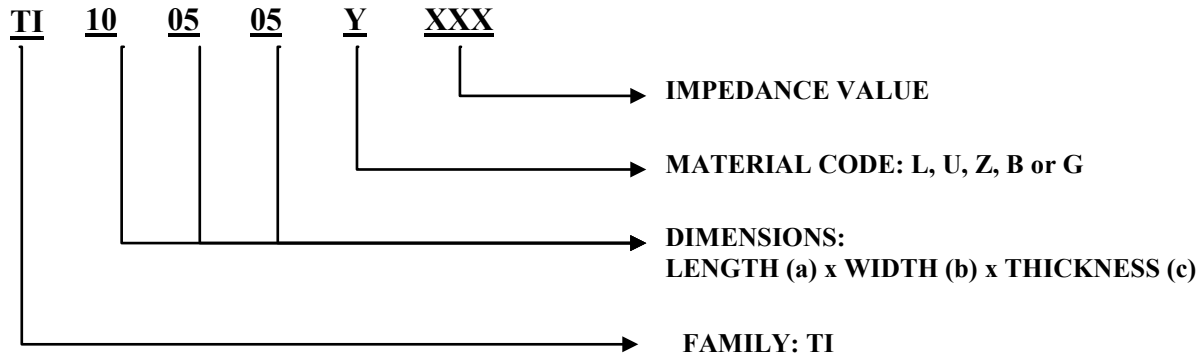
1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

A. Electrical Specifications:

P/N	Impedance (Ω) ±25% @100MHz	DCR Max. (Ω)	I rms. Max. (A)
TI100505U100	10	0.030	2.0
TI100505U300	30	0.050	2.0
TI100505U600	60	0.200	1.0
TI100505U121	120	0.200	1.2
TI100505Z121	120	0.090	1.5

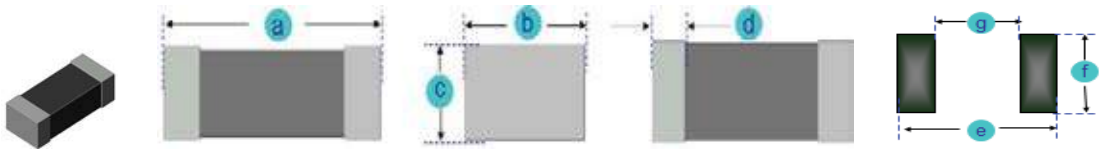
Note: TI100505yxxx, "TI" = Type, "10" = Length, "05" = Width, "05" = Thickness, "y" = Material, "xxx" = Impedance.

B. Part Number Key:



C. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
TI100505 (0402)	1.0 (0.039)	0.5 (0.020)	0.5 (0.020)	0.1 (0.004)	2.20 (0.087)	0.70 (0.028)	0.40 (0.016)
Tol.	±0.1 (0.004)	±0.1 (0.004)	±0.1 (0.004)	Min.	Typ.	Typ.	Typ.



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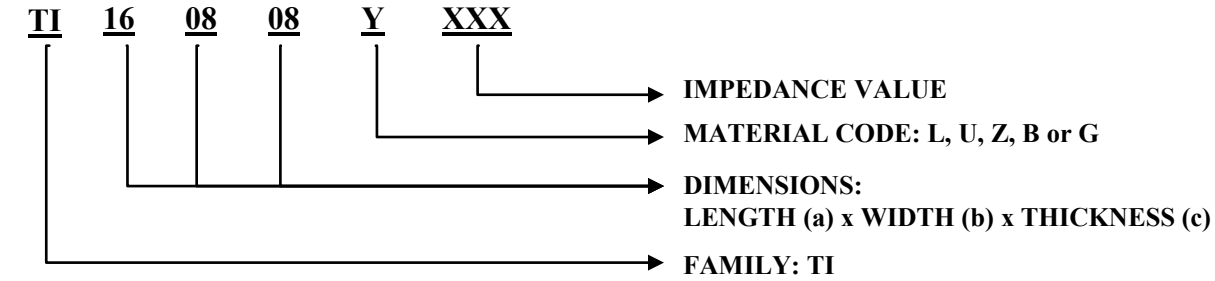
SMD MULTILAYER FERRITE CHIP BEADS (HIGH CURRENT)
TI160808(0603)-SERIES

A. Electrical Specifications:

P/N	Impedance (Ω) ±25% @100MHz	DCR Max.(Ω)	I rms. Max. (A)
TI160808B050	5	0.100	1.0
TI160808B300	30	0.150	1.0
TI160808B101	100	0.200	1.0
TI160808G100	10	0.060	2.0
TI160808G600	60	0.100	2.0
TI160808G101	100	0.100	2.0
TI160808G301	300	0.200	2.0
TI160808G601	600	0.300	1.0
TI160808U100	10	0.010	5.0
TI160808U110	11	0.030	4.0
TI160808U190	19	0.030	3.0
TI160808U200	20	0.030	3.0
TI160808U220	22	0.030	3.0
TI160808U250	25	0.030	3.0
TI160808U270	27	0.030	4.0
TI160808U280	28	0.030	4.0
TI160808U300	30	0.030	4.0
TI160808U400	40	0.050	3.0
TI160808U470	47	0.050	3.0
TI160808U600	60	0.060	3.0
TI160808U680	68	0.060	3.0
TI160808U800	80	0.060	3.0
TI160808U101	100	0.080	2.5
TI160808U121	120	0.080	2.5
TI160808U151	150	0.080	2.5
TI160808U181	180	0.120	2.0
TI160808U221	220	0.150	2.0
TI160808U301	300	0.150	2.0
TI160808U471	470	0.200	1.0
TI160808U601	600	0.200	1.0
TI160808Z220	22	0.030	3.0
TI160808Z300	30	0.030	3.0
TI160808Z500	50	0.060	3.0
TI160808Z800	80	0.060	2.5
TI160808Z121	120	0.080	2.5
TI160808Z151	150	0.080	2.5
TI160808Z221	220	0.150	2.0
TI160808Z301	300	0.150	2.0
TI160808Z471	470	0.200	1.0
TI160808Z601	600	0.200	1.0

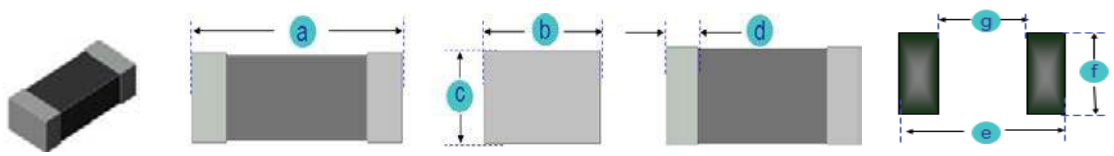
Note: TI160808yxxx, "TI" = Type, "16" = Length, "08" = Width, "08" = Thickness, "y" = Material, "xxx" = Impedance.

B. Part Number Key:



C. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
TI160808(0603)	1.6 (0.063)	0.8 (0.031)	0.8 (0.031)	0.5 (0.020)	2.80 (0.110)	1.00 (0.039)	0.60 (0.024)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.1(0.004)	± 0.3(0.012)	Typ.	Typ.	Typ.



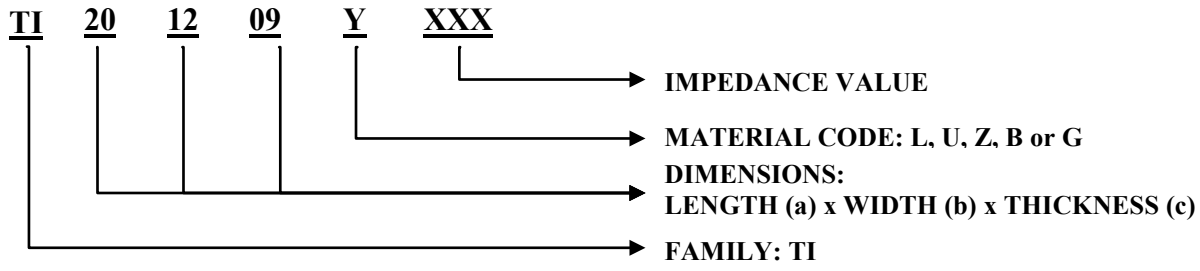
SMD MULTILAYER FERRITE CHIP BEADS (HIGH CURRENT)
TI201209(0805)-SERIES

A. Electrical Specifications:

P/N	Impedance (Ω) ±25% @100MHz	DCR Max.(Ω)	I rms. Max.(A)
TI201209B070	7	0.010	6.0
TI201209G050	5	0.040	2.2
TI201209G070	7	0.040	2.2
TI201209G300	30	0.040	3.0
TI201209G600	60	0.040	3.0
TI201209G800	80	0.060	3.0
TI201209G121	120	0.080	3.0
TI201209G151	150	0.080	3.0
TI201209G221	220	0.100	2.5
TI201209G301	300	0.100	2.5
TI201209G601	600	0.150	2.0
TI201209U070	7	0.010	6.0
TI201209U100	10	0.010	6.0
TI201209U110	11	0.010	6.0
TI201209U150	15	0.025	3.0
TI201209U170	17	0.025	4.0
TI201209U200	20	0.010	6.0
TI201209U260	26	0.020	5.0
TI201209U300	30	0.010	6.0
TI201209U310	31	0.010	6.0
TI201209U400	40	0.025	4.0
TI201209U470	47	0.050	3.0
TI201209U600	60	0.050	3.0
TI201209U700	70	0.060	3.0
TI201209U800	80	0.060	3.0
TI201209U101	100	0.040	4.0
TI201209U121	120	0.040	4.0
TI201209U151	150	0.060	3.0
TI201209U181	180	0.080	3.0
TI201209U221	220	0.080	3.0
TI201209U301	300	0.100	2.5
TI201209U471	470	0.150	2.0
TI201209U601	600	0.150	2.0
TI201209U102	1000	0.300	1.0
TI201209Z110	11	0.010	6.0
TI201209Z300	30	0.020	5.0
TI201209Z600	60	0.020	5.0
TI201209Z800	80	0.030	5.0
TI201209Z121	120	0.060	3.0
TI201209Z181	180	0.080	3.0
TI201209Z221	220	0.080	3.0
TI201209Z301	300	0.100	2.0
TI201209Z601	600	0.150	2.0
TI201209Z102	1000	0.300	1.0

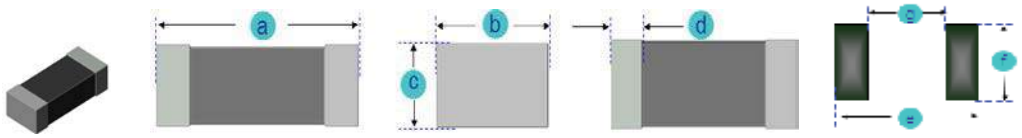
Note: TI201209yxxx, "TI" = Type, "20" = Length, "12" = Width, "09" = Thickness, "y" = Material, "xxx" = Impedance.

B. Part Number Key:



C. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
TI201209(0805)	2.0(0.079)	1.2(0.047)	0.9(0.035)	0.5(0.020)	3.20(0.126)	1.50(0.059)	0.60(0.024)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	± 0.3(0.012)	Typ.	Typ.	Typ.



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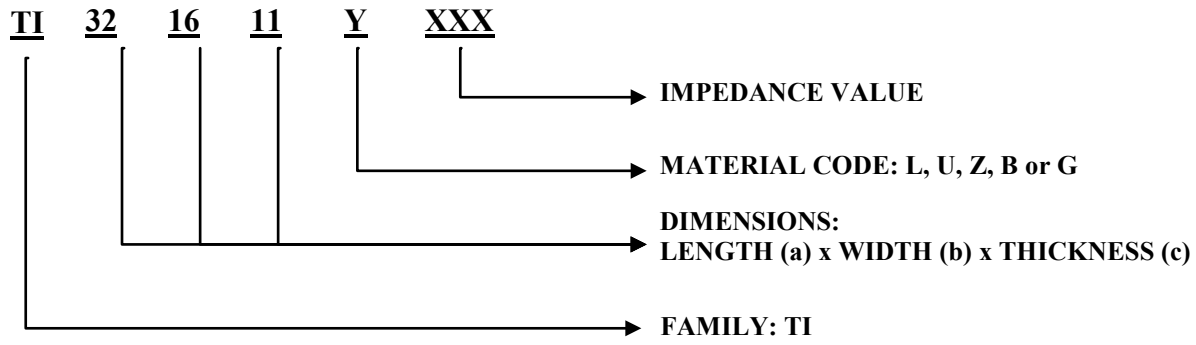
SMD MULTILAYER FERRITE CHIP BEADS (HIGH CURRENT)
TI321611(1206)-SERIES

A. Electrical Specifications:

P/N	Impedance (Ω) ±25% @100MHz	DCR Max.(Ω)	I rms. Max. (A)
TI321611B190	19	0.015	6.0
TI321611G310	31	0.030	4.0
TI321611G600	60	0.030	4.0
TI321611G800	80	0.030	4.0
TI321611G101	100	0.030	3.0
TI321611G601	600	0.200	2.0
TI321611U260	26	0.010	6.0
TI321611U310	31	0.010	6.0
TI321611U500	50	0.025	3.0
TI321611U600	60	0.040	3.0
TI321611U750	75	0.040	3.0
TI321611U800	80	0.040	3.0
TI321611U101	100	0.040	3.0
TI321611U121	120	0.040	3.0
TI321611U151	150	0.050	3.0
TI321611U221	220	0.050	3.0
TI321611U301	300	0.050	3.0
TI321611U391	390	0.070	2.5
TI321611U501	500	0.060	3.0
TI321611U601	600	0.060	3.0
TI321611U102	1000	0.200	2.0
TI321611Z260	26	0.010	6.0
TI321611Z500	50	0.030	3.0
TI321611Z600	60	0.030	3.0
TI321611Z121	120	0.050	3.0
TI321611Z301	300	0.050	3.0
TI321611Z501	500	0.060	3.0
TI321611Z601	600	0.080	3.0

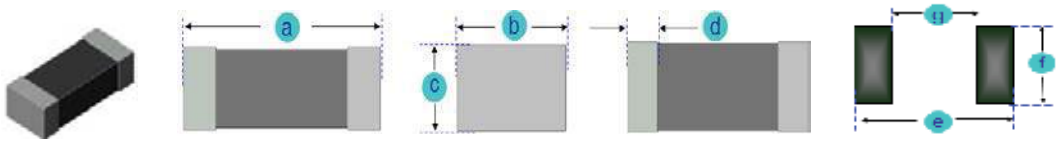
Note: TI321611yxxx, "TI" = Type, "32" = Length, "16" = Width, "11" = Thickness, "y" = Material, "xxx" = Impedance.

B. Part Number Key:



C. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
TI321611(1206)	3.2(0.126)	1.6(0.063)	1.1(0.043)	0.5(0.020)	4.40(0.173)	1.80(0.071)	1.20 (0.047)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	± 0.3(0.012)	Typ.	Typ.	Typ.



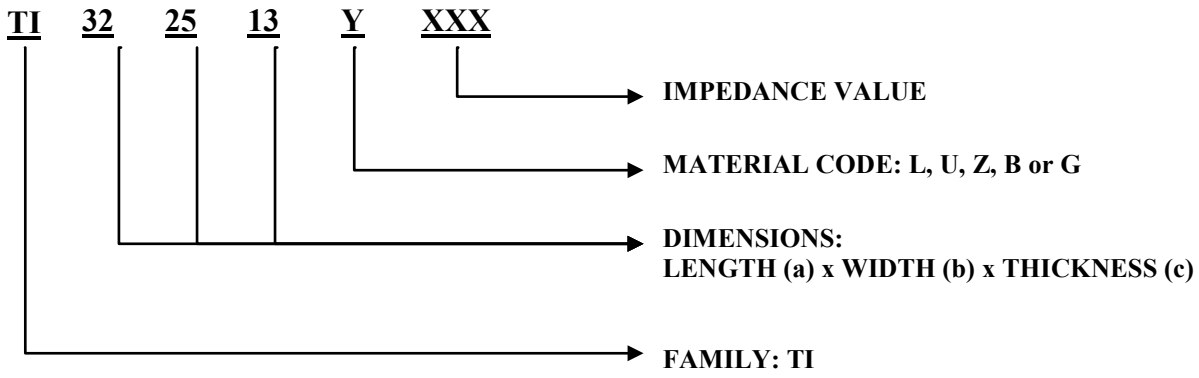
SMD MULTILAYER FERRITE CHIP BEADS (HIGH CURRENT)
TI322513(1206)-SERIES

A. Electrical Specifications:

P/N	Impedance (Ω) ±25% @100MHz	DCR Max. (Ω)	I rms. Max. (A)
TI322513U300	30	0.050	3.0
TI322513U520	52	0.050	3.0
TI322513U600	60	0.030	4.0
TI322513U650	65	0.030	3.5
TI322513U151	150	0.020	5.0

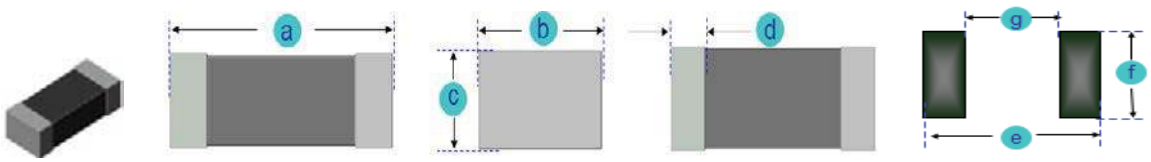
Note: TI322513yxxx, "TI" = Type, "32" = Length, "25" = Width, "13" = Thickness, "y" = Material, "xxx" = Impedance.

B. Part Number Key:



C. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
TI322513 (1206)	3.2 (0.126)	2.5 (0.098)	1.3 (0.051)	0.5 (0.020)	4.40 (0.173)	2.70 (0.106)	1.20 (0.047)
Tol.	± 0.2 (0.008)	± 0.2 (0.008)	± 0.2 (0.008)	± 0.3 (0.012)	Typ.	Typ.	Typ.



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SMD MULTILAYER FERRITE CHIP BEADS (HIGH CURRENT)
TI451616(1806)-SERIES / TI453215(1812)-SERIES

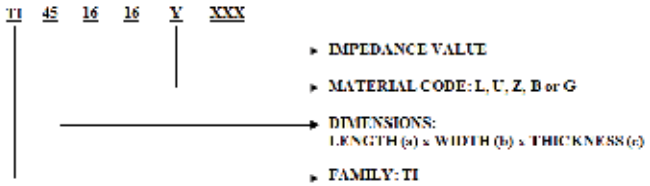
TI451616(1806)

A. Electrical Specifications:

P/N	Impedance (Ω) ±25%@100MHz	DCR Max.(Ω)	I rms. Max. (A)
TI451616U600	60	0.010	8.0
TI451616U750	75	0.020	6.0
TI451616U800	80	0.030	4.0
TI451616U121	120	0.040	3.0
TI451616U181	180	0.025	3.0
TI451616U471	470	0.090	2.0
TI451616Z600	60	0.010	6.0
TI451616Z800	80	0.050	3.0
TI451616Z181	180	0.025	3.0
TI451616Z471	470	0.090	2.0

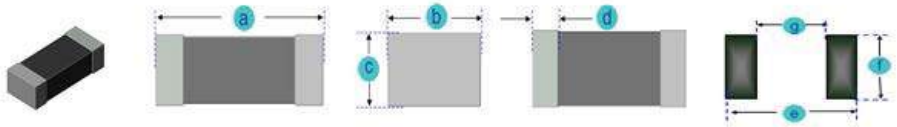
Note: TI451616yxxx, "TI" = Type, "45" = Length, "16" = Width, "16" = Thickness, "y" = Material, "xxx" = Impedance.

B. Part Number Key:



C. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
TI451616(1806)	4.5 (0.177)	1.6(0.063)	1.6(0.063)	0.5(0.020)	5.80 (0.228)	1.80(0.071)	2.00 (0.079)
Tol.	± 0.2 (0.008)	± 0.2 (0.008)	± 0.2(0.008)	± 0.3 (0.012)	Typ.	Typ.	Typ.



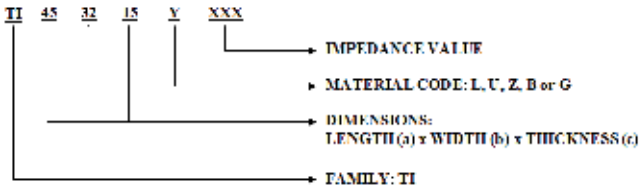
TI453215(1812)

A. Electrical Specifications:

P/N	Impedance (Ω) ±25% @100MHz	DCR Max.(Ω)	I rms. Max. (A)
TI453215U700	70	0.010	6.0
TI453215U800	80	0.010	6.0
TI453215U101	100	0.010	6.0
TI453215U121	120	0.010	6.0
TI453215U131	130	0.010	6.0
TI453215Z700	70	0.010	6.0
TI453215Z800	80	0.010	6.0
TI453215Z121	120	0.010	6.0
TI453215Z131	130	0.010	6.0

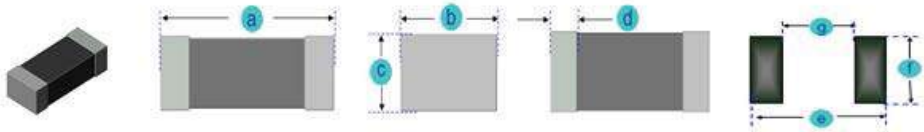
Note: TI453215yxxx, "TI" = Type, "45" = Length, "32" = Width, "15" = Thickness, "y" = Material, "xxx" = Impedance.

B. Part Number Key:



C. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
TI453215(1812)	4.5 (0.177)	3.2(0.126)	1.5 (0.059)	0.5(0.020)	5.80 (0.228)	3.40 (0.134)	2.00(0.079)
Tol.	± 0.2 (0.008)	± 0.2 (0.008)	± 0.2 (0.008)	± 0.3(0.012)	Typ.	Typ.	Typ.



SMD MULTILAYER FERRITE CHIP BEADS (HIGH IMPEDANCE)
FB100505(0402)-SERIES

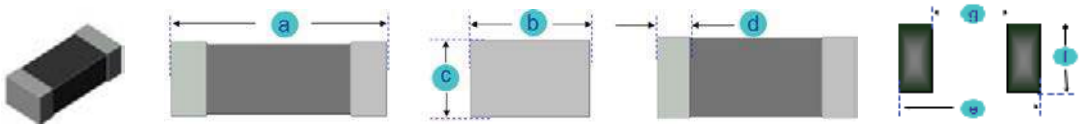
A. Electrical Specifications:

P/N	Impedance (Ω) ±25% @100MHz	DCR Max. (Ω)	I rms. Max. (mA)
FB100505U100	10	0.05	800
FB100505U300	30	0.15	800
FB100505U470	47	0.15	500
FB100505U600	60	0.20	500
FB100505U750	75	0.25	500
FB100505U121	120	0.25	800
FB100505U221	220	0.35	700
FB100505U301	300	0.50	500
FB100505U471	470	0.65	500
FB100505U601	600	0.65	500
FB100505U102	1000	0.85	500
FB100505Z300	30	0.20	500
FB100505Z600	60	0.30	500
FB100505Z800	80	0.35	500
FB100505Z121	120	0.35	500
FB100505Z221	220	0.40	500
FB100505Z301	300	0.50	200
FB100505Z471	470	0.65	200
FB100505Z601	600	0.85	200
FB100505G100	10	0.05	500
FB100505G300	30	0.30	500
FB100505G600	60	0.40	200
FB100505G750	75	0.50	200
FB100505G121	120	0.50	200
FB100505G221	220	0.70	100
FB100505G301	300	0.80	100
FB100505G471	470	1.00	100
FB100505G601	600	1.00	100
FB100505G102	1000	1.30	100
FB100505G152	1500	1.50	50

Note: FB100505yxxx, "FB100505" = P/N, "y" = Material, "xxx" = Impedance.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
FB100505	1.0(0.039)	0.5(0.020)	0.5(0.020)	0.25(0.010)	2.20(0.087)	0.70 (0.028)	0.40(0.016)
Tol.	± 0.1(0.004)	± 0.1(0.004)	± 0.1(0.004)	± 0.15(0.006)	Typ.	Typ.	Typ.



C. Part Number Key:

FB 10 05 05 Y XXX

- **XXX** → **IMPEDANCE VALUE**
- **Y** → **MATERIAL CODE: L, U, Z, B or G**
- **10 05 05** → **DIMENSIONS: LENGTH (a) x WIDTH (b) x THICKNESS (c)**
- **FB** → **FAMILY: FB**

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SMD MULTILAYER FERRITE CHIP BEADS (HIGH IMPEDANCE)
FB160808(0603)-SERIES

A. Electrical Specifications:

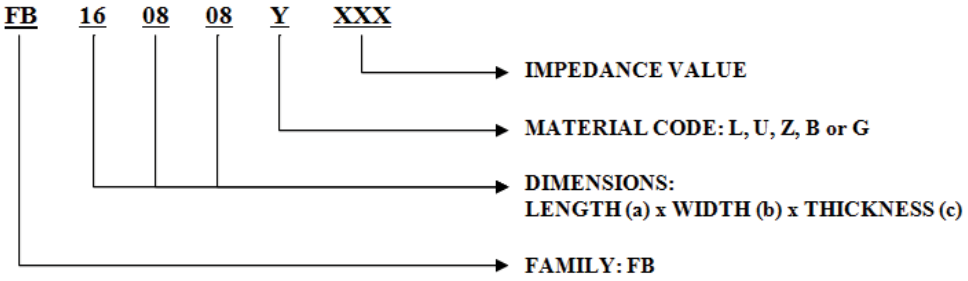
P/N	Impedance (Ω) ±25% @100MHz	DCR Max. (Ω)	I rms. Max.(mA)
FB160808Z100	10	0.10	800
FB160808Z300	30	0.10	800
FB160808Z600	60	0.10	800
FB160808Z800	80	0.10	900
FB160808Z121	120	0.10	800
FB160808Z221	220	0.15	600
FB160808Z301	300	0.35	400
FB160808Z601	600	0.45	600
FB160808Z102	1000	0.55	500
FB160808U100	10	0.10	900
FB160808U300	30	0.10	800
FB160808U470	47	0.10	600
FB160808U600	60	0.10	800
FB160808U800	80	0.15	900
FB160808U121	120	0.15	800
FB160808U221	220	0.20	700
FB160808U301	300	0.25	900
FB160808U471	470	0.35	500
FB160808U601	600	0.45	600
FB160808U102	1000	0.55	500
FB160808G100	10	0.08	800
FB160808G310	31	0.08	800
FB160808G470	47	0.15	500
FB160808G600	60	0.20	500
FB160808G750	75	0.20	500
FB160808G121	120	0.20	500
FB160808G221	220	0.20	500
FB160808G301	300	0.35	500
FB160808G541	540	0.40	500
FB160808G601	600	0.40	500
FB160808G102	1000	0.60	300
FB160808G152	1500	0.70	250
FB160808G202	2000	0.80	200
FB160808G252	2500	1.00	200
FB160808G272	2700	1.20	100
FB160808B100	10	0.10	500
FB160808B300	30	0.10	600
FB160808B470	47	0.20	500
FB160808B600	60	0.20	600
FB160808B750	75	0.25	500
FB160808B121	120	0.25	300
FB160808B221	220	0.40	600
FB160808B301	300	0.45	200
FB160808B471	470	0.65	200
FB160808B601	600	0.65	200

Note: FB160808yxxx, "FB160808" = P/N, "y" = Material, "xxx" = Impedance.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
FB160808	1.6(0.063)	0.8(0.031)	0.8(0.031)	0.3(0.012)	2.80(0.110)	1.00(0.039)	0.60(0.024)
Tol.	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.

C. Part Number Key:



SMD MULTILAYER FERRITE CHIP BEADS (HIGH IMPEDANCE)
FB201209(0805)-SERIES

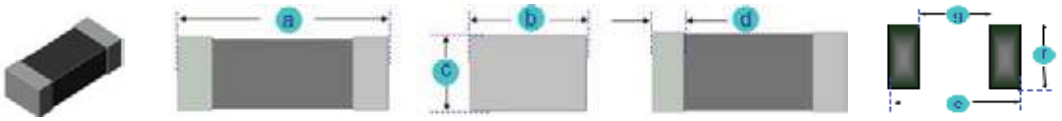
A. Electrical Specifications:

P/N	Impedance (Ω) ±25% @100MHz	DCR Max.(Ω)	I rms. Max. (mA)
FB201209Z100	10	0.10	800
FB201209Z300	30	0.10	800
FB201209Z600	60	0.10	900
FB201209Z800	80	0.15	600
FB201209Z121	120	0.15	600
FB201209Z221	220	0.20	700
FB201209Z301	300	0.25	700
FB201209Z601	600	0.35	500
FB201209Z102	1000	0.50	500
FB201209U100	10	0.10	800
FB201209U110	11	0.10	900
FB201209U300	30	0.10	600
FB201209U600	60	0.10	800
FB201209U800	80	0.10	800
FB201209U121	120	0.10	800
FB201209U221	220	0.20	500
FB201209U301	300	0.20	500
FB201209U601	600	0.30	500
FB201209U102	1000	0.45	500
FB201209G070	7	0.10	800
FB201209G310	31	0.10	800
FB201209G600	60	0.15	700
FB201209G800	80	0.20	500
FB201209G121	120	0.20	600
FB201209G221	220	0.20	500
FB201209G301	300	0.25	500
FB201209G601	600	0.45	300
FB201209G102	1000	0.45	300
FB201209G152	1500	0.45	400
FB201209G202	2000	0.60	300
FB201209G222	2200	0.60	300
FB201209G252	2500	0.60	300
FB201209G272	2700	0.65	300
FB201209B070	7	0.15	600
FB201209B300	30	0.15	600
FB201209B600	60	0.20	300
FB201209B121	120	0.25	300
FB201209B221	220	0.35	300
FB201209B301	300	0.40	300
FB201209B601	600	0.50	300
FB201209B102	1000	0.60	300

Note: FB201209yxxx, "FB201209" = Type, "y" = Material, "xxx" = Impedance.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
FB201209	2.0(0.079)	1.2(0.047)	0.9(0.035)	0.5(0.020)	3.20(0.126)	1.50(0.059)	0.60(0.024)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	± 0.3(0.012)	Typ.	Typ.	Typ.



C. Part Number Key:

FB 20 12 09 Y XXX

- **XXX** → **IMPEDANCE VALUE**
- **Y** → **MATERIAL CODE: L, U, Z, B or G**
- **20 12 09** → **DIMENSIONS: LENGTH (a) x WIDTH (b) x THICKNESS (c)**
- **FB** → **FAMILY: FB**

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SMD MULTILAYER FERRITE CHIP BEADS (HIGH IMPEDANCE)
FB321611(1206)-SERIES

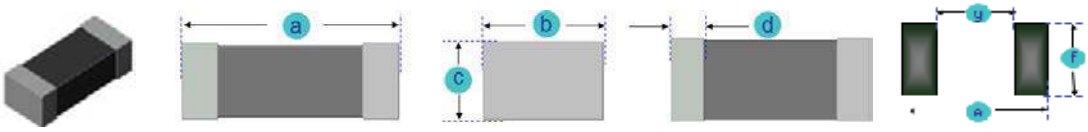
A. Electrical Specifications:

P/N	Impedance (Ω) ±25% @100MHz	DCR Max. (Ω)	I rms. Max. (mA)
FB321611Z260	26	0.10	500
FB321611Z310	31	0.10	500
FB321611Z600	60	0.15	400
FB321611Z800	80	0.10	600
FB321611Z121	120	0.15	500
FB321611Z221	220	0.20	400
FB321611Z301	300	0.25	400
FB321611Z601	600	0.30	300
FB321611Z102	1000	0.45	200
FB321611Z122	1200 (at 50 MHz)	0.50	200
FB321611Z202	2000 (at 30 MHz)	0.60	200
FB321611U260	26	0.10	600
FB321611U310	31	0.10	600
FB321611U500	50	0.10	600
FB321611U700	70	0.15	800
FB321611U800	80	0.15	800
FB321611U121	120	0.20	500
FB321611U221	220	0.25	500
FB321611U301	300	0.15	800
FB321611U601	600	0.20	600
FB321611U102	1000	0.45	500
FB321611U122	1200 (at 50 MHz)	0.50	500
FB321611U152	1500 (at 50 MHz)	0.50	500
FB321611U202	2000 (at 30 MHz)	0.50	500
FB321611G070	7	0.15	500
FB321611G600	60	0.15	500
FB321611G800	80	0.15	500
FB321611G221	220	0.20	600
FB321611G301	300	0.25	500
FB321611G601	600	0.30	300
FB321611G102	1000	0.45	300
FB321611G152	1500	0.45	300
FB321611G202	2000	0.60	200
FB321611B190	19	0.10	600

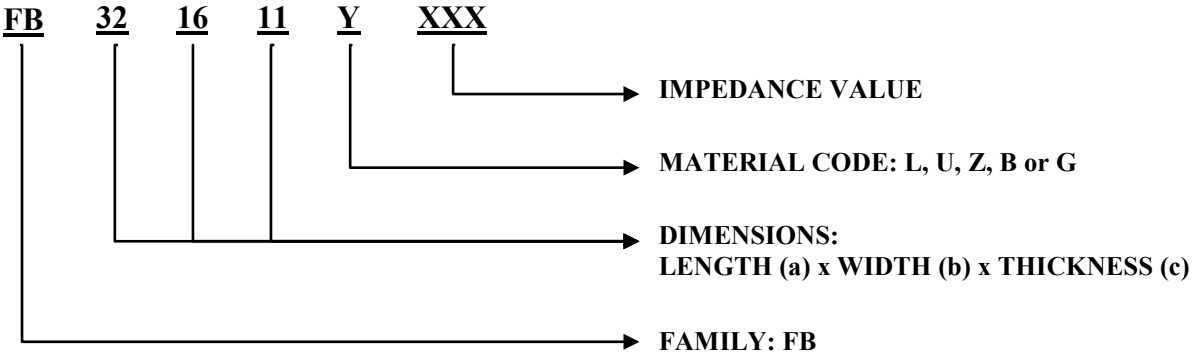
Note: FB321611yxxx, "FB321611" = Type, "y" = Material, "xxx" = Impedance.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
FB321611	3.2(0.126)	1.6(0.063)	1.1(0.043)	0.5(0.020)	4.40(0.173)	1.80(0.071)	1.20(0.047)
Tol.	± 0.2(0.008)	± 0.2(0.008)	± 0.2(0.008)	± 0.3(0.012)	Typ.	Typ.	Typ.



C. Part Number Key:



SMD MULTILAYER FERRITE CHIP BEADS (HIGH IMPEDANCE)
FB3225-SERIES, FB4516-SERIES AND FB4532-SERIES

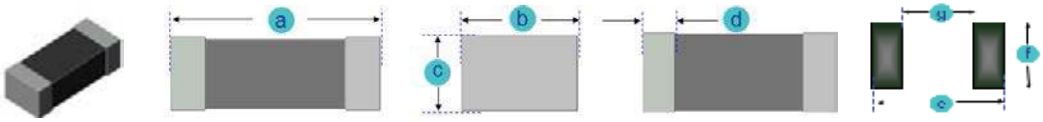
A. Electrical Specifications:

P/N	Impedance (Ω) ±25% @100MHz	DCR Max.(Ω)	I rms. Max.(mA)
FB322513U310	31	0.20	400
FB322513U330	33	0.20	400
FB322513U520	52	0.20	400
FB322513U600	60	0.20	800
FB451616U600	60	0.10	800
FB451616U800	80	0.10	600
FB451616U121	120	0.20	500
FB451616U181	180	0.25	500
FB451616Z800	80	0.10	600
FB451616Z121	120	0.10	600
FB451616Z151	150	0.20	500
FB451616Z171	170	0.25	500
FB453215U700	70	0.10	600
FB453215U800	80	0.10	600
FB453215U121	120	0.15	500
FB453215U131	130	0.15	500

Note: FBAABBCCyxxx, "FB" = Type, "AA" = Length, "BB" = Width, "CC" = Thickness, "y" = Material, "xxx" = Impedance.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
FB322513	3.2 (0.126)	2.5 (0.098)	1.3 (0.051)	0.5 (0.020)	4.40 (0.173)	2.70 (0.106)	1.20 (0.047)
Tol.	± 0.2 (0.008)	± 0.2 (0.008)	± 0.2 (0.008)	± 0.3 (0.012)	Typ.	Typ.	Typ.
FB451616	4.5 (0.177)	1.6 (0.063)	1.6 (0.063)	0.5 (0.020)	5.80 (0.228)	1.80 (0.071)	2.00 (0.079)
Tol.	± 0.2 (0.008)	± 0.2 (0.008)	± 0.2 (0.008)	± 0.3 (0.012)	Typ.	Typ.	Typ.
FB453215	4.5 (0.177)	3.2 (0.126)	1.5 (0.059)	0.5 (0.020)	5.80 (0.228)	3.40 (0.134)	2.00 (0.079)
Tol.	± 0.2 (0.008)	± 0.2 (0.008)	± 0.2 (0.008)	± 0.3 (0.012)	Typ.	Typ.	Typ.



C. Part Number Key:

FB AA BB CC Y XXX

- **XXX** → **IMPEDANCE VALUE**
- **Y** → **MATERIAL CODE: L, U, Z, B or G**
- **AA BB CC** → **DIMENSIONS: LENGTH (a) x WIDTH (b) x THICKNESS (c)**
- **FB** → **FAMILY: FB**

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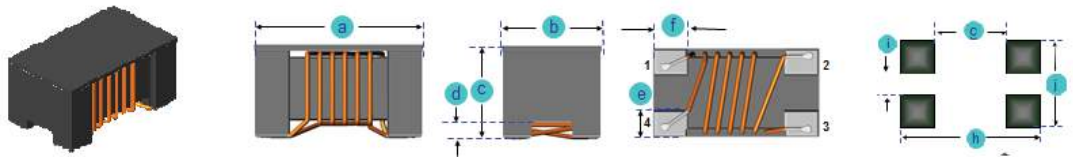
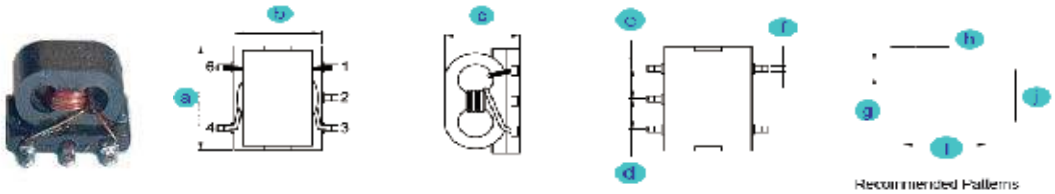
A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	j	Type
BIH2012OB	2.0(0.079)	1.20(0.047)	1.20(0.047)	0.17(0.007)	0.40(0.016)	0.45(0.018)	0.80(0.031)	2.60(0.102)	0.40(0.016)	1.20(0.047)	1
Tol.	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
SBT151	3.80(0.150)	4.10(0.161)	3.60(0.142)	1.27(0.05)	1.27(0.05)	0.5(0.020)	0.75(0.030)	1.65(0.065)	4.82(0.190)	3.3(0.130)	2
Tol.	±0.38(0.015)	±0.38(0.015)	Max.	±0.38(0.015)	±0.38(0.015)	±0.15(0.006)	Typ.	Typ.	Typ.	Typ.	
SBT201	4.4(0.173)	5.5 (0.217)	3.2(0.126)	1.5(0.059)	1.5(0.059)	0.5(0.020)	0.8(0.031)	1.65(0.065)	4.55(0.179)	3.0(0.118)	2
Tol.	Max.	Max.	Max.	±0.3(0.012)	±0.3(0.012)	±0.15(0.006)	Typ.	Typ.	Typ.	Typ.	
SBT203	5.5(0.217)	4.4(0.173)	1.5(0.059)	1.5(0.059)	3.2(0.126)	0.5(0.020)	0.8(0.031)	3.0(0.118)	6.2(0.244)	2.9(0.114)	3
Tol.	Max.	Max.	±0.3(0.012)	±0.3(0.012)	Max.	±0.15(0.006)	Typ.	Typ.	Typ.	Typ.	
SBT301	6.9(0.272)	6.9(0.272)	4.4(0.173)	2.0(0.079)	2.0(0.079)	0.6(0.024)	1.2(0.047)	1.7(0.067)	5.7(0.224)	4.0(0.157)	2
Tol.	Max.	Max.	Max.	±0.3(0.012)	±0.3(0.012)	±0.15(0.006)	Typ.	Typ.	Typ.	Typ.	
SBT303	6.9(0.272)	6.9(0.272)	2.0(0.079)	2.0(0.079)	4.4(0.173)	0.6(0.024)	1.2(0.047)	1.7(0.067)	5.7(0.224)	4.0(0.157)	4
Tol.	Max.	Max.	±0.3(0.012)	±0.3(0.012)	Max.	±0.15(0.006)	Typ.	Typ.	Typ.	Typ.	

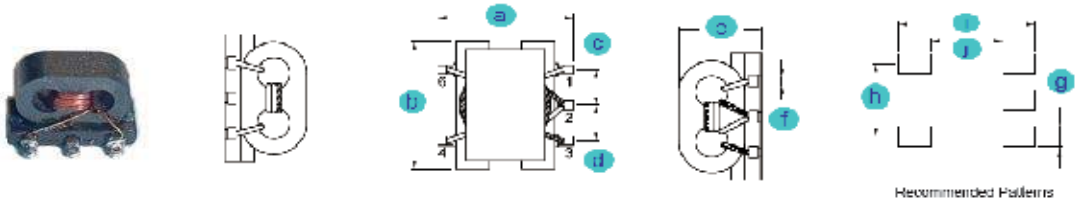
B. Mechanical Drawing:



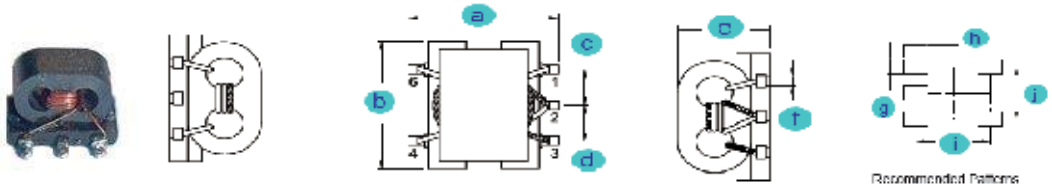
Type-1



Type-2



Type-3



Type-4

C. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

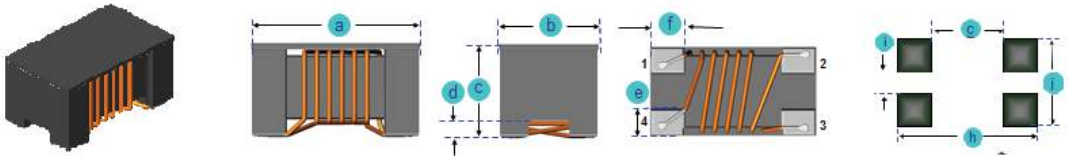
SMD BALUN TRANSFORMERS
BIH2012OB-SERIES

A. Electrical Specifications:

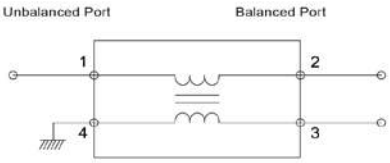
P/N	UB/B Impedance(Ω)	Withstand Voltage (DCV)	Rated Voltage (DCV)	DCR Max. (Ω)	Rated Current Max.(mA)	Frequency Range (MHz)	Insertion Loss at Freq. Range (Max.)
BIH2012OB-001H	75/75	125	50	0.35	330	50MHz to 1000MHz	1.0dB

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	j
BIH2012OB	2.0(0.079)	1.20(0.047)	1.20(0.047)	0.17(0.007)	0.40(0.016)	0.45(0.018)	0.80(0.031)	2.60(0.102)	0.40(0.016)	1.20(0.047)
Tol.	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.



C. Application Circuit:



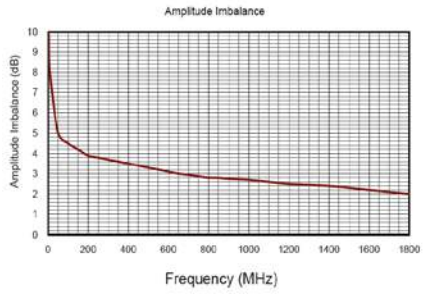
D. Features:

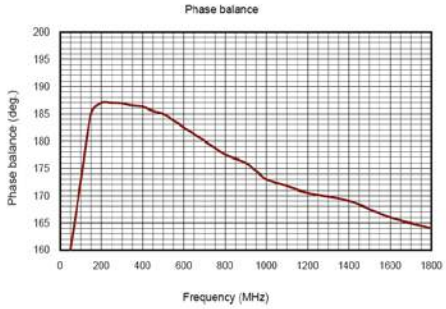
1. Input impedance is 75Ω.
2. Impedance ratio is 1:1.
3. Frequency band width is 50MHz to 1.0GHz (IL=1.0dB typ.)
4. MSL: Level 1.

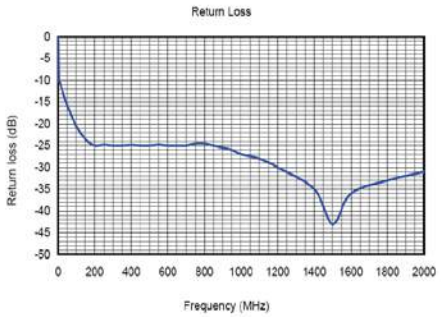
E. Applications:

1. Turner for TV.
2. Mobile devices.
3. Power driver for STB and Tuner.

F. Characteristics Curve:







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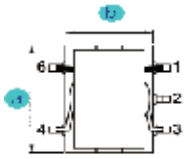
SMD BALUN TRANSFORMERS
SBT151-SERIES

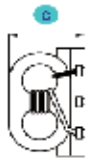
A. Electrical Specifications:

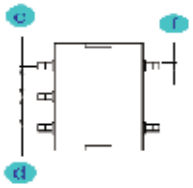
P/N	Winding Turns	Insertion Loss 1dB Max.
SBT151-04	4.5 Ts	@ 500~1800 MHz

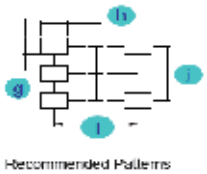
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	j
SBT151	3.80 (0.150)	4.10 (0.161)	3.60 (0.142)	1.27 (0.05)	1.27 (0.05)	0.5 (0.020)	0.75 (0.030)	1.65 (0.065)	4.82 (0.190)	3.3 (0.130)
Tol.	±0.38 (0.015)	±0.38 (0.015)	Max.	±0.38 (0.015)	±0.38 (0.015)	±0.15 (0.006)	Typ.	Typ.	Typ.	Typ.



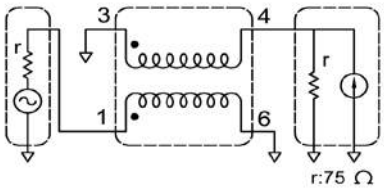






Recommended Patterns

C. Test Circuit:



Test Equipment : WILTRON 5411A

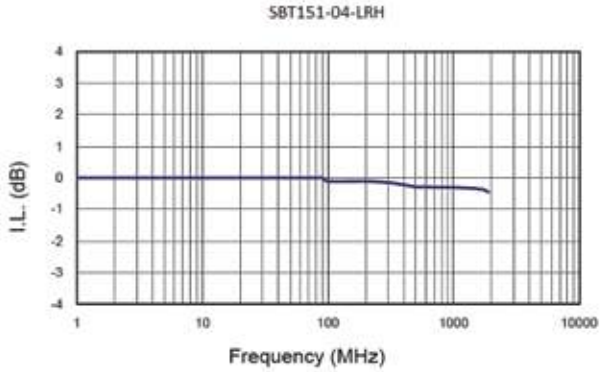
D. Features:

1. Base pin terminal treated, allowing mounting 'as is' on a PCB.
2. Custom specifications available.
3. MSL: Level 1.

E. Applications:

Double balance mixers, broad-band transformers, impedance transformers, etc.

F. Characteristics Curve:



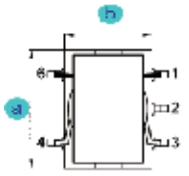
SMD BALUN TRANSFORMERS
SBT201-SERIES

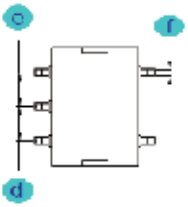
A. Electrical Specifications:

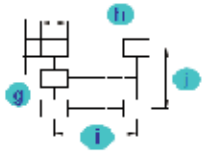
P/N	Winding Turns	Insertion Loss 2.5dB Max.
SBT201-02	2.5 Ts	@ 8~2000 MHz
SBT201-03	3.5 Ts	@ 6~2000 MHz
SBT201-04	4.5 Ts	@ 5~1900 MHz
SBT201-05	5.5 Ts	@ 3~1700 MHz

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	j
SBT201	4.4(0.173)	5.5 (0.217)	3.2(0.126)	1.5(0.059)	1.5(0.059)	0.5(0.020)	0.8(0.031)	1.65(0.065)	4.55(0.179)	3.0(0.118)
Tol.	Max.	Max.	Max.	±0.3(0.012)	±0.3(0.012)	±0.15(0.006)	Typ.	Typ.	Typ.	Typ.

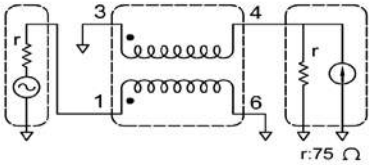






Recommended Patterns

C. Test Circuit:



Test Equipment : WILTRON 5411A

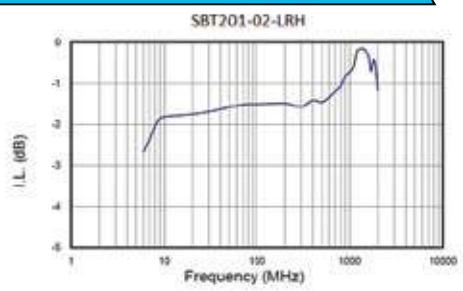
D. Features:

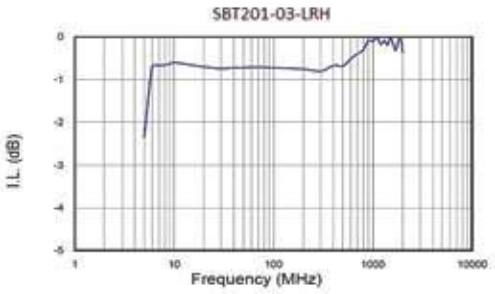
1. Base pin terminal treated, allowing mounting 'as is' on a PCB.
2. Custom Specifications available.
3. MSL: Level 1.

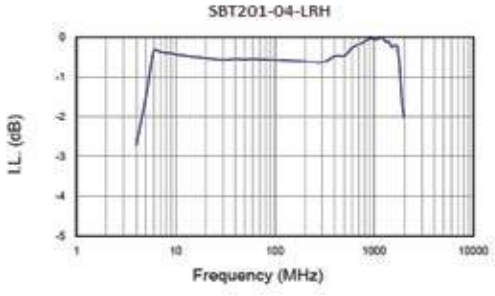
E. Applications:

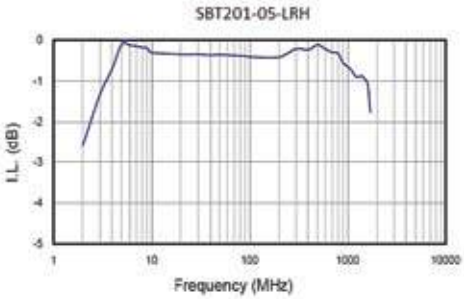
Double balance mixers, broad-band transformers, impedance transformers, etc.

F. Characteristics Curve:









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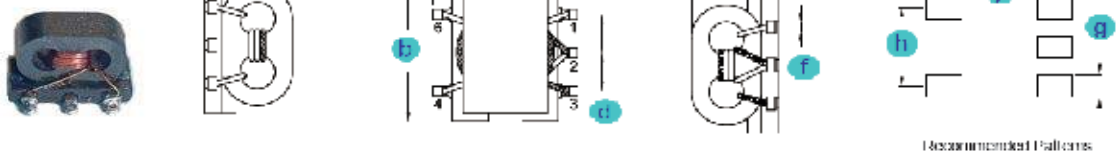
SMD BALUN TRANSFORMERS
SBT203-SERIES

A. Electrical Specifications:

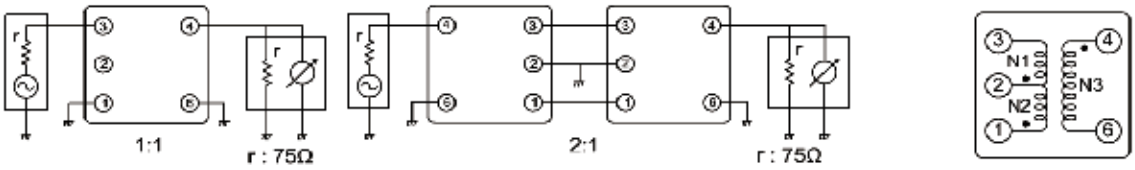
P/N	Winding Ratio	Insertion Loss 3dB Max.
SBT203-11	1 : 1	@ 3~300 MHz
SBT203-21	2 : 1	@ 6~400 MHz

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	j
SBT203	5.5 (0.217)	4.4 (0.173)	1.5 (0.059)	1.5 (0.059)	3.2 (0.126)	0.5 (0.020)	0.8 (0.031)	3.0 (0.118)	6.2 (0.244)	2.9 (0.114)
Tol.	Max.	Max.	±0.3 (0.012)	±0.3 (0.012)	Max.	±0.15 (0.006)	Typ.	Typ.	Typ.	Typ.



C. Test Circuit:



Test Equipment : WILTRON 5411A

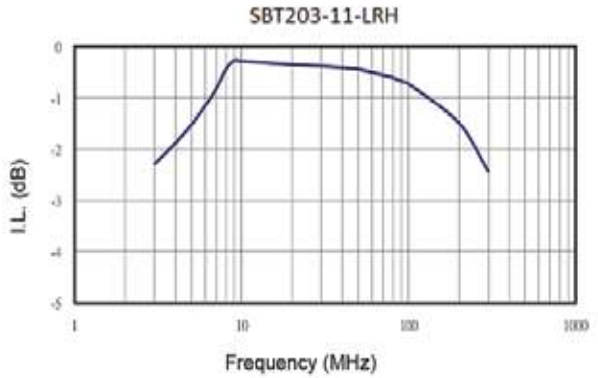
D. Features:

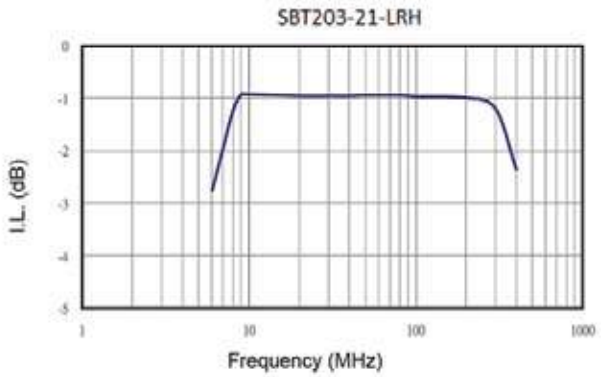
a. Base pin terminal treated, allowing mounting 'as is' on a PCB.
b. MSL: Level 1.

E. Applications:

1. Double balance mixers, broad-band transformers, impedance transformers, etc.

F. Characteristics Curve:





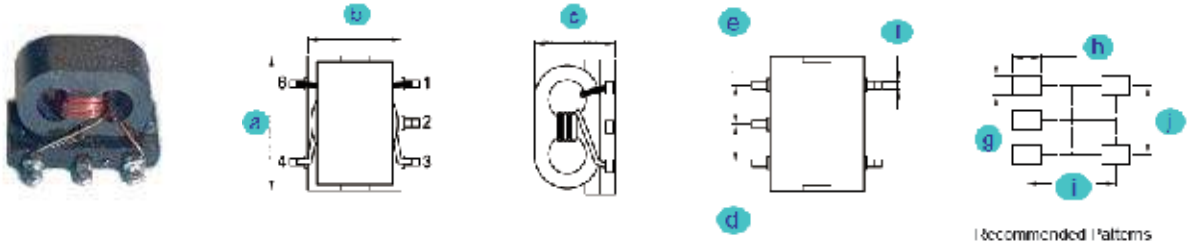
SMD BALUN TRANSFORMERS
SBT301-SERIES

A. Electrical Specifications:

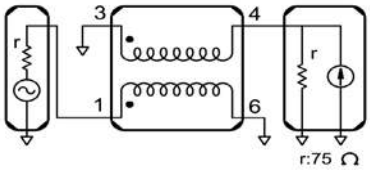
P/N	Winding Turns	Insertion Loss 3dB Max.
SBT301-02	2.5 Ts	@ 8~1600 MHz
SBT301-03	3.5 Ts	@ 7~1100 MHz
SBT301-04	4.5 Ts	@ 8~600 MHz

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	j
SBT301	6.9 (0.272)	6.9 (0.272)	4.4 (0.173)	2.0 (0.079)	2.0 (0.079)	0.6 (0.024)	1.2 (0.047)	1.7 (0.067)	5.7 (0.224)	4.0 (0.157)
Tol.	Max.	Max.	Max.	±0.3 (0.012)	±0.3 (0.012)	±0.15 (0.006)	Typ.	Typ.	Typ.	Typ.



C. Test Circuit:



Test Equipment : WILTRON 5411A

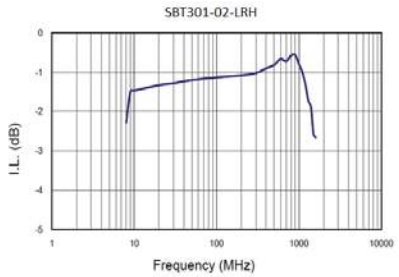
D. Features:

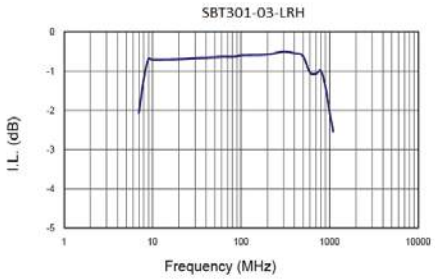
1. Base pin terminal treated, allowing mounting 'as is' on a PCB.
2. Custom Specifications available.
3. MSL: Level 1.

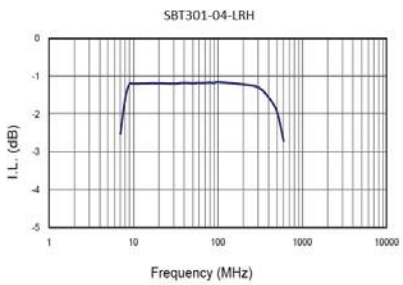
E. Applications:

1. Double balance mixers, broad-band transformers, impedance transformers, etc.
2. Common Mode Choke Coils.

F. Characteristics Curve:







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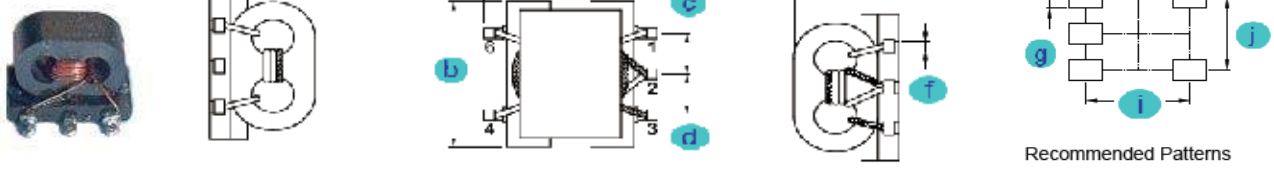
SMD BALUN TRANSFORMERS
SBT303-SERIES

A. Electrical Specifications:

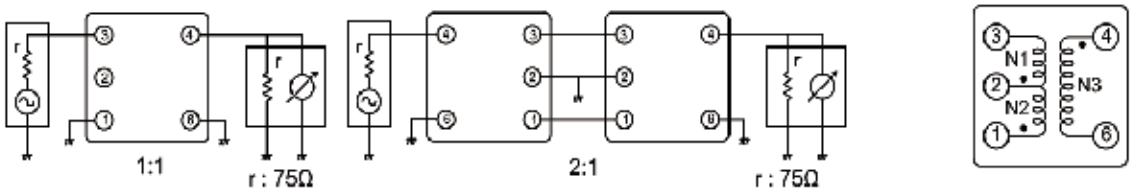
P/N	Winding Ratio	Insertion Loss 3dB Max.
SBT303-11	1 : 1	@ 5~400 MHz
SBT303-21	2 : 1	@ 5~250 MHz

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	j
SBT303	6.9 (0.272)	6.9 (0.272)	2.0 (0.079)	2.0 (0.079)	4.4 (0.173)	0.6 (0.024)	1.2 (0.047)	1.7 (0.067)	5.7 (0.224)	4.0 (0.157)
Tol.	Max.	Max.	±0.3 (0.012)	±0.3 (0.012)	Max.	±0.15 (0.006)	Typ.	Typ.	Typ.	Typ.



C. Test Circuit:



Test Equipment : WILTRON 5411A

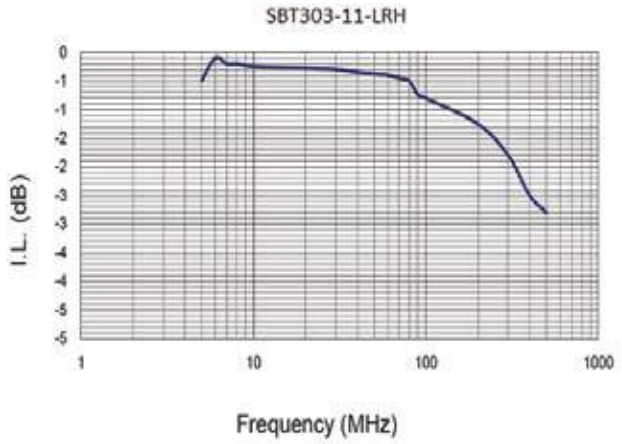
D. Features:

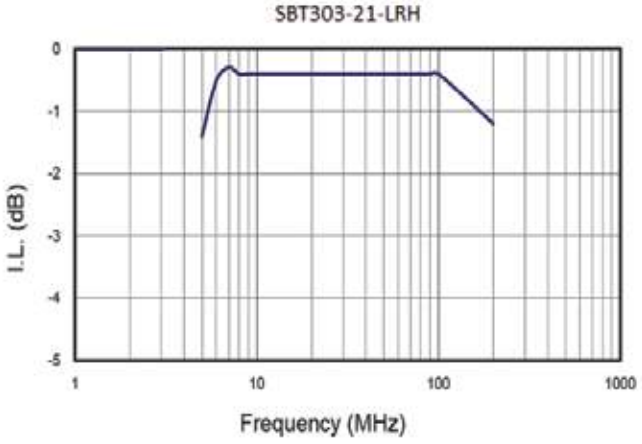
1. Base pin terminal treated, allowing mounting 'as is' on a PCB.
2. Custom Specifications available.
3. MSL: Level 1.

E. Applications:

1. Double balance mixers, broad-band transformers, impedance transformers, etc.
2. Common Mode Choke Coils.

F. Characteristics Curve:

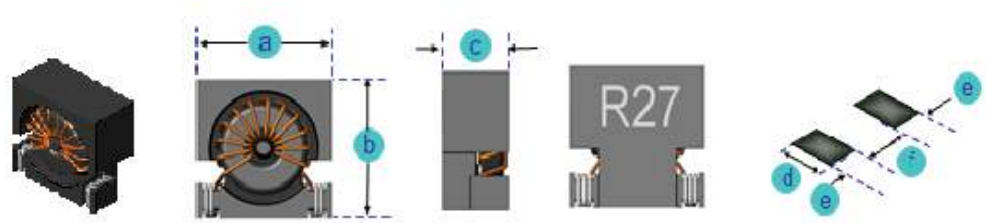




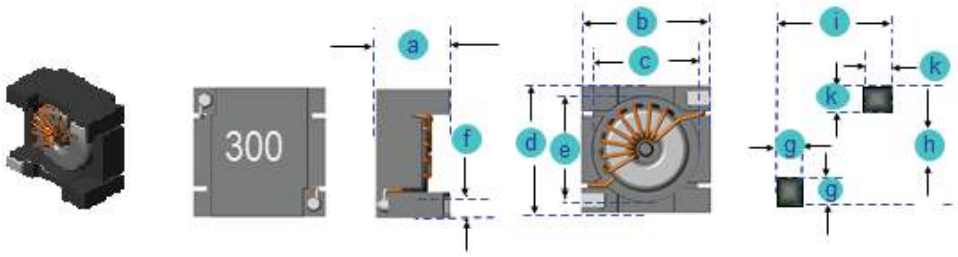
A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k	Type
OI0604DV	6.0 (0.236)	4.5 (0.177)	6.5 (0.256)	2.0 (0.079)	0.7 (0.028)	3.3 (0.130)	N/A	N/A	N/A	N/A	1
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.	N/A	N/A	N/A	N/A	
OI0707BI	6.5 (0.256)	6.8 (0.268)	5.0 (0.197)	6.8 (0.268)	5.0 (0.197)	0.95 (0.037)	1.5 (0.059)	7.0 (0.276)	7.0 (0.276)	1.5 (0.059)	2
Tol.	Max.	±0.5 (0.020)	+1.0 (0.039)	±0.5 (0.020)	+1.0 (0.039)	±0.35 (0.014)	Typ.	Typ.	Typ.	Typ.	

B. Mechanical Drawing:



Type-1



Type-2

C. General Informaton:

1. P/N: OI****DV/BI-xxx_H: “OI****DV/BI” = Series, “xxx” = Inductance, “_” = Tolerance, “H” = Internal control code.
2. Tolerance “ _ ”: K = ± 10%, J = ± 5%, H = ± 3%, G = ± 2%.
3. Inductance measured using the HP4291B or HP4287A.
4. Q measured using the HP4291B or HP4287A.
5. Test Fixture: HP16193A.
6. MSL: Level 1

D. Applications:

1. LC filters, for CATV diplex filters.

E. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

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OI0604DV

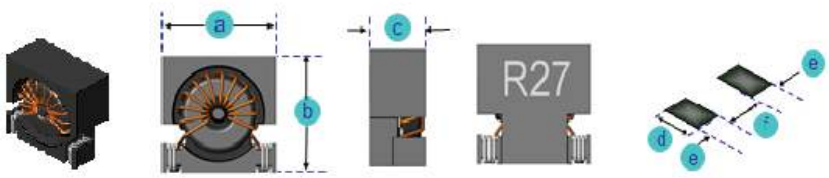
A. Electrical Specifications:

P/N	Inductance(nH)	Mark	Q (Min.)	Test Freq.
OI0604DV-R15_H	150	R15	80	40MHz
OI0604DV-R18_H	180	R18	80	40MHz
OI0604DV-R27_H	270	R27	80	40MHz
OI0604DV-R33_H	330	R33	80	40MHz

Note: 1. P/N: OI0604DV-xxx_H: "OI0604DV" = Series, "xxx" = Inductance, "_" = Tolerance, "H" = Internal control code.
2. Operating Temp. : -25ºC to +85ºC.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f
OI0604DV	6.0 (0.236)	4.5 (0.177)	6.5 (0.256)	2.0 (0.079)	0.7 (0.028)	3.3 (0.130)
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.



OI0707BI

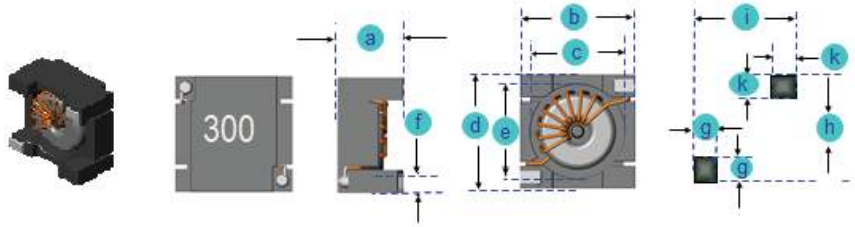
A. Electrical Specifications:

P/N	Inductance (nH)	Mark	Inductance Tolerance	Q (Min.)	Test Freq.
OI0707BI-R20_H	200	200	K, J, G	100	40MHz
OI0707BI-R22_H	220	220	K, J, G	100	40MHz
OI0707BI-R24_H	240	240	K, J, G	100	40MHz
OI0707BI-R30_H	300	300	K, J, G	100	40MHz
OI0707BI-R33_H	330	330	K, J, G	100	40MHz
OI0707BI-R43_H	430	430	K, J, G	100	40MHz

Note: 1. P/N: OI0707BI-xxx_H: "OI0707BI" = Series, "xxx" = Inductance, "_" = Tolerance, "H" = Internal control code.
2. Operating Temp. : -40ºC to +125ºC.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
OI0707BI	6.5 (0.256)	6.8 (0.268)	5.0 (0.197)	6.8 (0.268)	5.0 (0.197)	0.95 (0.037)	1.5 (0.059)	7.0 (0.276)	7.0 (0.276)	1.5 (0.059)
Tol.	Max.	±0.5 (0.020)	+1.0 (0.039)	±0.5 (0.020)	+1.0 (0.039)	±0.35 (0.014)	Typ.	Typ.	Typ.	Typ.

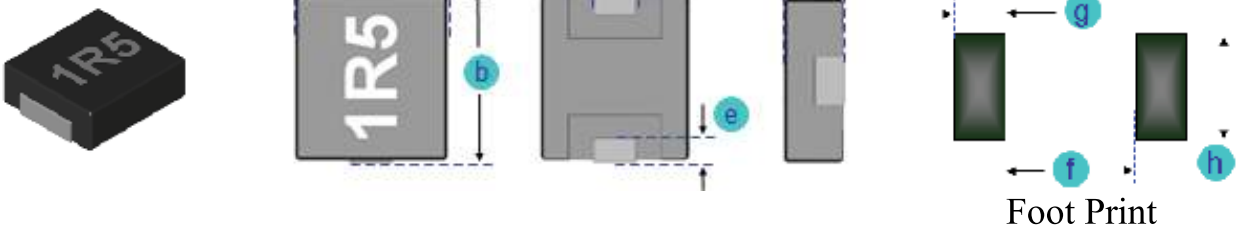


SMD MOLDED HIGH CURRENT POWER INDUCTORS (SHIELDED)
MCS****-SERIES

A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
MCS0420	4.45 (0.175)	4.0 (0.157)	1.8 (0.071)	1.5 (0.059)	0.8 (0.031)	2.2 (0.087)	1.5 (0.059)	2.5 (0.098)
Tol.	±0.25 (0.010)	±0.3 (0.012)	±0.2 (0.008)	±0.3 (0.012)	±0.3 (0.012)	Typ.	Typ.	Typ.
MCS0630	6.6 (0.260)	7.3 (0.287)	3 (0.118)	3 (0.118)	1.5 (0.059)	3.7 (0.146)	1.85 (0.073)	3.5 (0.138)
Tol.	±0.2 (0.008)	Max	Max.	±0.3 (0.012)	±.5 (0.020)	Typ.	Typ.	Typ.
MCS1040	10 (0.394)	11.15 (0.439)	4.0 (0.157)	3.0 (0.118)	2.0 (0.079)	5.4 (0.213)	4.05 (0.159)	4.4 (0.173)
Tol.	±0.3 (0.012)	±0.35 (0.014)	Max.	±0.5 (0.020)	±.5 (0.020)	Typ.	Typ.	Typ.

B. Mechanical Drawing:



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MCS

C. General Informaton:

1. P/N: MCS****-xxx_N1/N2, “MCS****” = P/N, “xxx” = Inductance, “_” = Tolerance: M: ± 20%, “N1/N2” = Internal control code
2. Tolerance “_”: N: ± 30%, M: ± 20%.
3. Magnetically shielded
4. High saturation current
5. Operating temperature: -55ºC to +125ºC
6. All test data is referenced to 25ºC ambient.
7. Rated current (A) that will cause an approximate ΔT of 40ºC.
8. The part temperature (ambient + temp. rise) should not exceed 125ºC under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow, and other cooling provisions all affect the temperature. Part temperature should be verified in the end application.
9. Test Instrument: Chroma16502, Chroma11300.
10. MSL: Level 1.
11. Inductance and Current range:
    a. MCS0420: From 0.47 uH (7.0 A) to 6.80 uH (2.0 A).
    b. MCS0630: From 0.22 uH (23.0 A) to 10 uH (4.0 A).
    c. MCS1040: From 0.36 uH (34 A) to 1.5 uH (16 A)

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. PDA, LCD, DVD, BRP, HD.

E. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

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SMD MOLDED HIGH CURRENT POWER INDUCTORS (SHIELDED)
MCS0420-SERIES

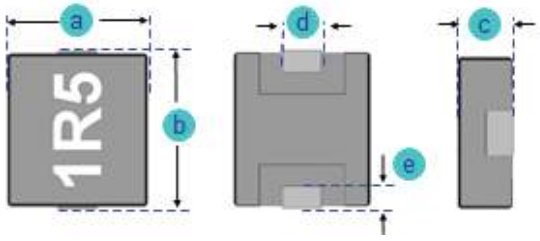
A. Electrical Specifications:

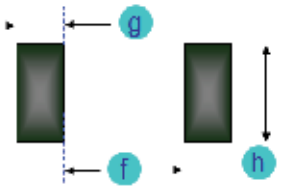
P/N	L (uH)	Tol.	Mark	Test Freq. (KHz)	DCR Typ. (mΩ)	DCR Max. (mΩ)	I sat. Typ. (A)	I rated Typ. (A)
MCS0420-R47MN2	0.47	M	R47	100	12.5	14.0	9.5	7.0
MCS0420-1R0MN2	1.0	M	1R0	100	24.0	27.0	7.0	4.5
MCS0420-1R5MN2	1.5	M	1R5	100	38.0	46.0	6.0	4.0
MCS0420-2R2MN2	2.2	M	2R2	100	52.0	58.0	5.0	3.0
MCS0420-3R3MN2	3.3	M	3R3	100	74.0	87.0	4.0	2.5
MCS0420-4R7MN2	4.7	M	4R7	100	92.0	105.0	3.0	2.2
MCS0420-6R8MN2	6.8	M	6R8	100	162.0	178.0	2.1	2.0

Note: 1. MCS0420-xxx_N2, "MCS0420" = P/N, "xxx" = Inductance, "_" = Tolerance: M: ± 20%, "N2" = Internal control code.
2. I sat (A) that will cause Lo to drop approximately 30%.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
MCS0420	4.45 (0.175)	4.0 (0.157)	1.8 (0.071)	1.5 (0.059)	0.8 (0.031)	2.2 (0.087)	1.5 (0.059)	2.5 (0.098)
Tol.	±0.25 (0.010)	±0.3 (0.012)	±0.2 (0.008)	±0.3 (0.012)	±0.3 (0.012)	Typ.	Typ.	Typ.





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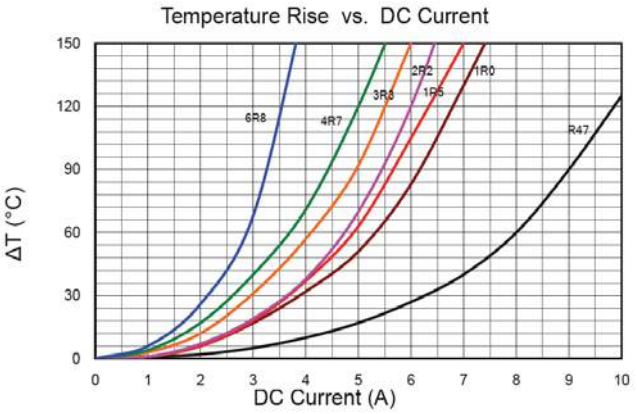
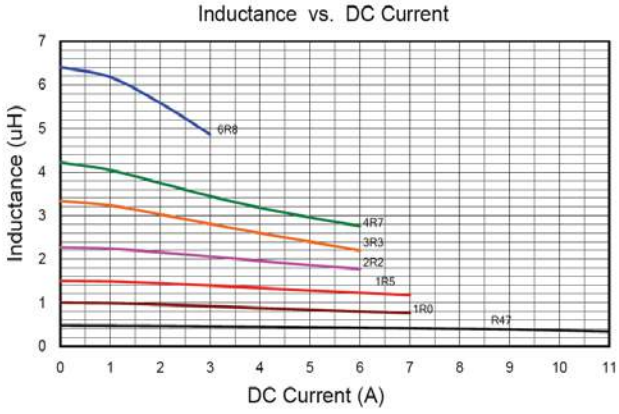
C. Characteristics Curve:





SMD MOLDED HIGH CURRENT POWER INDUCTORS (SHIELDED)
MCS0630-SERIES

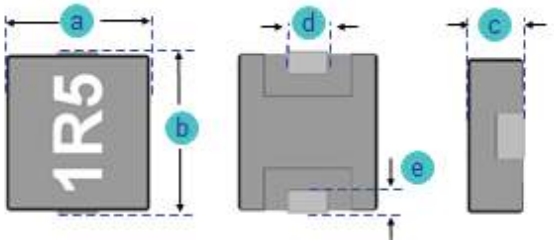
A. Electrical Specifications:

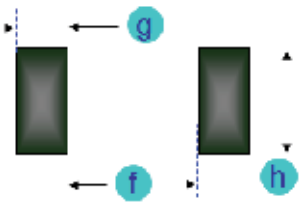
P/N	L (uH)	Tol.	Mark	Test Freq. (KHz)	DCR Typ. (mΩ)	DCR Max. (mΩ)	I sat. Typ. (A)	I rated Typ. (A)
MCS0630-R22MN2	0.22	M	R22	100	2.50	2.80	40.0	23.0
MCS0630-R33MN2	0.33	M	R33	100	3.50	3.90	30.0	20.0
MCS0630-R47MN2	0.47	M	R47	100	4.00	4.20	26.5	17.5
MCS0630-R56MN2	0.56	M	R56	100	4.70	5.00	25.5	16.5
MCS0630-R68MN2	0.68	M	R68	100	5.00	5.50	25.0	15.5
MCS0630-R82MN2	0.82	M	R82	100	6.70	8.00	20.0	13.0
MCS0630-1R0MN2	1.00	M	1R0	100	9.00	10.0	20.0	11.0
MCS0630-1R5MN2	1.50	M	1R5	100	14.0	15.0	16.0	9.00
MCS0630-2R2MN2	2.20	M	2R2	100	17.0	20.0	12.0	8.00
MCS0630-3R3MN2	3.30	M	3R3	100	28.0	30.0	10.0	6.00
MCS0630-4R7MN2	4.70	M	4R7	100	37.0	40.0	7.00	5.50
MCS0630-6R8MN2	6.80	M	6R8	100	54.0	60.0	6.50	4.50
MCS0630-8R2MN2	8.20	M	8R2	100	54.0	60.0	6.50	4.50
MCS0630-100MN1	10.00	M	100	100	62.0	68.0	5.50	4.00

Note: 1. MCS0630-xxx_N2, "MCS0630" = P/N, "xxx" = Inductance, "_" = Tolerance: M: ± 20%, "N2" = Internal control code
2. I sat (A) that will cause Lo to drop approximately 20%.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
MCS0630	6.6 (0.260)	7.3 (0.287)	3 (0.118)	3 (0.118)	1.5 (0.059)	3.7 (0.146)	1.85 (0.073)	3.5 (0.138)
Tol.	±0.2 (0.008)	Max	Max.	±0.3 (0.012)	±.5 (0.020)	Typ.	Typ.	Typ.





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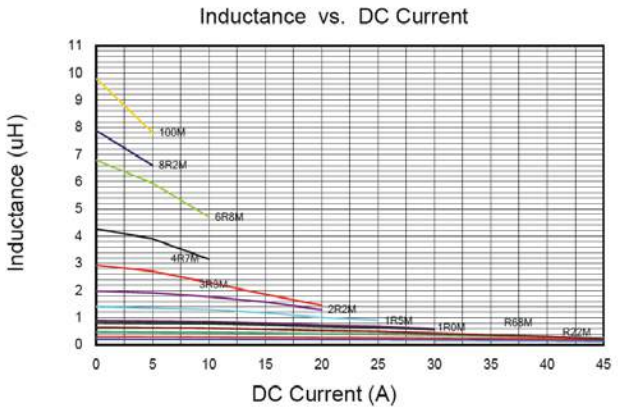
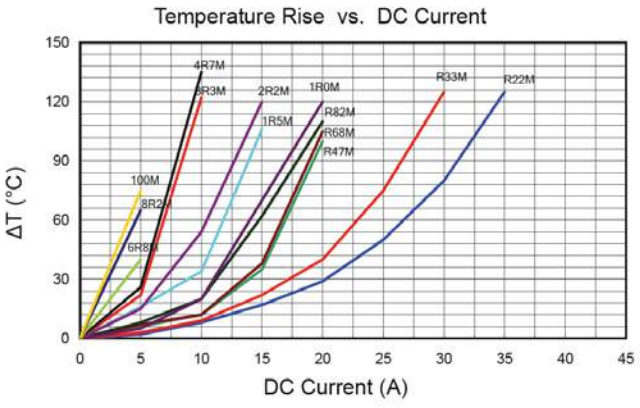
C. Characteristics Curve:





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SMD MOLDED HIGH CURRENT POWER INDUCTORS (SHIELDED)
MCS1040-SERIES

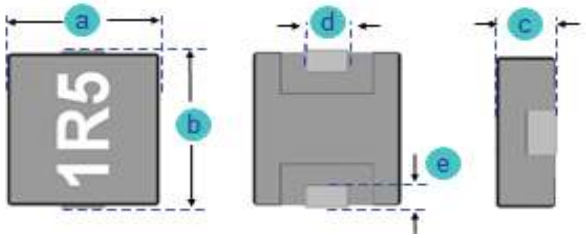
A. Electrical Specifications:

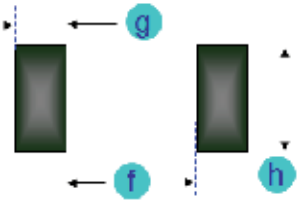
P/N	L (uH)	Tol.	Mark	Test Freq. (KHz)	DCR Typ. (mΩ)	DCR Max. (mΩ)	I sat. Typ. (A)	I rated Typ. (A)
MCS1040-R36MN1	0.36	M	R36	100	1.10	1.20	40.0	34.0
MCS1040-R47MN1	0.47	M	R47	100	1.30	1.55	35.0	25.0
MCS1040-R56MN1	0.56	M	R56	100	1.60	1.80	32.0	25.0
MCS1040-R68MN1	0.68	M	R68	100	2.40	2.70	30.0	22.0
MCS1040-R88MN1	0.88	M	R88	100	2.70	3.00	30.0	20.0
MCS1040-1R0MN1	1.00	M	1R0	100	3.00	3.30	28.0	18.0
MCS1040-1R5MN1	1.50	M	1R5	100	3.80	4.20	21.0	16.0

Note: 1. MCS1040-xxx_N1, "MCS1040" = P/N, "xxx" = Inductance, "_" = Tolerance: M: ± 20%, "N1" = Internal control code.
2. I sat (A) that will cause Lo to drop approximately 30%.

B. Dimensions: mm (Inch)

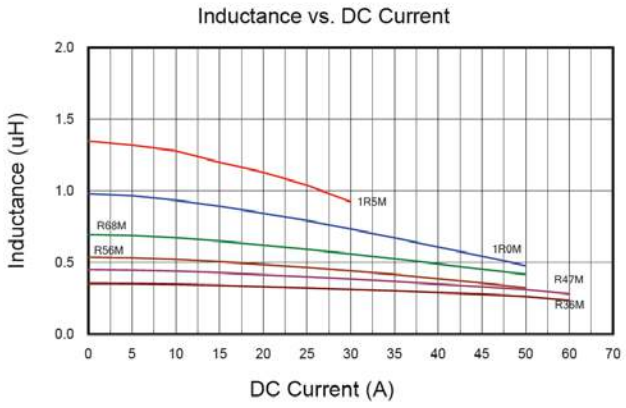
Series	a	b	c	d	e	f	g	h
MCS1040	10 (0.394)	11.15 (0.439)	4.0 (0.157)	3.0 (0.118)	2.0 (0.079)	5.4 (0.213)	4.05 (0.159)	4.4 (0.173)
Tol.	±0.3 (0.012)	±0.35 (0.014)	Max.	±0.5 (0.020)	±.5 (0.020)	Typ.	Typ.	Typ.

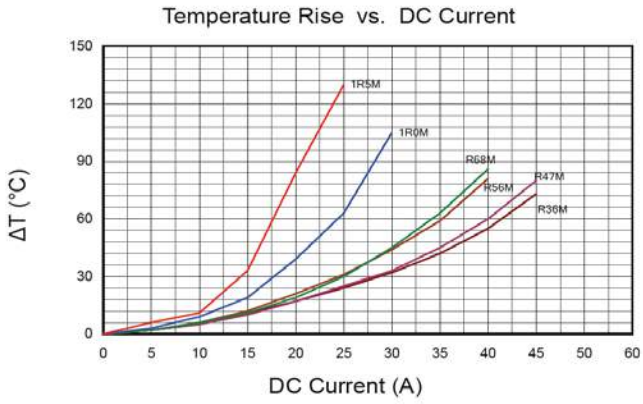




Foot Print

C. Characteristics Curve:



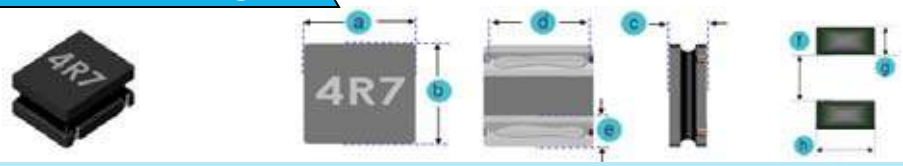


SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSM****D-SERIES

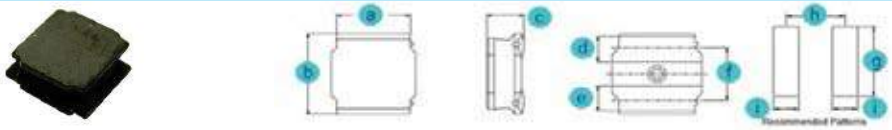
A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	Type
CSM0310D	3.0(0.118)	3.0(0.118)	1.0(0.039)	2.7(0.106)	0.9(0.035)	1.2(0.047)	1.0(0.039)	2.7(0.106)	N/A	1
Tol.	±0.1(0.004)	±0.1(0.004)	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	N/A	
CSM0315D	3.0(0.118)	3.0(0.118)	1.5(0.059)	2.7(0.106)	0.9(0.035)	1.2(0.047)	1.0(0.039)	2.7(0.106)	N/A	1
Tol.	±0.1(0.004)	±0.1(0.004)	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	N/A	
CSM0418D	4.0(0.157)	4.0(0.157)	1.8(0.071)	1.1(0.106)	1.1(0.106)	2.5(0.098)	3.7(0.146)	2.8(0.110)	1.2(0.047)	2
Tol.	±0.2(0.008)	±0.2(0.008)	Max.	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.	
CSM0840D	8.0(0.315)	8.0(0.315)	4.2(0.165)	5.6(0.220)	2.3(0.091)	3.4(0.134)	2.2(0.087)	7.5(0.295)	N/A	3
Tol.	±0.2(0.008)	±0.2(0.008)	Max.	±0.2(0.008)	Typ.	Typ.	Typ.	Typ.	N/A	

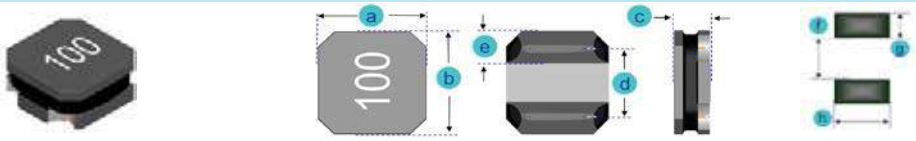
B. Mechanical Drawing:



Type-1 CSM****D



Type-2 CSM****D



Type-3 CSM****D

C. General Informaton:

1. P/N: CSM****D-xxx_, “CSM****D” = Series, “xxx” = Inductance, “_” = Tolerance.
2. Tolerance “_”: M: ± 20%, N: ± 30%
3. Magnetically shielded
4. High saturation current
5. I sat: based on inductance decrease 30% (at 20 ºC ambient).
6. I rms: based on temperature increase 40ºC (at 20 ºC ambient).
7. Storage temperature: -40ºC to +85ºC.
8. Operating temperature range:
   CSM0315D: -25ºC to +105ºC (Including self-heating).
   CSM0310D, CSM0840D: -25ºC to +120ºC (Including self-heating).
   CSM0418D: -25ºC to +125ºC (Including self-heating).
9. Inductance measured:
   CSM0315D, CSM0840D: CH-3302, HP4286A or equivalent.
   CSM0310D, CSM0418D: Using HP4285A and Chroma1320 & 3302
10. DCR measured: CHROMA 16502 or equivalent.
11. MSL: Level 1.
12. Inductance and Current range:
    a. CSM 0310D: From 1.0 uH (1.525 A) to 47 uH (0.270 A)
    b. CSM 0315D: From 1.0 uH (2.1 A) to 100 uH (0.25 A)
    c. CSM 0418D: From 1.0 µH (3200mA) to 220 µH (170mA).
    d. CSM 0840D: From 0.9 uH (8.0 A) to 100 uH (1.1 A)

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. PDA, LCD, DVD, BRP, HD.

E. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSM0310D-SERIES

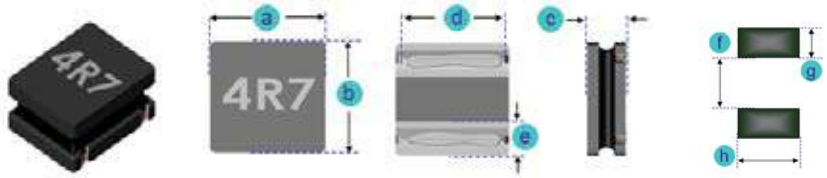
A. Electrical Specifications:

P/N	L (uH)	Tol.	Mark	Test Freq. (MHz)	DCR Max. (Ω)	I sat. Max. (A)	I rms Max. (A)
CSM0310D-1R0N	1.0	± 30%	1R0	1	0.078	1.70	1.525
CSM0310D-1R2N	1.2	± 30%	1R2	1	0.078	1.70	1.480
CSM0310D-1R5N	1.5	± 30%	1R5	1	0.090	1.44	1.370
CSM0310D-2R2N	2.2	± 20%, ± 30%	2R2	1	0.100	1.30	1.300
CSM0310D-2R7M	2.7	± 20%, ± 30%	2R7	1	0.169	1.00	1.020
CSM0310D-3R3M	3.3	± 20%, ± 30%	3R3	1	0.156	1.00	1.030
CSM0310D-3R6M	3.6	± 20%, ± 30%	3R6	1	0.215	0.95	0.900
CSM0310D-4R7M	4.7	± 20%, ± 30%	4R7	1	0.204	0.85	0.900
CSM0310D-5R6M	5.6	± 20%, ± 30%	5R6	1	0.342	0.72	0.820
CSM0310D-6R8M	6.8	± 20%, ± 30%	6R8	1	0.300	0.70	0.745
CSM0310D-100M	10	± 20%, ± 30%	100	1	0.420	0.60	0.620
CSM0310D-150M	15	± 20%, ± 30%	150	1	0.660	0.45	0.480
CSM0310D-180M	18	± 20%, ± 30%	180	1	0.793	0.42	0.470
CSM0310D-220M	22	± 20%, ± 30%	220	1	0.924	0.38	0.410
CSM0310D-270M	27	± 20%, ± 30%	270	1	1.404	0.30	0.350
CSM0310D-330M	33	± 20%, ± 30%	330	1	1.860	0.29	0.345
CSM0310D-390M	39	± 20%, ± 30%	390	1	2.275	0.28	0.280
CSM0310D-470M	47	± 20%, ± 30%	470	1	2.400	0.24	0.270

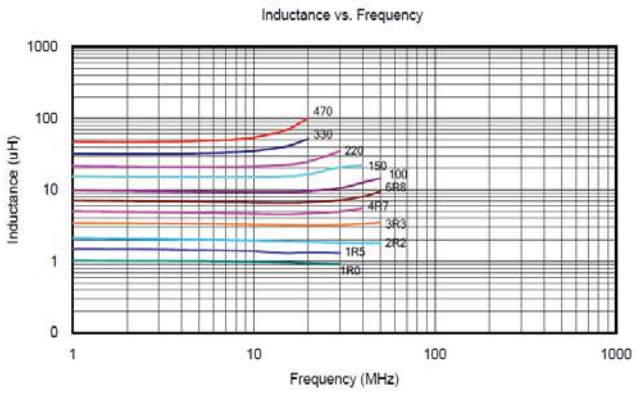
Note: 1. CSM0310D-xxx_, "CSM0310D" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance measured: HP4285A and Chroma1320 & 3302

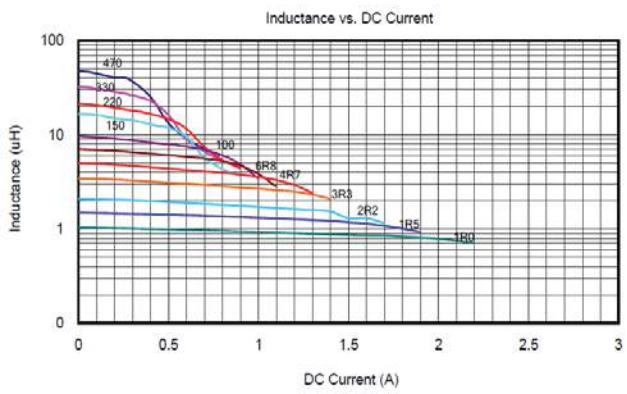
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CSM0310D	3.0 (0.118)	3.0 (0.118)	1.0 (0.039)	2.7 (0.106)	0.9 (0.035)	1.2 (0.047)	1.0 (0.039)	2.7 (0.106)
Tol.	±0.1 (0.004)	±0.1 (0.004)	Max.	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSM0315D-SERIES

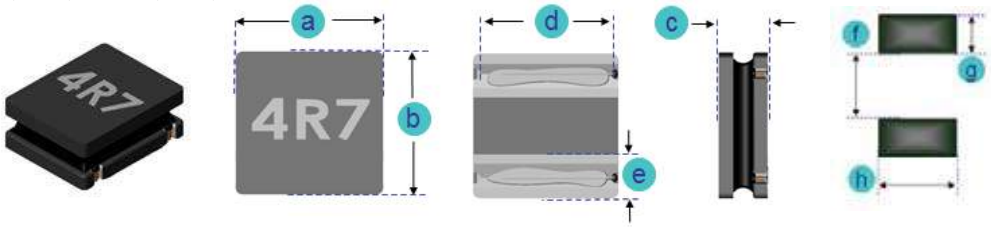
A. Electrical Specifications:

P/N	L (uH)	Tol.	Mark	Test Freq. (MHz)	DCR Max. (Ω)	I sat. Max. (A)	I rms Max. (A)
CSM0315D-1R0N	1.0	± 20%, ± 30%	1R0	1	0.0360	2.10	2.10
CSM0315D-1R5N	1.5	± 20%, ± 30%	1R5	1	0.0480	1.80	1.90
CSM0315D-1R8N	1.8	± 20%, ± 30%	1R8	1	0.0650	1.75	1.70
CSM0315D-2R2N	2.2	± 20%, ± 30%	2R2	1	0.0720	1.48	1.60
CSM0315D-2R7N	2.7	± 20%, ± 30%	2R7	1	0.0975	1.52	1.43
CSM0315D-3R3M	3.3	± 20%, ± 30%	3R3	1	0.0960	1.21	1.45
CSM0315D-3R6M	3.6	± 20%, ± 30%	3R6	1	0.1365	1.28	1.20
CSM0315D-4R7M	4.7	± 20%, ± 30%	4R7	1	0.1360	1.08	1.25
CSM0315D-5R1M	5.6	± 20%, ± 30%	5R6	1	0.1625	1.08	1.09
CSM0315D-6R2M	6.2	± 20%, ± 30%	6R2	1	0.2535	1.00	0.86
CSM0315D-6R8M	6.8	± 20%, ± 30%	6R8	1	0.2110	0.90	0.90
CSM0315D-100M	10	± 20%, ± 30%	100	1	0.2678	0.75	0.87
CSM0315D-120M	12	± 20%, ± 30%	120	1	0.4160	0.70	0.68
CSM0315D-150M	15	± 20%, ± 30%	150	1	0.4220	0.58	0.65
CSM0315D-180M	18	± 20%, ± 30%	180	1	0.5590	0.56	0.59
CSM0315D-220M	22	± 20%, ± 30%	220	1	0.5980	0.47	0.55
CSM0315D-330M	33	± 20%, ± 30%	330	1	0.9590	0.39	0.45
CSM0315D-390M	39	± 20%, ± 30%	390	1	1.2940	0.41	0.39
CSM0315D-430M	43	± 20%, ± 30%	430	1	1.3780	0.37	0.37
CSM0315D-470M	47	± 20%, ± 30%	470	1	1.4060	0.32	0.40
CSM0315D-560M	56	± 20%, ± 30%	560	1	1.6640	0.33	0.34
CSM0315D-680M	68	± 20%, ± 30%	680	1	3.5100	0.28	0.23
CSM0315D-101M	100	± 20%, ± 30%	101	1	2.9200	0.23	0.25

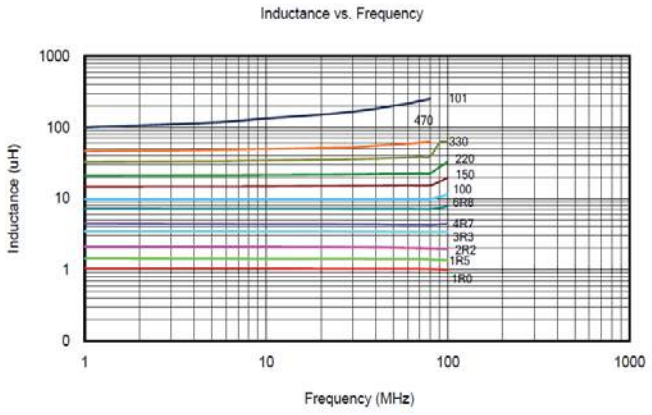
Note: 1. CSM0315D-xxx_, "CSM0315D" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Operating temperature range: -25ºC to +120ºC (Including self-heating).
3. Inductance measured: CH-3302, HP4286A or equivalent.

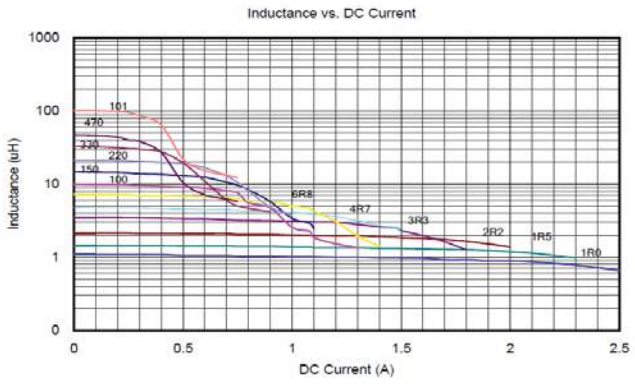
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CSM0315D	3.0 (0.118)	3.0 (0.118)	1.5 (0.059)	2.7 (0.106)	0.9 (0.035)	1.2 (0.047)	1.0 (0.039)	2.7 (0.106)
Tol.	±0.1 (0.004)	±0.1 (0.004)	Max.	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSM0418D-SERIES

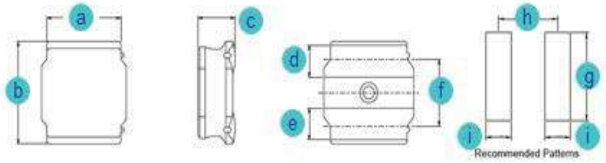
A. Electrical Specifications:

P/N	Marking	Inductance @100KHz (µH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF Min. (MHz)
					I sat	I rms	
CSM0418D-1R0N	A	1.0	± 30%	0.027	4000	3200	90
CSM0418D-2R2M	C	2.2	± 20%	0.042	3000	2200	60
CSM0418D-3R3M	E	3.3	± 20%	0.055	2300	2000	45
CSM0418D-4R7M	H	4.7	± 20%	0.070	2000	1700	35
CSM0418D-6R8M	I	6.8	± 20%	0.098	1600	1450	30
CSM0418D-100M	K	10	± 20%	0.150	1300	1200	25
CSM0418D-150M	M	15	± 20%	0.210	1100	850	18
CSM0418D-220M	N	22	± 20%	0.290	900	720	15
CSM0418D-330M	P	33	± 20%	0.460	700	550	12
CSM0418D-470M	R	47	± 20%	0.65	570	420	10
CSM0418D-680M	S	68	± 20%	1.00	470	320	8.3
CSM0418D-101M	U	100	± 20%	1.50	400	270	6.5
CSM0418D-151M	W	150	± 20%	2.50	310	220	5.5
CSM0418D-221M	Y	220	± 20%	4.00	270	170	4.0

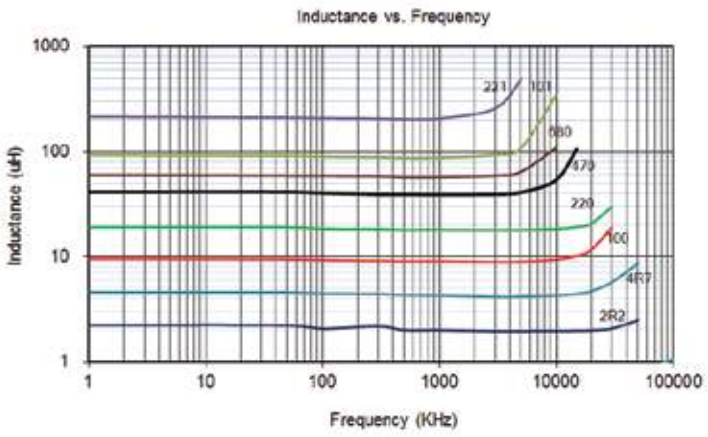
Note: 1. CSM0418D-xxx_, "CSM0418D" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Operating temperature range: -25ºC to +120ºC (Including self-heating).
3. Inductance measured: CH-3302, HP4286A or equivalent.

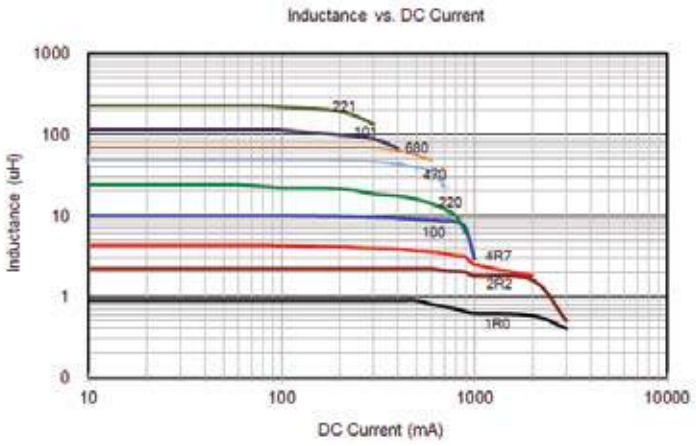
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i
CSM0418D	4.0(0.157)	4.0(0.157)	1.8(0.071)	1.1(0.106)	1.1(0.106)	2.5(0.098)	3.7(0.146)	2.8(0.110)	1.2(0.047)
Tol.	±0.2(0.008)	±0.2(0.008)	Max.	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.



C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSM0840D-SERIES

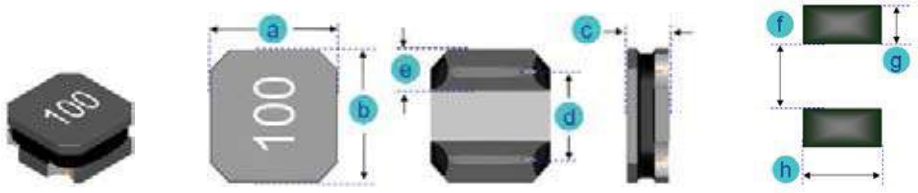
A. Electrical Specifications:

P/N	L (uH)	Tol.	Mark	Test Freq. (KHz)	SRF Min. (MHz)	DCR Max. (mΩ)	I sat. Max. (A)	I rms Max. (A)
CSM0840D-R90N	0.9	± 30%	R90	100	85	7.80	12.0	8.00
CSM0840D-1R4N	1.4	± 30%	1R4	100	63	9.10	10.8	7.80
CSM0840D-2R0N	2.0	± 30%	2R0	100	50	11.7	9.00	7.40
CSM0840D-2R2N	2.2	± 30%	2R2	100	41	15.6	7.50	6.00
CSM0840D-3R3N	3.3	± 30%	3R3	100	27	19.5	7.00	5.10
CSM0840D-3R6N	3.6	± 30%	3R6	100	34	19.5	6.00	4.90
CSM0840D-4R7N	4.7	± 30%	4R7	100	30	23.4	5.50	4.60
CSM0840D-6R8N	6.8	± 30%	6R8	100	24	31.2	5.00	4.40
CSM0840D-100M	10	± 20%	100	100	22	37.7	4.00	3.80
CSM0840D-150M	15	± 20%	150	100	16	61.1	3.00	2.80
CSM0840D-220M	22	± 20%	220	100	13	89.7	2.80	2.60
CSM0840D-330M	33	± 20%	330	100	12	126.1	2.00	1.80
CSM0840D-470M	47	± 20%	470	100	8	176.8	1.90	1.75
CSM0840D-680M	68	± 20%	680	100	7	254.8	1.70	1.45
CSM0840D-101M	100	± 20%	101	100	6	377.0	1.10	1.10

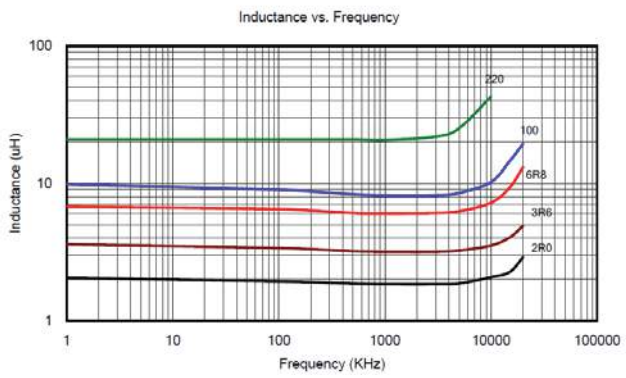
Note: 1. CSM0840D-xxx_, "CSM0840D" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Operating temperature range: -25ºC to +120ºC (Including self-heating).
3. Inductance measured: CH-3302, HP4286A or equivalent.

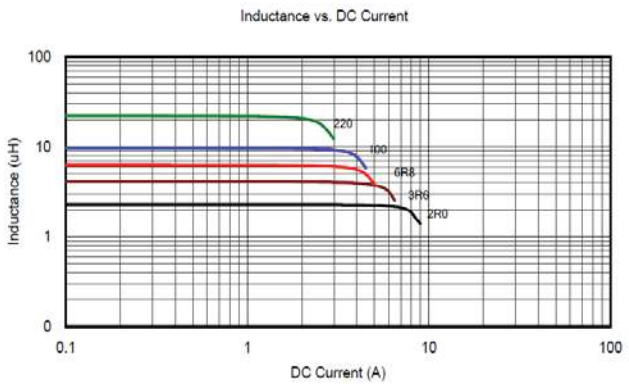
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CSM0840D	8.0 (0.315)	8.0 (0.315)	4.2 (0.165)	5.6 (0.220)	2.3 (0.091)	3.4 (0.134)	2.2 (0.087)	7.5 (0.295)
Tol.	±0.2 (0.008)	±0.2 (0.008)	Max.	±0.2 (0.008)	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:





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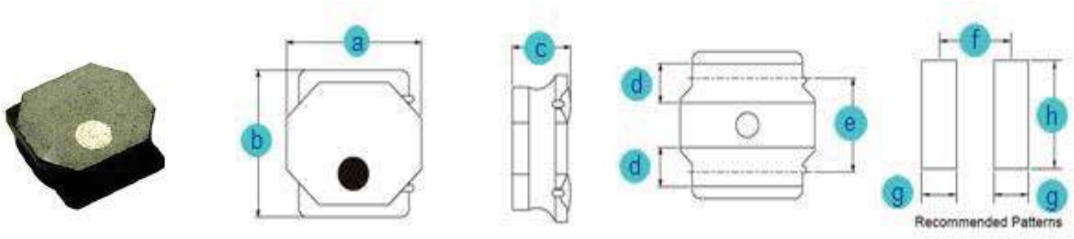
SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSMH****D-SERIES

A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CSMH2410D	2.4(0.094)	2.4(0.094)	1.0(0.039)	0.6(0.024)	1.45(0.057)	1.45(0.057)	0.7(0.028)	2.0(0.079)
Tol.	±0.1(0.004)	±0.1(0.004)	Max.	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.
CSMH2412D	2.4(0.094)	2.4(0.094)	1.2(0.047)	0.6(0.024)	1.45(0.057)	1.45(0.057)	0.7(0.028)	2.0(0.079)
Tol.	±0.1(0.004)	±0.1(0.004)	Max.	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.
CSMH0312D	3.0(0.118)	3.0(0.118)	1.2(0.047)	0.9(0.035)	1.9(0.075)	2.2(0.087)	0.8(0.031)	2.7(0.106)
Tol.	±0.1(0.004)	±0.1(0.004)	Max.	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.

B. Mechanical Drawing:



C. General Informaton:

1. P/N: CSMH****D-xxx_, “CSMH****D” = Series, “xxx” = Inductance, “_” = Tolerance.
2. Tolerance “_”: M: ± 20%, N: ± 30%
3. Operating temperature range: -25ºC to +120ºC (Including self-heating).
4. Storage temperature: -40ºC to +85ºC.
5. Inductance measured using the HP4285A and Chroma1320 & 3302.
6. DCR measured using Chroma 16502.
7. SRF measured using the HP4291B.
8. Saturation Current Idc1: The value of current causes a 30% Inductance reduction from initial value. (at : 20 ºC ambient)
9. Temperature rise current Idc2: The value of current causes a 40ºC temperature rise. (at : 20 ºC ambient)
10. Rated Current: Either Idc1 or Idc2 whichever is smaller.
11. MSL: Level 1.
12. Inductance and Current range:
    a. CSMH 2410D: From 0.68 µH (1570mA) to 22 µH (300mA).
    b. CSMH 2412D: From 1.0 µH (1300mA) to 10 µH (450mA).
    c. CSMH 0312D: From 1.0 µH (1710mA) to 22.0µH (500mA).

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. PDA, LCD, DVD, BRP, HD.

E. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSMH2410D-SERIES

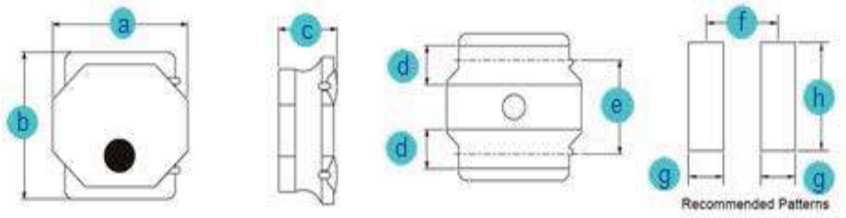
A. Electrical Specifications:

P/N	Inductance @100KHz (µH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF Min. (MHz)
				I sat	I rms	
CSMH2410D-R68N	0.68	± 30%	0.06	2200	1570	120
CSMH2410D-1R0N	1.0	± 30%	0.07	1800	1410	106
CSMH2410D-1R5M	1.5	± 20%	0.11	1550	1160	94
CSMH2410D-2R2M	2.2	± 20%	0.15	1290	970	77
CSMH2410D-3R3M	3.3	± 20%	0.22	1000	770	56
CSMH2410D-4R7M	4.7	± 20%	0.29	880	670	50
CSMH2410D-6R8M	6.8	± 20%	0.41	750	570	43
CSMH2410D-100M	10	± 20%	0.69	550	450	32
CSMH2410D-150M	15	± 20%	1.02	470	370	27
CSMH2410D-220M	22	± 20%	1.47	390	300	22

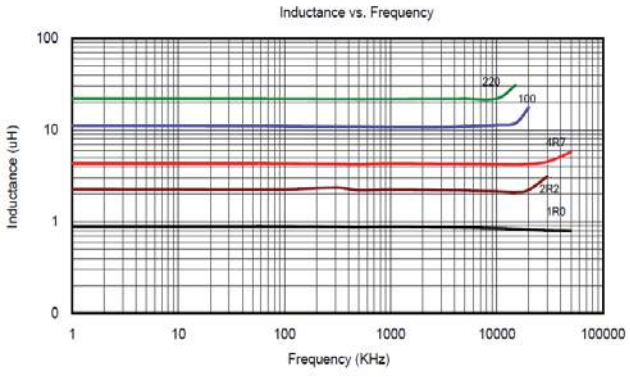
Note: CSMH2410D-xxx_, "CSMH2410D" = P/N, "xxx" = Inductance, "_" = Tolerance.

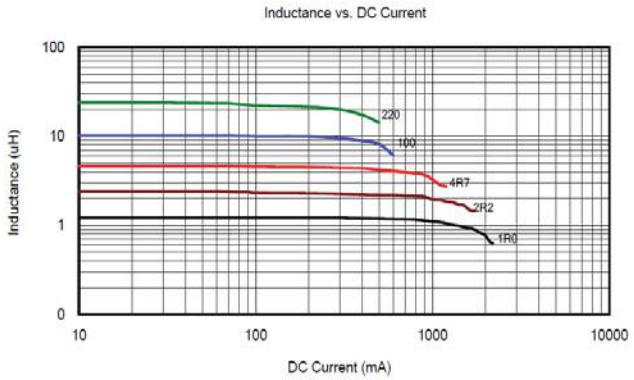
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CSMH2410D	2.4 (0.094)	2.4 (0.094)	1.0 (0.039)	0.6 (0.024)	1.45 (0.057)	1.45 (0.057)	0.7 (0.028)	2.0 (0.079)
Tol.	±0.1 (0.004)	±0.1 (0.004)	Max.	±0.2 (0.008)	±0.2 (0.008)	Typ.	Typ.	Typ.



C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSMH2412D-SERIES

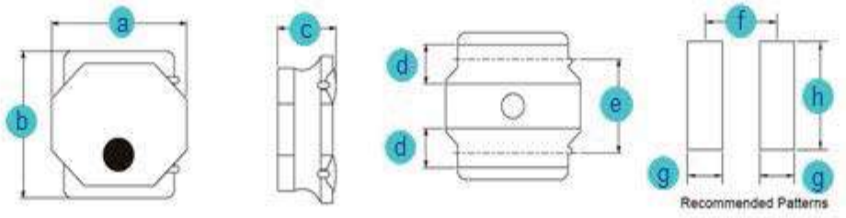
A. Electrical Specifications:

P/N	Inductance @100KHz (µH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF Min. (MHz)
				I sat	I rms	
CSMH2412D-1R0N	1.0	± 30%	0.077	2350	1300	101
CSMH2412D-1R5N	1.5	± 30%	0.100	2100	1150	89
CSMH2412D-2R2M	2.2	± 20%	0.140	1700	1000	72
CSMH2412D-3R3M	3.3	± 20%	0.225	1400	750	56
CSMH2412D-4R7M	4.7	± 20%	0.300	1150	650	45
CSMH2412D-6R8M	6.8	± 20%	0.420	950	550	34
CSMH2412D-100M	10	± 20%	0.600	810	450	29

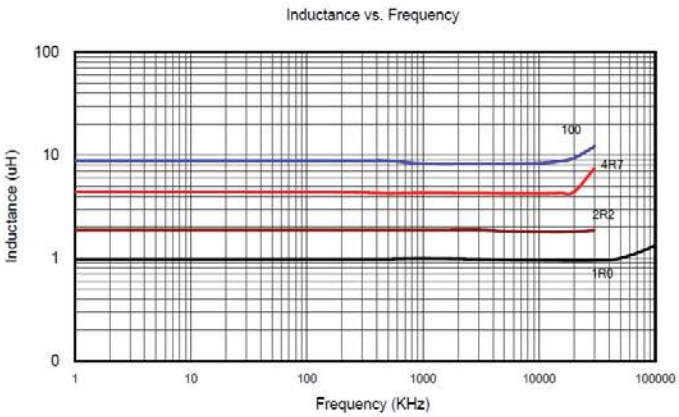
Note: CSMH2412D-xxx_, "CSMH2412D" = P/N, "xxx" = Inductance, "_" = Tolerance.

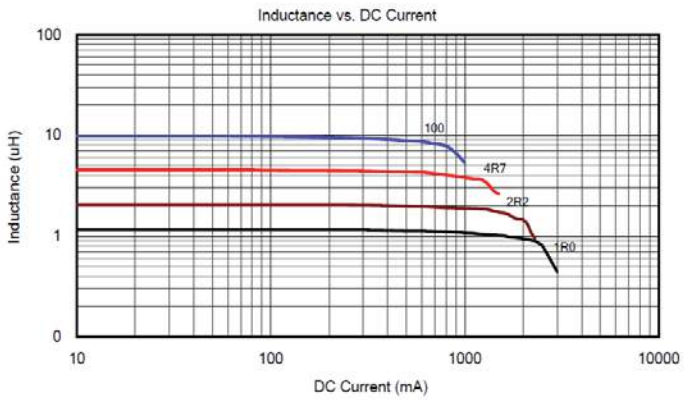
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CSMH2412D	2.4 (0.094)	2.4 (0.094)	1.2 (0.047)	0.6 (0.024)	1.45 (0.057)	1.45 (0.057)	0.7 (0.028)	2.0 (0.079)
Tol.	±0.1 (0.004)	±0.1 (0.004)	Max.	±0.2 (0.008)	±0.2 (0.008)	Typ.	Typ.	Typ.



C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSMH0312D-SERIES

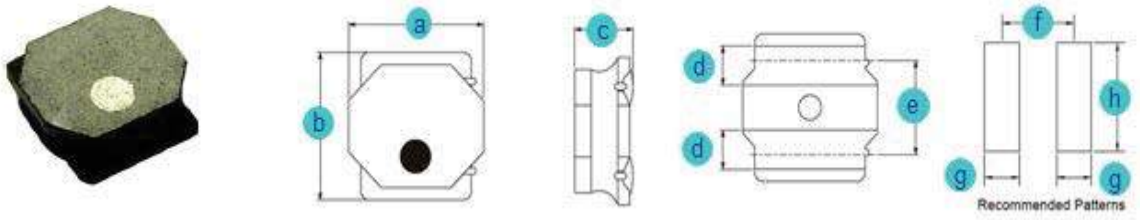
A. Electrical Specifications:

P/N	Inductance @100KHz (µH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF Min. (MHz)
				I sat	I rms	
CSMH0312D-1R0N	1.0	± 30%	0.048	2200	1710	111
CSMH0312D-1R5N	1.5	± 30%	0.055	1700	1600	95
CSMH0312D-2R2M	2.2	± 20%	0.075	1500	1370	78
CSMH0312D-3R3M	3.3	± 20%	0.100	1200	1210	61
CSMH0312D-4R7M	4.7	± 20%	0.130	1000	1060	50
CSMH0312D-6R8M	6.8	± 20%	0.190	850	890	43
CSMH0312D-100M	10	± 20%	0.270	730	720	32
CSMH0312D-150M	15	± 20%	0.450	530	570	26
CSMH0312D-220M	22	± 20%	0.630	500	500	22

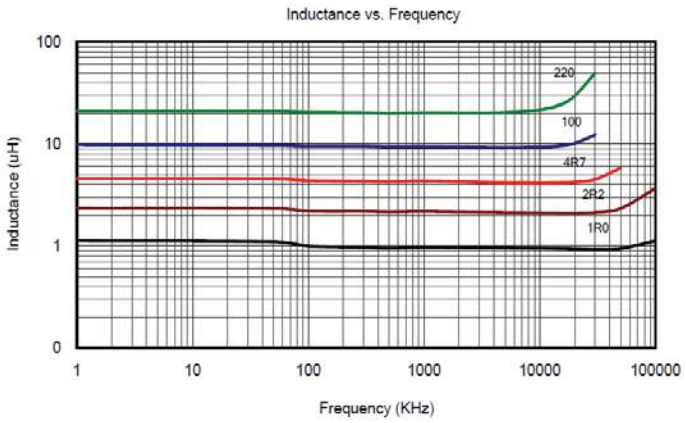
Note: CSMH0312D-xxx_, "CSMH0312D" = P/N, "xxx" = Inductance, "_" = Tolerance.

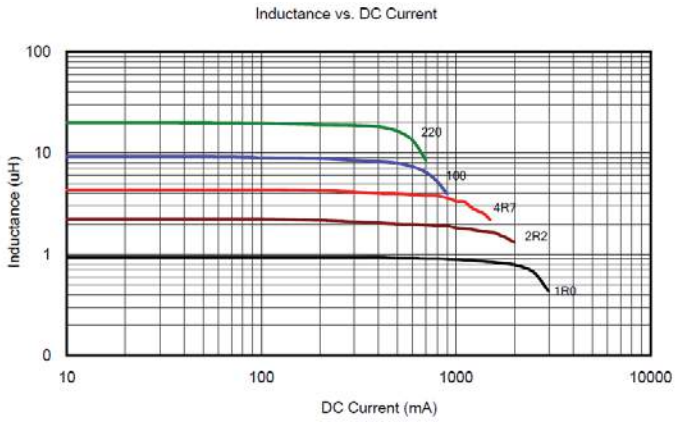
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CSMH0312D	3.0 (0.118)	3.0 (0.118)	1.2 (0.047)	0.9 (0.035)	1.9 (0.075)	2.2 (0.087)	0.8 (0.031)	2.7 (0.106)
Tol.	±0.1 (0.004)	±0.1 (0.004)	Max.	±0.2 (0.008)	±0.2 (0.008)	Typ.	Typ.	Typ.



C. Characteristics Curve:





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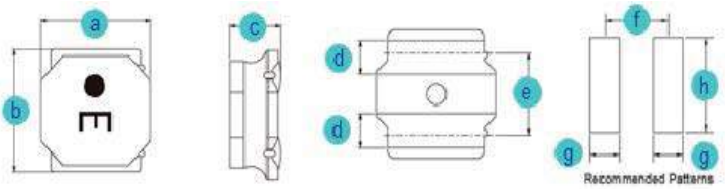
SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSMS****D-SERIES

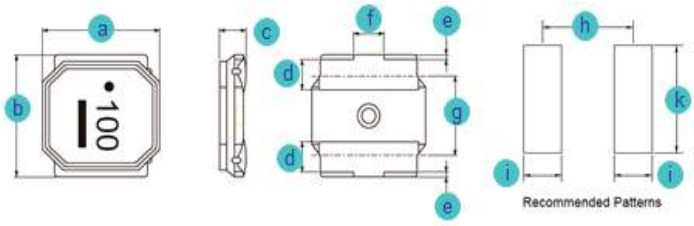
A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k	m	n	Type
CSMS2012D	2.0(0.079)	2.0(0.079)	1.2(0.047)	0.5(0.020)	1.25(0.049)	1.35(0.053)	0.65(0.026)	2.0(0.079)	N/A	N/A	N/A	N/A	4
Tol.	±0.1(0.004)	±0.1(0.004)	Max.	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.	N/A	N/A	N/A	N/A	
CSMS0410D	4.0(0.157)	4.0(0.157)	1.0(0.039)	1.1(0.043)	2.5(0.098)	2.8(0.110)	1.2(0.047)	3.7(0.146)	N/A	N/A	N/A	N/A	1
Tol.	±0.2(0.008)	±0.2(0.008)	Max.	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.	N/A	N/A	N/A	N/A	
CSMS0412D	4.0(0.157)	4.0(0.157)	1.2(0.047)	1.1(0.043)	2.5(0.098)	2.8(0.110)	1.2(0.047)	3.7(0.146)	N/A	N/A	N/A	N/A	1
Tol.	±0.2(0.008)	±0.2(0.008)	Max.	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.	N/A	N/A	N/A	N/A	
CSMS0510D	4.9(0.193)	4.9(0.193)	1.0(0.039)	1.2(0.047)	0.2(0.008)	1.3(0.051)	3.3(0.130)	3.6(0.142)	1.5(0.059)	4.0(0.157)	N/A	N/A	2
Tol.	±0.2(0.008)	±0.2(0.008)	Max.	±0.2(0.008)	Typ.	Typ.	±0.2(0.008)	Typ.	Typ.	Typ.	N/A	N/A	
CSMS0512D	4.9(0.193)	4.9(0.193)	1.2(0.047)	1.2(0.047)	1.3(0.051)	3.3(0.130)	3.8(0.150)	0.2(0.008)	1.5(0.059)	4.2(0.165)	4.0(0.157)	3.6(0.142)	3
Tol.	±0.2(0.008)	±0.2(0.008)	Max.	±0.2(0.008)	Typ.	±0.2(0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
CSMS0520D	4.9(0.193)	4.9(0.193)	2.0(0.079)	1.2(0.047)	1.3(0.051)	3.3(0.130)	3.8(0.150)	0.2(0.008)	1.5(0.059)	4.2(0.165)	4.0(0.157)	3.6(0.142)	3
Tol.	±0.2(0.008)	±0.2(0.008)	Max.	±0.2(0.008)	Typ.	±0.2(0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
CSMS0540D	4.9(0.193)	4.9(0.193)	4.1(0.161) 1R5N~100M 4.0(0.157) 150M~470M	1.2(0.047)	1.3(0.051)	3.3(0.130)	3.8(0.150)	0.2(0.008)	1.5(0.059)	4.2(0.165)	4.0(0.157)	3.6(0.142)	3
Tol.	±0.2(0.008)	±0.2(0.008)	Max.	±0.2(0.008)	Typ.	±0.2(0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
CSMS0610D	6.0(0.236)	6.0(0.236)	1.0(0.039)	1.35(0.053)	2.3(0.091)	4.0(0.157)	4.8(0.189)	0.3(0.012)	1.6(0.063)	5.2(0.205)	5.7(0.224)	4.7(0.185)	3
Tol.	±0.2(0.008)	±0.2(0.008)	Max.	±0.2(0.008)	Typ.	±0.2(0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
CSMS0612D	6.0(0.236)	6.0(0.236)	1.2(0.047)	1.35(0.053)	2.3(0.091)	4.0(0.157)	4.8(0.189)	0.3(0.012)	1.6(0.063)	5.2(0.205)	5.7(0.224)	4.7(0.185)	3
Tol.	±0.2(0.008)	±0.2(0.008)	Max.	±0.2(0.008)	Typ.	±0.2(0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
CSMS0620D	6.0(0.236)	6.0(0.236)	2.0(0.079)	1.35(0.053)	2.3(0.091)	4.0(0.157)	4.8(0.189)	0.3(0.012)	1.6(0.063)	5.2(0.205)	5.7(0.224)	4.7(0.185)	3
Tol.	±0.2(0.008)	±0.2(0.008)	Max.	±0.2(0.008)	Typ.	±0.2(0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
CSMS0628D	6.0(0.236)	6.0(0.236)	2.8(0.110)	1.35(0.053)	2.3(0.091)	4.0(0.157)	4.8(0.189)	0.3(0.012)	1.6(0.063)	5.2(0.205)	5.7(0.224)	4.7(0.185)	3
Tol.	±0.2(0.008)	±0.2(0.008)	Max.	±0.2(0.008)	Typ.	±0.2(0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
CSMS0645D	6.0(0.236)	6.0(0.236)	4.5(0.177)	1.35(0.053)	2.3(0.091)	4.0(0.157)	4.8(0.189)	0.3(0.012)	1.6(0.063)	5.2(0.205)	5.7(0.224)	4.7(0.185)	3
Tol.	±0.2(0.008)	±0.2(0.008)	Max.	±0.2(0.008)	Typ.	±0.2(0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	

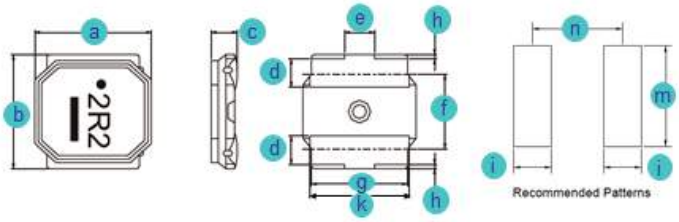
B. Mechanical Drawing:



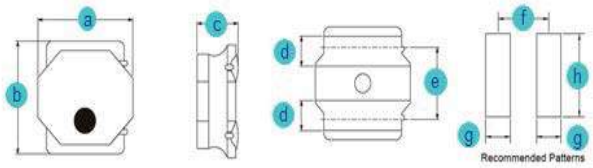
Type-1



Type-2



Type-3



Type-4

C. General Informaton:

1. P/N: CSMS****D-xxx_, "CSMS****D" = Series, "xxx" = Inductance, "_" = Tolerance.
2. Tolerance "_": M: ± 20%, N: ± 30%
3. Magnetically shielded
4. High saturation current
5. Storage temperature: -40ºC to +85ºC.
6. Inductance measured using the HP4285A and Chroma1320 & 3302.
7. DCR measured using Chroma 16502.
8. SRF measured using the HP4291B.
9. Saturation Current Idc1: The value of current causes a 30% Inductance reduction from initial value. (at : 20 ºC ambient)
10. Temperature rise current Idc2: The value of current causes a 40ºC temperature rise. (at : 20 ºC ambient)
11. Rated Current: Either Idc1 or Idc2 whichever is smaller.
12. MSL: Level 1.
13. Inductance and Current range:
    a. CSMS 2012D: From 1.0 µH (1700mA) to 4.7 µH (910mA).
    b. CSMS 0410D: From 1.0 µH (1900mA) to 22.0 µH (500mA).
    c. CSMS 0412D: From 1.0 µH (2200mA) to 22.0 µH (620mA).
    d. CSMS 0510D: From 1.0 µH (1750mA) to 22.0 µH (450mA).
    e. CSMS 0512D: From 1.0 µH (2300mA) to 15.0 µH (640mA).
    f. CSMS 0520D: From 1.0 µH (3600mA) to 22.0 µH (1000mA).
    g. CSMS 0540D: From 1.5 µH (4500mA) to 47.0 µH (900mA).
    h. CSMS 0610D: From 1.5 µH (1900mA) to 22.0 µH (650mA).
    i. CSMS 0612D: From 2.5 µH (1800mA) to 100.0 µH (320mA).
    j. CSMS 0620D: From 0.8 µH (4100mA) to 22.0 µH (950mA).
    k. CSMS 0628D: From 0.9 µH (4600mA) to 100.0 µH (660mA).
    l. CSMS 0645D: From 1.0 µH (4500mA) to 100.0 µH (750mA).

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. PDA, LCD, DVD, BRP, HD.

E. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSMS2012D-SERIES

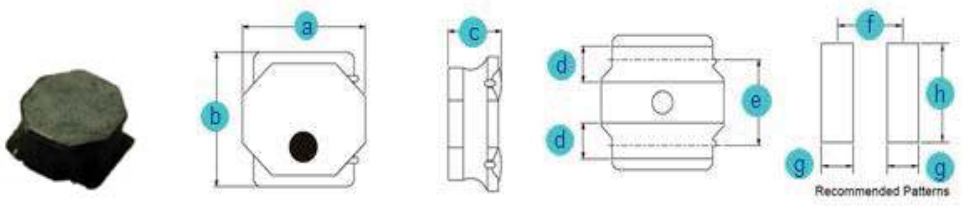
A. Electrical Specifications:

P/N	Inductance @100KHz (µH)	Inductance Tolerance	DCR ±20%(Ω)	Rated Current (mA)			
				I sat Typ.	I rms Typ.	I sat Max.	I rms Max.
CSMS2012D-1R0N	1.0	± 30%	0.070	2050	1850	1900	1700
CSMS2012D-1R5N	1.5	± 30%	0.090	1800	1650	1650	1500
CSMS2012D-2R2M	2.2	± 20%	0.107	1500	1500	1350	1370
CSMS2012D-3R3M	3.3	± 20%	0.190	1150	1100	1000	1020
CSMS2012D-4R7M	4.7	± 20%	0.241	1050	1000	900	910

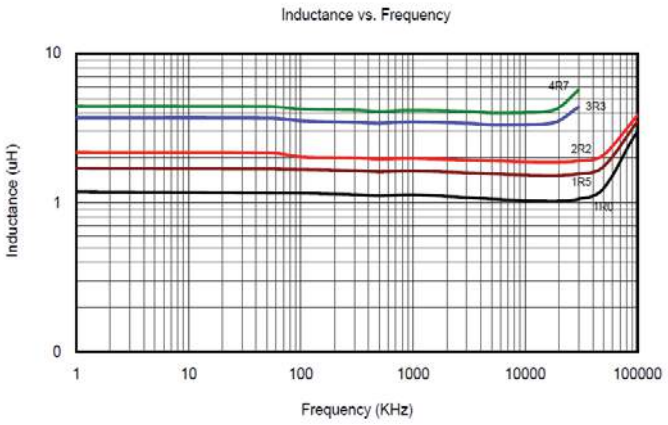
Note: 1. CSMS02012D-xxx_, "CSMS2012D" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Operating temperature range: -25ºC to +125ºC (Including self-heating).

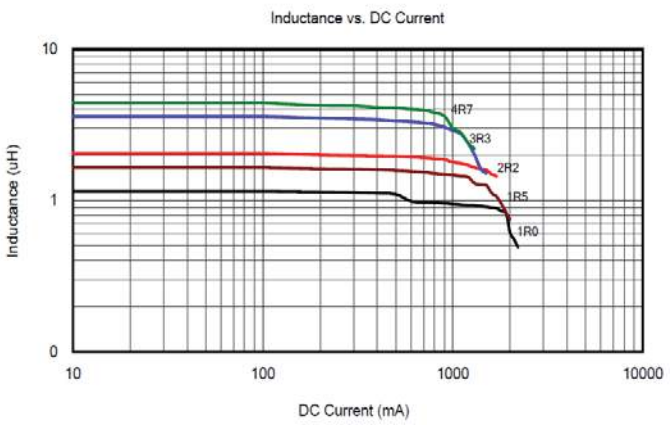
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CSMS2012D	2.0 (0.079)	2.0 (0.079)	1.2 (0.047)	0.5 (0.020)	1.25 (0.049)	1.35 (0.053)	0.65 (0.026)	2.0 (0.079)
Tol.	±0.1 (0.004)	±0.1 (0.004)	Max.	±0.2 (0.008)	±0.2 (0.008)	Typ.	Typ.	Typ.



C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSMS0410D-SERIES

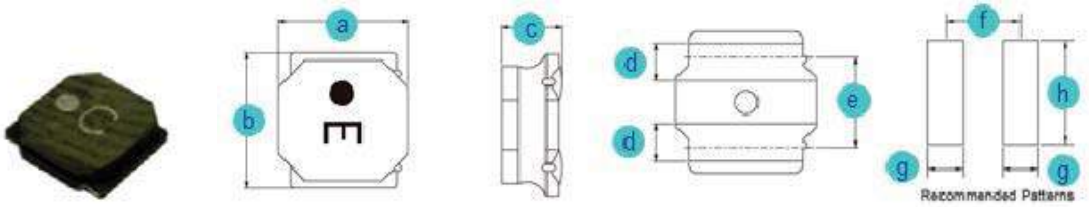
A. Electrical Specifications:

P/N	Marking	Inductance @100KHz (μH)	Inductance Tolerance	DCR ±20%(Ω)	Rated Current (mA)		SRF Min. (MHz)
					I sat	I rms	
CSMS0410D-1R0N	A	1.0	± 30%	0.056	2000	1900	116
CSMS0410D-2R2M	C	2.2	± 20%	0.085	1200	1500	73
CSMS0410D-3R3M	E	3.3	± 20%	0.100	1100	1400	58
CSMS0410D-4R7M	H	4.7	± 20%	0.140	950	1200	47
CSMS0410D-6R8M	I	6.8	± 20%	0.200	800	1000	38
CSMS0410D-100M	K	10	± 20%	0.300	620	750	31
CSMS0410D-150M	M	15	± 20%	0.430	540	600	24
CSMS0410D-220M	N	22	± 20%	0.570	450	500	19

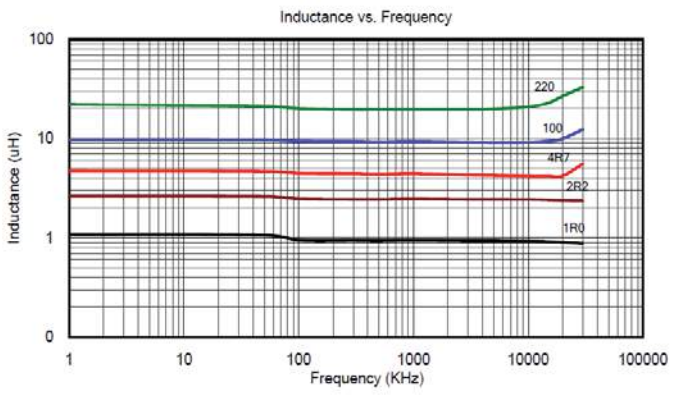
Note: 1. CSMS0410D-xxx_, "CSMS0410D" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Operating temperature range: -25ºC to +125ºC (Including self-heating).

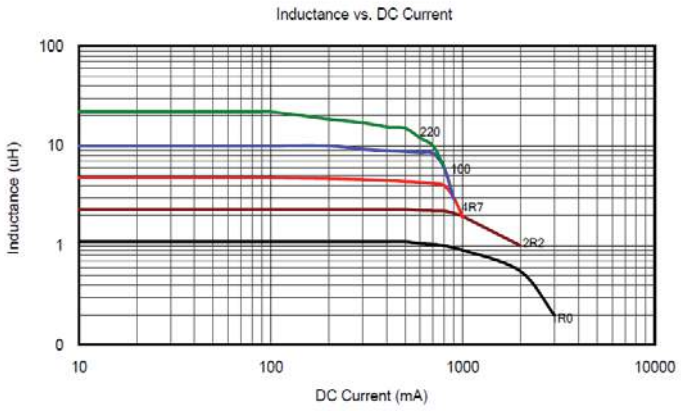
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CSMS0410D	4.0 (0.157)	4.0 (0.157)	1.0 (0.039)	1.1 (0.043)	2.5 (0.098)	2.8 (0.110)	1.2 (0.047)	3.7 (0.146)
Tol.	±0.2 (0.008)	±0.2 (0.008)	Max.	±0.2 (0.008)	±0.2 (0.008)	Typ.	Typ.	Typ.



C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSMS0412D-SERIES

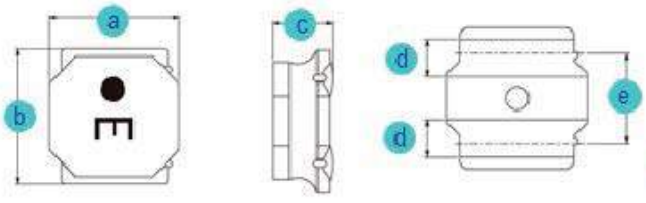
A. Electrical Specifications:

P/N	Marking	Inductance @100KHz (µH)	Inductance Tolerance	DCR ±20%(Ω)	Rated Current (mA)		SRF Min. (MHz)
					I sat	I rms	
CSMS0412D-1R0N	A	1.0	± 30%	0.042	2800	2200	100
CSMS0412D-2R2M	C	2.2	± 20%	0.060	1650	1900	70
CSMS0412D-3R3M	E	3.3	± 20%	0.070	1400	1700	60
CSMS0412D-4R7M	H	4.7	± 20%	0.095	1200	1500	45
CSMS0412D-6R8M	I	6.8	± 20%	0.125	900	1300	35
CSMS0412D-100M	K	10	± 20%	0.170	800	1100	30
CSMS0412D-150M	M	15	± 20%	0.260	650	750	24
CSMS0412D-220M	N	22	± 20%	0.400	500	620	18

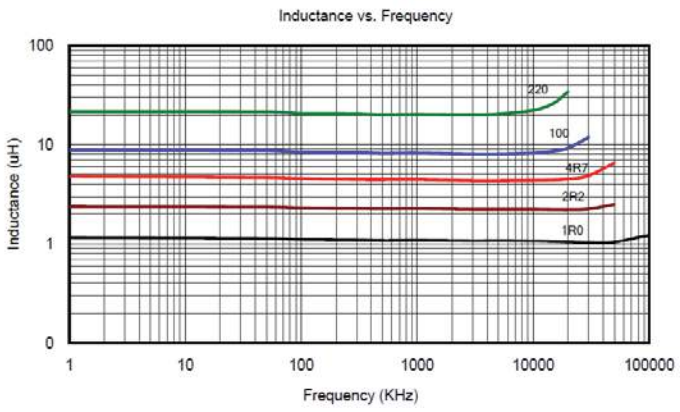
Note: 1. CSMS0412D-xxx_, "CSMS0412D" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Operating temperature range: -25ºC to +125ºC (Including self-heating).

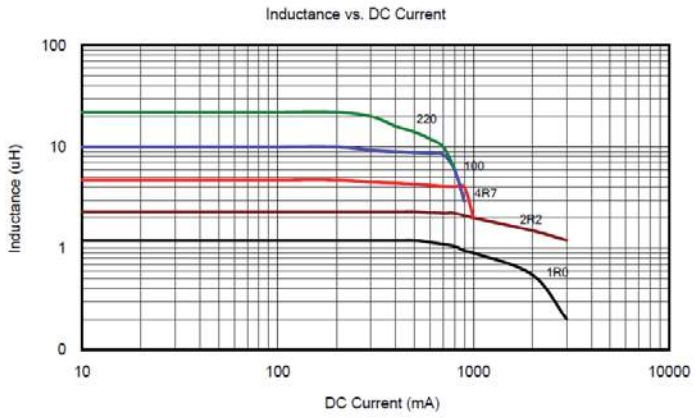
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CSMS0412D	4.0 (0.157)	4.0 (0.157)	1.2 (0.047)	1.1 (0.043)	2.5 (0.098)	2.8 (0.110)	1.2 (0.047)	3.7 (0.146)
Tol.	±0.2 (0.008)	±0.2 (0.008)	Max.	±0.2 (0.008)	±0.2 (0.008)	Typ.	Typ.	Typ.



C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSMS0510D-SERIES

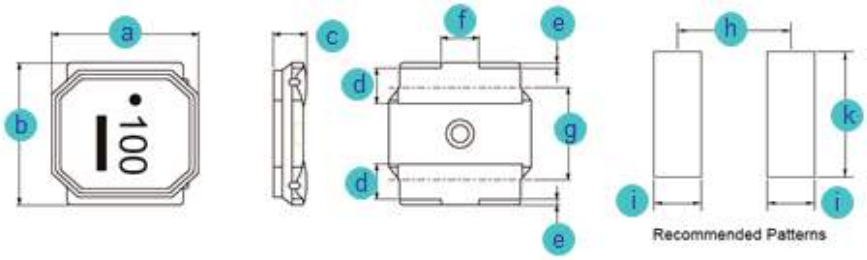
A. Electrical Specifications:

P/N	Marking	Inductance @100KHz (µH)	Inductance Tolerance	DCR ±20%(Ω)	Rated Current (mA)		SRF Min. (MHz)
					I sat	I rms	
CSMS0510D-1R0N	1R0	1.0	± 30%	0.070	2350	1750	95
CSMS0510D-2R2N	2R2	2.2	± 30%	0.105	1500	1400	65
CSMS0510D-3R3M	3R3	3.3	± 20%	0.125	1400	1250	42
CSMS0510D-4R7M	4R7	4.7	± 20%	0.145	1200	1150	37
CSMS0510D-6R8M	6R8	6.8	± 20%	0.185	1000	1000	33
CSMS0510D-100M	100	10	± 20%	0.250	850	900	23
CSMS0510D-150M	150	15	± 20%	0.400	680	650	19
CSMS0510D-220M	220	22	± 20%	0.600	550	450	15

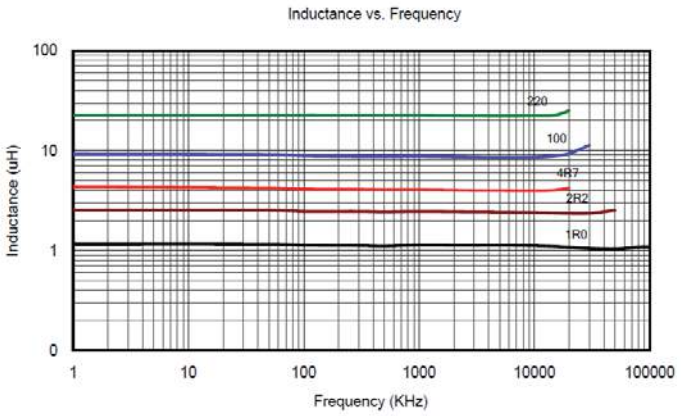
Note: 1. CSMS0510D-xxx_, "CSMS0510D" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Operating temperature range: -25ºC to +125ºC (Including self-heating).

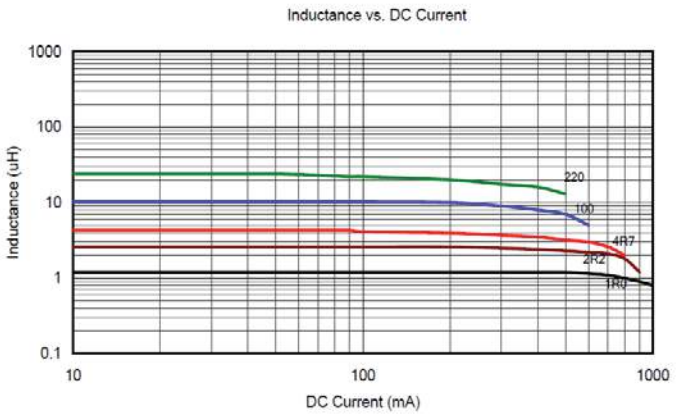
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSMS0510D	4.9 (0.193)	4.9 (0.193)	1.0 (0.039)	1.2 (0.047)	0.2 (0.008)	1.3 (0.051)	3.3 (0.130)	3.6 (0.142)	1.5 (0.059)	4.0 (0.157)
Tol.	±0.2 (0.008)	±0.2 (0.008)	Max.	±0.2 (0.008)	Typ.	Typ.	±0.2 (0.008)	Typ.	Typ.	Typ.



C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSMS0512D-SERIES

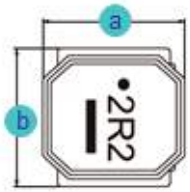
A. Electrical Specifications:

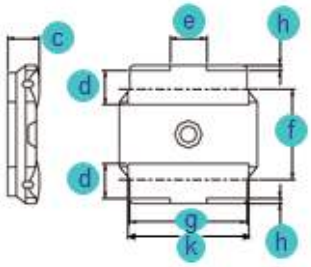
P/N	Marking	Inductance @100KHz (µH)	Inductance Tolerance	DCR ±20%(Ω)	Rated Current (mA)		SRF Min. (MHz)
					I sat	I rms	
CSMS0512D-1R0N	1R0	1.0	± 30%	0.053	4500	2300	100
CSMS0512D-1R5N	1R5	1.5	± 30%	0.070	3800	2200	86
CSMS0512D-2R2M	2R2	2.2	± 20%	0.085	3100	2000	70
CSMS0512D-3R3M	3R3	3.3	± 20%	0.160	2400	1450	48
CSMS0512D-4R7M	4R7	4.7	± 20%	0.180	2200	1400	40
CSMS0512D-6R8M	6R8	6.8	± 20%	0.260	1700	1100	36
CSMS0512D-100M	100	10	± 20%	0.420	1400	850	26
CSMS0512D-150M	150	15	± 20%	0.670	1200	640	22

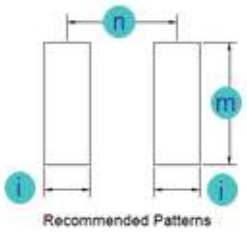
Note: 1. CSMS0512D-xxx_, "CSMS0512D" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Operating temperature range: -25ºC to +125ºC (Including self-heating).

B. Dimensions: mm (Inch)

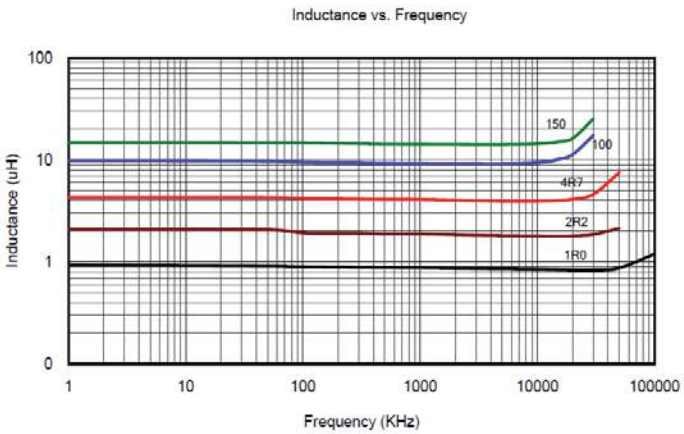
Series	a	b	c	d	e	f	g	h	i	k	m	n
CSMS0512D	4.9 (0.193)	4.9 (0.193)	1.2 (0.047)	1.2 (0.047)	1.3 (0.051)	3.3 (0.130)	3.8 (0.150)	0.2 (0.008)	1.5 (0.059)	4.2 (0.165)	4.0 (0.157)	3.6 (0.142)
Tol.	±0.2 (0.008)	±0.2 (0.008)	Max.	±0.2 (0.008)	Typ.	±0.2 (0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.

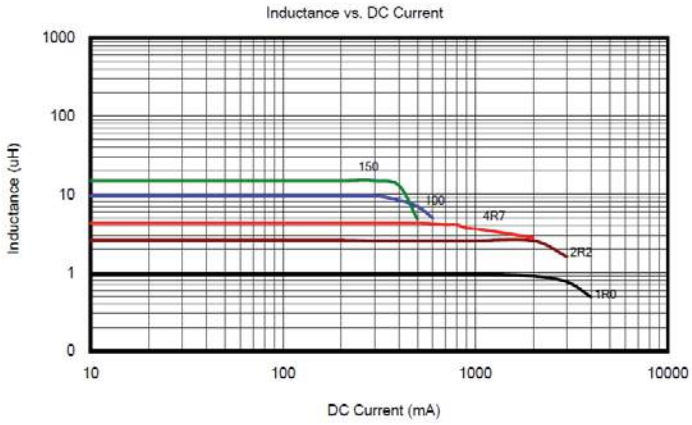






C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSMS0520D-SERIES

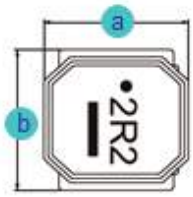
A. Electrical Specifications:

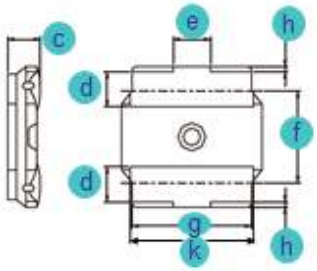
P/N	Marking	Inductance @100KHz (µH)	Inductance Tolerance	DCR ±20%(Ω)	Rated Current (mA)		SRF Min. (MHz)
					I sat	I rms	
CSMS0520D-1R0N	1R0	1.0	± 30%	0.021	4000	3600	81
CSMS0520D-1R5N	1R5	1.5	± 30%	0.026	3350	3200	68
CSMS0520D-2R2N	2R2	2.2	± 30%	0.035	2900	2900	57
CSMS0520D-3R3N	3R3	3.3	± 30%	0.048	2400	2400	46
CSMS0520D-4R7M	4R7	4.7	± 20%	0.060	2000	2000	37
CSMS0520D-6R8M	6R8	6.8	± 20%	0.090	1600	1650	30
CSMS0520D-100M	100	10	± 20%	0.120	1300	1450	24
CSMS0520D-150M	150	15	± 20%	0.165	1100	1200	20
CSMS0520D-220M	220	22	± 20%	0.260	900	1000	17

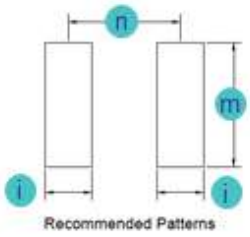
Note: 1. CSMS0520D-xxx_, "CSMS0520D" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Operating temperature range: -25ºC to +125ºC (Including self-heating).

B. Dimensions: mm (Inch)

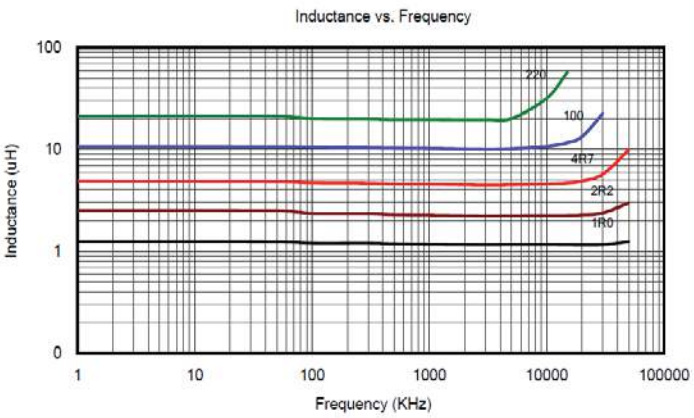
Series	a	b	c	d	e	f	g	h	i	k	m	n
CSMS0520D	4.9 (0.193)	4.9 (0.193)	2.0 (0.079)	1.2 (0.047)	1.3 (0.051)	3.3 (0.130)	3.8 (0.150)	0.2 (0.008)	1.5 (0.059)	4.2 (0.165)	4.0 (0.157)	3.6 (0.142)
Tol.	±0.2 (0.008)	±0.2 (0.008)	Max.	±0.2 (0.008)	Typ.	±0.2 (0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.

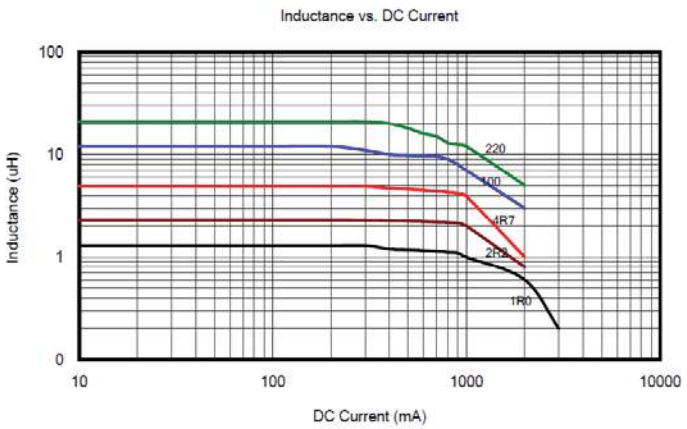






C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSMS0540D-SERIES

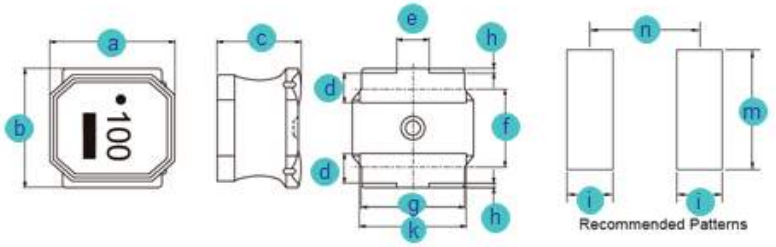
A. Electrical Specifications:

P/N	Marking	Inductance @100KHz (µH)	Inductance Tolerance	DCR ±30%(Ω)	Rated Current (mA)		SRF Min. (MHz)
					I sat	I rms	
CSMS0540D-1R5N	1R5	1.5	± 30%	0.017	6400	4500	60
CSMS0540D-2R2N	2R2	2.2	± 30%	0.022	5000	3700	42
CSMS0540D-3R3N	3R3	3.3	± 30%	0.027	4000	3300	32
CSMS0540D-4R7N	4R7	4.7	± 30%	0.029	3300	3100	28
CSMS0540D-6R8M	6R8	6.8	± 20%	0.049	2800	2400	21
CSMS0540D-100M	100	10	± 20%	0.056	2300	2100	18
CSMS0540D-150M	150	15	± 20%	0.080	2000	1800	13
CSMS0540D-220M	220	22	± 20%	0.126	1500	1400	9
CSMS0540D-330M	330	33	± 20%	0.180	1300	1200	7
CSMS0540D-470M	470	47	± 20%	0.310	1100	900	6

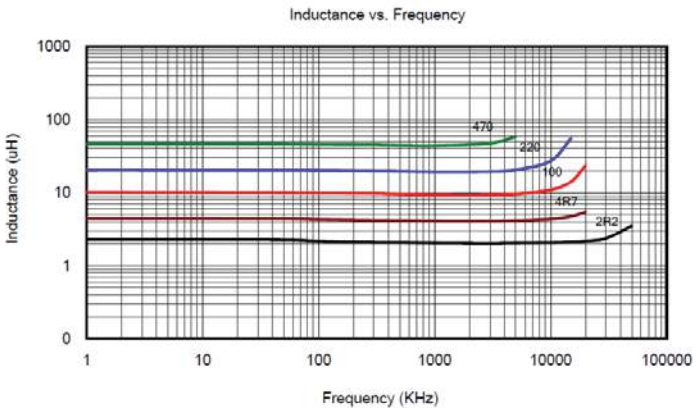
Note: 1. CSMS0540D-xxx_, "CSMS0540D" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Operating temperature range: -25ºC to +125ºC (Including self-heating).

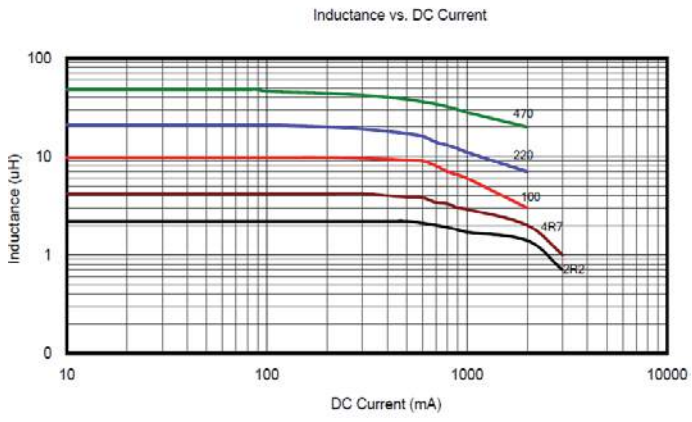
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k	m	n
CSMS0540D	4.9 (0.193)	4.9 (0.193)	4.1(0.161)1R5N~100M 4.0(0.157)150M~470M	1.2 (0.047)	1.3 (0.051)	3.3 (0.130)	3.8 (0.150)	0.2 (0.008)	1.5 (0.059)	4.2 (0.165)	4.0 (0.157)	3.6 (0.142)
Tol.	±0.2 (0.008)	±0.2 (0.008)	Max.	±0.2 (0.008)	Typ.	±0.2 (0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSMS0610D-SERIES

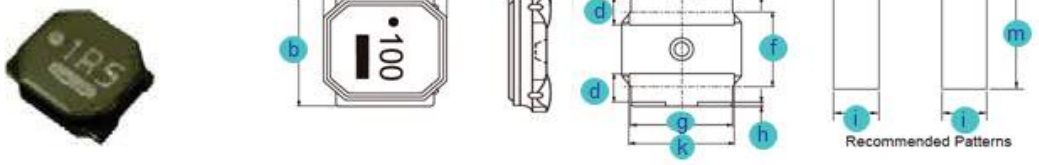
A. Electrical Specifications:

P/N	Marking	Inductance @100KHz (µH)	Inductance Tolerance	DCR ±30%(Ω)	Rated Current (mA) I sat	Rated Current (mA) I rms	SRF Min. (MHz)
CSMS0610D-1R5M	1R5	1.5	± 20%	0.090	2400	1900	77
CSMS0610D-2R2M	2R2	2.2	± 20%	0.110	1900	1700	56
CSMS0610D-3R3M	3R3	3.3	± 20%	0.135	1600	1500	42
CSMS0610D-4R7M	4R7	4.7	± 20%	0.165	1300	1400	36
CSMS0610D-6R8M	6R8	6.8	± 20%	0.220	1200	1200	30
CSMS0610D-100M	100	10	± 20%	0.270	1000	1100	25
CSMS0610D-220M	220	22	± 20%	0.580	650	700	12

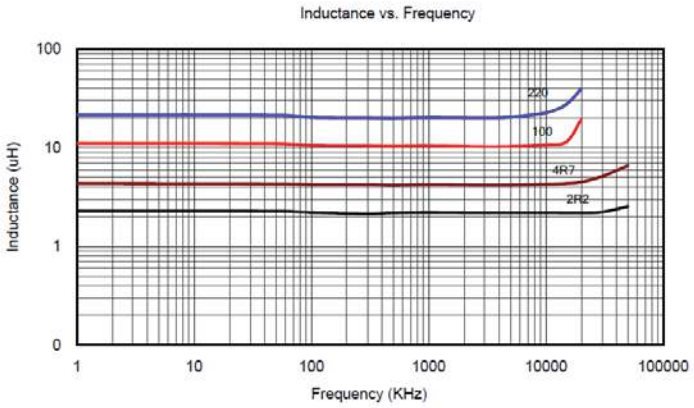
Note: 1. CSMS0610D-xxx_, "CSMS0610D" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Operating temperature range: -25ºC to +125ºC (Including self-heating).

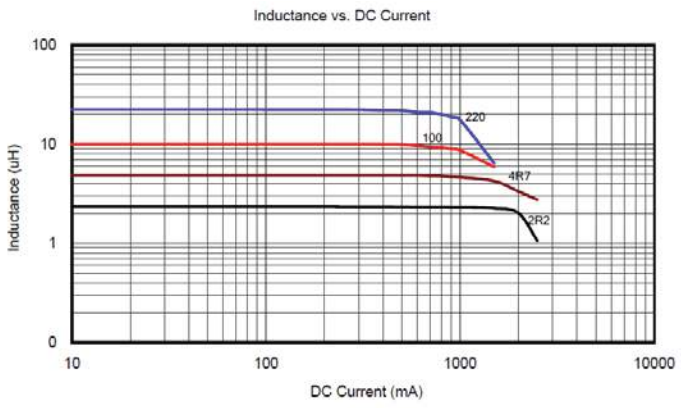
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k	m	n
CSMS0610D	6.0 (0.236)	6.0 (0.236)	1.0 (0.039)	1.35 (0.053)	2.3 (0.091)	4.0 (0.157)	4.8 (0.189)	0.3 (0.012)	1.6 (0.063)	5.2 (0.205)	5.7 (0.224)	4.7 (0.185)
Tol.	±0.2 (0.008)	±0.2 (0.008)	Max.	±0.2 (0.008)	Typ.	±0.2 (0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSMS0612D-SERIES

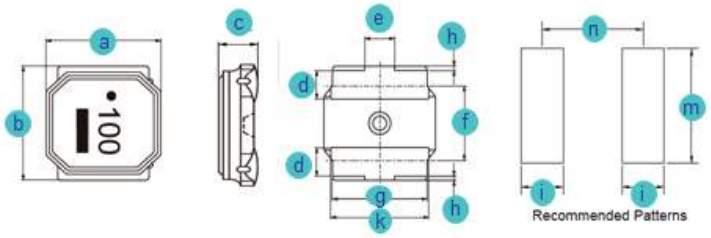
A. Electrical Specifications:

P/N	Marking	Inductance @100KHz (µH)	Inductance Tolerance	DCR ±20%(Ω)	Rated Current (mA)		SRF Min. (MHz)
					I sat	I rms	
CSMS0612D-2R5N	2R5	2.5	± 30%	0.090	2100	1800	45
CSMS0612D-3R3N	3R3	3.3	± 30%	0.105	1800	1700	42
CSMS0612D-4R7M	4R7	4.7	± 20%	0.125	1600	1550	36
CSMS0612D-5R3M	5R3	5.3	± 20%	0.125	1500	1550	34
CSMS0612D-6R8M	6R8	6.8	± 20%	0.165	1300	1350	30
CSMS0612D-100M	100	10	± 20%	0.200	1000	1200	22
CSMS0612D-150M	150	15	± 20%	0.295	800	800	18
CSMS0612D-220M	220	22	± 20%	0.465	760	650	12
CSMS0612D-330M	330	33	± 20%	0.580	590	550	8
CSMS0612D-470M	470	47	± 20%	0.965	520	460	6
CSMS0612D-680M	680	68	± 20%	1.160	440	410	3
CSMS0612D-101M	101	100	± 20%	1.670	350	320	1

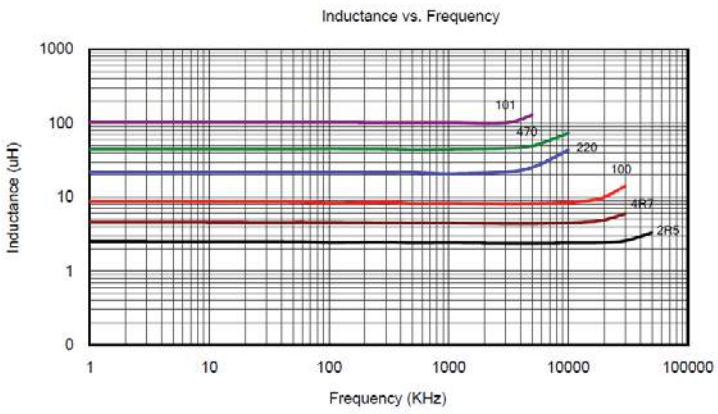
Note: 1. CSMS0612D-xxx_, "CSMS0612D" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Operating temperature range: -25ºC to +125ºC (Including self-heating).

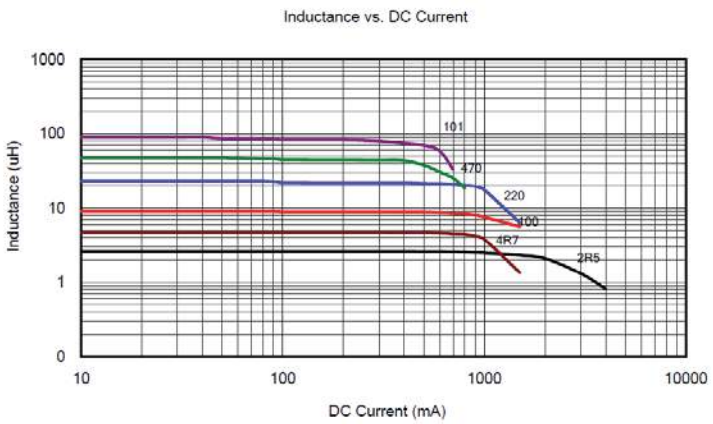
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k	m	n
CSMS0612D	6.0 (0.236)	6.0 (0.236)	1.2 (0.047)	1.35 (0.053)	2.3 (0.091)	4.0 (0.157)	4.8 (0.189)	0.3 (0.012)	1.6 (0.063)	5.2 (0.205)	5.7 (0.224)	4.7 (0.185)
Tol.	±0.2 (0.008)	±0.2 (0.008)	Max.	±0.2 (0.008)	Typ.	±0.2 (0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSMS0620D-SERIES

A. Electrical Specifications:

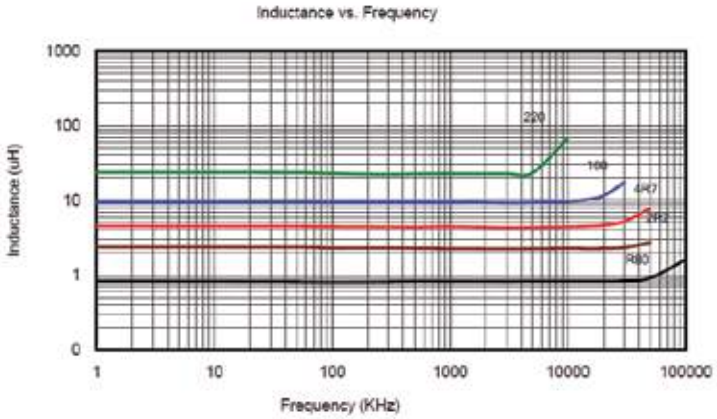
P/N	Marking	Inductance @100KHz (µH)	Inductance Tolerance	DCR ±20%(Ω)	Rated Current (mA)		SRF Min. (MHz)
					I sat	I rms	
CSMS0620D-R80N	0R8	0.8	± 30%	0.020	6400	4100	110
CSMS0620D-1R5N	1R5	1.5	± 30%	0.026	4300	3600	93
CSMS0620D-2R2N	2R2	2.2	± 30%	0.034	3200	2900	73
CSMS0620D-3R3N	3R3	3.3	± 30%	0.040	2800	2750	55
CSMS0620D-4R7N	4R7	4.7	± 30%	0.058	2400	2150	43
CSMS0620D-6R8N	6R8	6.8	± 30%	0.085	2000	1800	30
CSMS0620D-100M	100	10	± 20%	0.125	1900	1500	18
CSMS0620D-220M	220	22	± 20%	0.290	1250	950	11

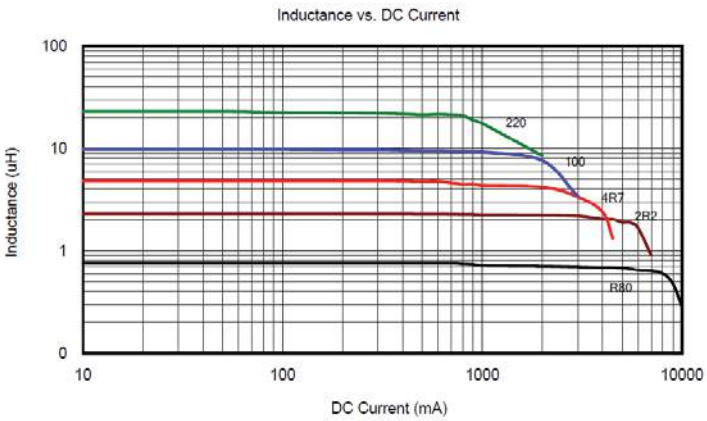
Note: 1. CSMS0620D-xxx_, "CSMS0620D" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Operating temperature range: -25ºC to +125ºC (Including self-heating).

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k	m	n
CSMS0620D	6.0 (0.236)	6.0 (0.236)	2.0 (0.079)	1.35 (0.053)	2.3 (0.091)	4.0 (0.157)	4.8 (0.189)	0.3 (0.012)	1.6 (0.063)	5.2 (0.205)	5.7 (0.224)	4.7 (0.185)
Tol.	±0.2 (0.008)	±0.2 (0.008)	Max.	±0.2 (0.008)	Typ.	±0.2 (0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.

C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSMS0628D-SERIES

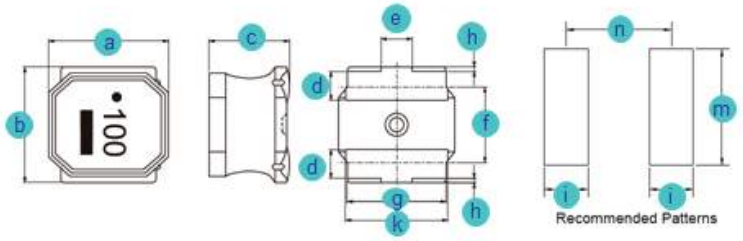
A. Electrical Specifications:

P/N	Marking	Inductance @100KHz (µH)	Inductance Tolerance	DCR ±30%(Ω)	Rated Current (mA)		SRF Min. (MHz)
					I sat	I rms	
CSMS0628D-R90N	0R9	0.9	± 30%	0.013	6700	4600	90
CSMS0628D-1R5N	1R5	1.5	± 30%	0.016	5100	4200	78
CSMS0628D-2R2N	2R2	2.2	± 30%	0.020	4200	3700	68
CSMS0628D-3R0N	3R0	3.0	± 30%	0.023	3600	3400	55
CSMS0628D-4R7M	4R7	4.7	± 20%	0.031	2700	3000	39
CSMS0628D-6R0M	6R0	6.0	± 20%	0.040	2500	2500	30
CSMS0628D-100M	100	10	± 20%	0.065	1900	1900	20
CSMS0628D-150M	150	15	± 20%	0.095	1600	1800	17
CSMS0628D-220M	220	22	± 20%	0.135	1300	1400	12
CSMS0628D-330M	330	33	± 20%	0.220	1100	1100	10
CSMS0628D-470M	470	47	± 20%	0.300	1000	920	8
CSMS0628D-680M	680	68	± 20%	0.420	800	770	5
CSMS0628D-101M	101	100	± 20%	0.600	650	660	3

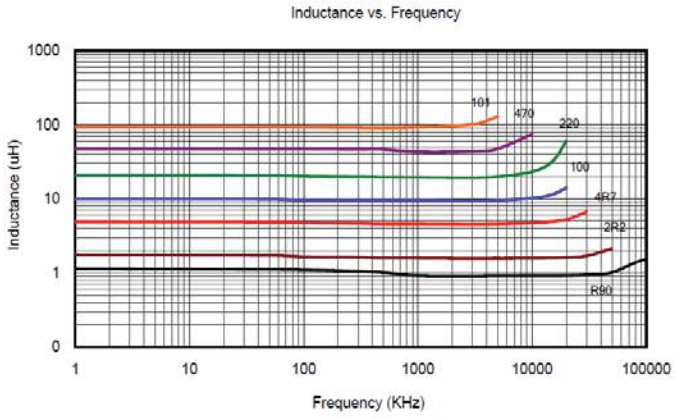
Note: 1. CSMS0628D-xxx_, "CSMS0628D" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Operating temperature range: -25ºC to +125ºC (Including self-heating).

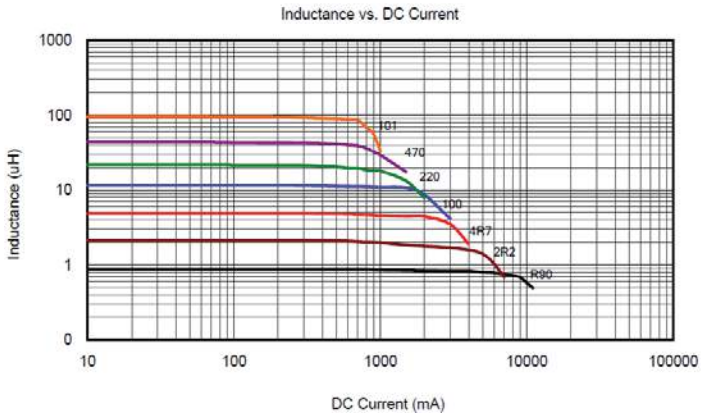
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k	m	n
CSMS0628D	6.0 (0.236)	6.0 (0.236)	2.8 (0.110)	1.35 (0.053)	2.3 (0.091)	4.0 (0.157)	4.8 (0.189)	0.3 (0.012)	1.6 (0.063)	5.2 (0.205)	5.7 (0.224)	4.7 (0.185)
Tol.	±0.2 (0.008)	±0.2 (0.008)	Max.	±0.2 (0.008)	Typ.	±0.2 (0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSMS0645D-SERIES

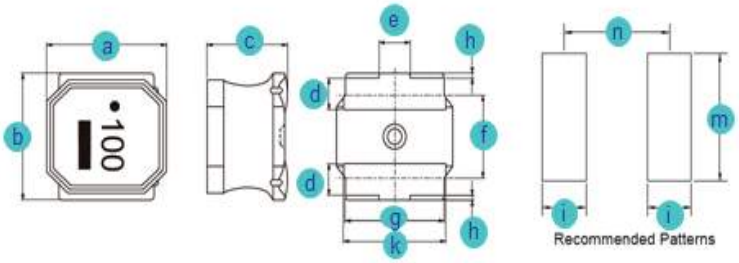
A. Electrical Specifications:

P/N	Marking	Inductance @100KHz (µH)	Inductance Tolerance	DCR ±20%(Ω)	Rated Current (mA)		SRF Min. (MHz)
					I sat	I rms	
CSMS0645D-1R0N	1R0	1.0	± 30%	0.014	9800	4500	110
CSMS0645D-1R3N	1R3	1.3	± 30%	0.016	8200	4200	95
CSMS0645D-1R8N	1R8	1.8	± 30%	0.019	7200	3900	80
CSMS0645D-2R3N	2R3	2.3	± 30%	0.022	6400	3600	60
CSMS0645D-3R0N	3R0	3.0	± 30%	0.024	5600	3300	45
CSMS0645D-4R5M	4R5	4.5	± 20%	0.030	4400	3100	25
CSMS0645D-6R3M	6R3	6.3	± 20%	0.036	3600	3000	15
CSMS0645D-100M	100	10	± 20%	0.046	3100	2400	12
CSMS0645D-150M	150	15	± 20%	0.070	2500	1900	10
CSMS0645D-220M	220	22	± 20%	0.107	2000	1600	7
CSMS0645D-330M	330	33	± 20%	0.141	1650	1400	6
CSMS0645D-470M	470	47	± 20%	0.211	1400	1150	5
CSMS0645D-680M	680	68	± 20%	0.304	1100	950	4
CSMS0645D-101M	101	100	± 20%	0.466	900	750	3

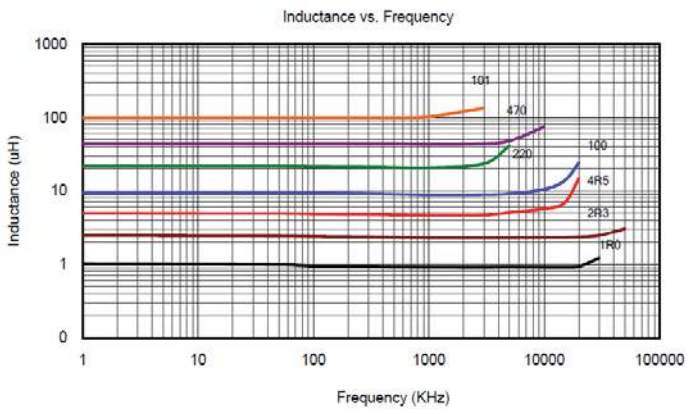
Note: 1. CSMS0645D-xxx_, "CSMS0645D" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Operating temperature range: -25ºC to +125ºC (Including self-heating).

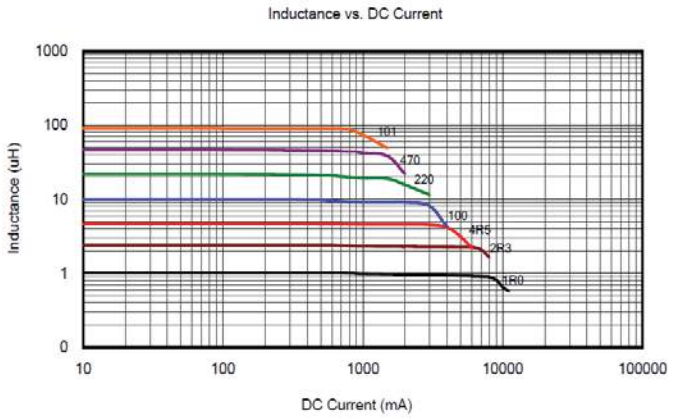
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k	m	n
CSMS0645D	6.0 (0.236)	6.0 (0.236)	4.5 (0.177)	1.35 (0.053)	2.3 (0.091)	4.0 (0.157)	4.8 (0.189)	0.3 (0.012)	1.6 (0.063)	5.2 (0.205)	5.7 (0.224)	4.7 (0.185)
Tol.	±0.2 (0.008)	±0.2 (0.008)	Max.	±0.2 (0.008)	Typ.	±0.2 (0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:





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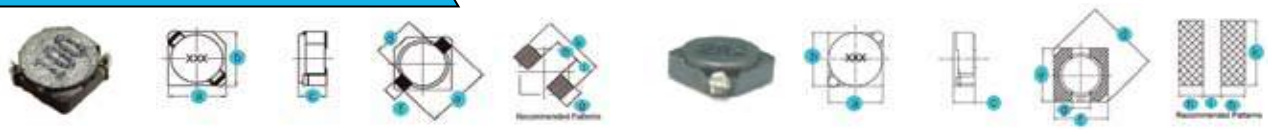
SMD POWER INDUCTORS (SHIELDED)
CSS****P-SERIES

A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k	Type
CSS0211P	3.2(0.126)	3.2(0.126)	1.2(0.047)	Ø2.1(0.083)	3.3(0.130)	1.0(0.039)	1.3(0.051)	1.7(0.067)	1.3(0.051)	4.3(0.169)	1
Tol.	Max.	Max.	Max.	±0.1(0.004)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
CSS0214P	3.2(0.126)	3.2(0.126)	1.55(0.061)	Ø2.1(0.083)	3.3(0.130)	1.0(0.039)	1.3(0.051)	1.7(0.067)	1.3(0.051)	4.3(0.169)	1
Tol.	Max.	Max.	Max.	±0.1(0.004)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
CSS0218P	3.2(0.126)	3.2(0.126)	2.0(0.079)	Ø2.1(0.083)	3.3(0.130)	1.0(0.039)	1.3(0.051)	1.7(0.067)	1.3(0.051)	4.3(0.169)	1
Tol.	Max.	Max.	Max.	±0.1(0.004)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
CSS0316P	3.8(0.150)	3.8(0.150)	1.80(0.071)	Ø2.1(0.083)	4.4(0.173)	1.1(0.043)	1.5(0.059)	2.4(0.094)	1.4(0.055)	5.2(0.205)	1
Tol.	±0.2(0.008)	±0.2(0.008)	Max.	±0.1(0.004)	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.	Typ.	
CSS0418P	4.7(0.185)	4.7(0.185)	2.0(0.079)	6.9(0.272)	4.5(0.177)	4.5(0.177)	1.5(0.059)	1.9(0.075)	1.5(0.059)	5.3(0.209)	2
Tol.	±0.3(0.012)	±0.3(0.012)	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
CSS0428P	4.7(0.185)	4.7(0.185)	3.0(0.118)	6.9(0.272)	4.5(0.177)	4.5(0.177)	1.5(0.059)	1.9(0.075)	1.5(0.059)	5.3(0.209)	2
Tol.	±0.3(0.012)	±0.3(0.012)	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
CSS0518P	5.7(0.224)	5.7(0.224)	2.0(0.049)	8.2(0.323)	5.5(0.217)	5.5(0.217)	2.0(0.079)	2.15(0.085)	2.0(0.079)	6.3(0.248)	2
Tol.	±0.3(0.012)	±0.3(0.012)	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
CSS0528P	5.7(0.224)	5.7(0.224)	3.0(0.118)	8.2(0.323)	5.5(0.217)	5.5(0.217)	2.0(0.079)	2.15(0.085)	2.0(0.079)	6.3(0.248)	2
Tol.	±0.3(0.012)	±0.3(0.012)	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
CSS0628P	6.7(0.264)	6.7(0.264)	3.0(0.118)	9.5(0.374)	6.5(0.256)	6.5(0.256)	2.0(0.079)	2.65(0.104)	2.0(0.079)	7.3(0.287)	2
Tol.	±0.3(0.012)	±0.3(0.012)	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
CSS0638P	6.7(0.264)	6.7(0.264)	4.0(0.157)	9.5(0.374)	6.5(0.256)	6.5(0.256)	2.0(0.079)	2.65(0.104)	2.0(0.079)	7.3(0.287)	2
Tol.	±0.3(0.012)	±0.3(0.012)	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
CSS1050P	8.9(0.350)	9.8(0.386)	5.0(0.197)	5.8(0.228)	8.8(0.346)	2.0(0.079)	2.3(0.091)	5.4(0.213)	2.4(0.094)	N/A	3
Tol.	±0.3(0.012)	±0.3(0.012)	Max.	Max.	±0.2(0.008)	±0.2(0.008)	Typ.	Typ.	Typ.	N/A	

B. Mechanical Drawing:



Type-1 CSS****P

Type-2 CSS****P

Type-3 CSS****P

C. General Informaton:

1. P/N: CSS****P-xxx_, "CSS****P" = Series, "xxx" = Inductance, "_" = Tolerance.
2. Tolerance "_": N: ± 30%, M: ± 20%, L= ± 15%.
3. Operating temperature range: -30ºC to +100ºC (Including self-heating).
4. Storage temperature: -40ºC to +85ºC.
5. Inductance measured using the HP4284A and Chroma1320 & 3302.
6. DCR measured using Chroma 16502 milliohm meter.
7. Inductance and Current range:
   a. CSS0211P: From 1.5 µH (1480 mA) to 10.0 µH (650mA).
   b. CSS0214P: From 1.5 µH (2000mA) to 12.0 µH (640mA).
   c. CSS0218P: From 2.2 µH (2300mA) to 47.0 µH (480mA).
   d. CSS0316P: From 1.5 µH (1550mA) to 33.0 µH (320mA).
   e. CSS0418P: From 1.0 µH (1.72A) to 39.0 µH (0.30A).
   f. CSS0428P: From 1.2µH (2.56A) to 180.0 µH (0.22A).
   g. CSS0518P: From 4.1µH (1.95A) to 100.0 µH (0.36A).
   h. CSS0528P: From 2.5µH (2.60A) to 100.0 µH (0.42A).
   i. CSS0628P: From 3.0µH (3.00A) to 100.0 µH (0.54A).
   j. CSS0638P: From 3.3µH (3.50A) to 100.0 µH (0.65A).
   k. CSS1050P: From 10.0µH (2.40A) to 470.0 µH (0.36A).

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. PDA, LCD, DVD, BRP, HD.

E. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS0211P-SERIES

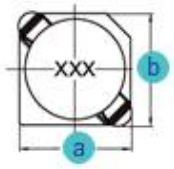
A. Electrical Specifications:

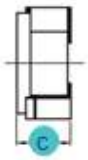
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (mΩ)	Rated Current (mA)	I sat (mA)
CSS0211P-1R5N	1R5	1.5	100	68	1480	900
CSS0211P-2R2N	2R2	2.2	100	98	1270	780
CSS0211P-3R3N	3R3	3.3	100	123	1020	600
CSS0211P-4R7N	4R7	4.7	100	170	880	500
CSS0211P-6R8N	6R8	6.8	100	260	800	440
CSS0211P-100N	100	10.0	100	400	650	350

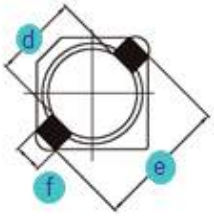
Note: 1. CSS0211P-xxx_, "CSS0211P" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 35% of initial value at Isat, temperature rise Δt < 40ºC at rated current.

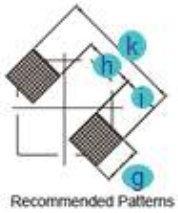
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS0211P	3.2 (0.126)	3.2 (0.126)	1.2 (0.047)	Ø2.1 (0.083)	3.3 (0.130)	1.0 (0.039)	1.3 (0.051)	1.7 (0.067)	1.3 (0.051)	4.3 (0.169)
Tol.	Max.	Max.	Max.	±0.1 (0.004)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.

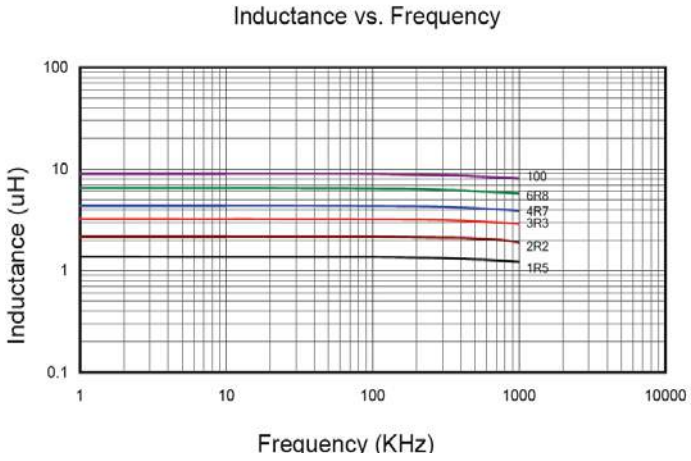


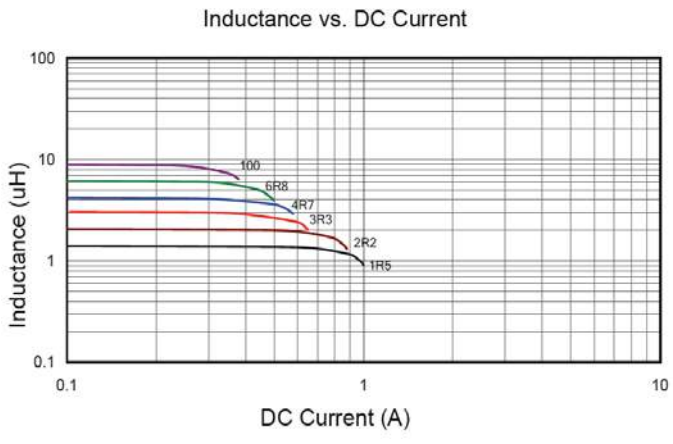






C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS0214P-SERIES

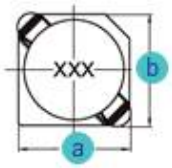
A. Electrical Specifications:

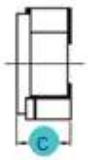
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (mΩ)	Rated Current (mA)	I sat (mA)
CSS0214P-1R5N	1R5	1.5	100	63	2000	1800
CSS0214P-1R8N	1R8	1.8	100	75	1800	1650
CSS0214P-2R2N	2R2	2.2	100	94	1600	1500
CSS0214P-2R7N	2R7	2.7	100	106	1400	1350
CSS0214P-3R3N	3R3	3.3	100	125	1240	1200
CSS0214P-3R9N	3R9	3.9	100	138	1120	1100
CSS0214P-4R7N	4R7	4.7	100	169	1000	1000
CSS0214P-5R6N	5R6	5.6	100	188	980	950
CSS0214P-6R8N	6R8	6.8	100	213	920	850
CSS0214P-8R2N	8R2	8.2	100	281	800	800
CSS0214P-100N	100	10.0	100	294	760	700
CSS0214P-120N	120	12.0	100	394	640	620

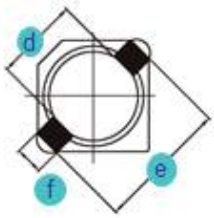
Note: 1. CSS0214P-xxx_, "CSS0214P" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 35% of initial value at Isat, temperature rise Δt < 40°C at rated current.

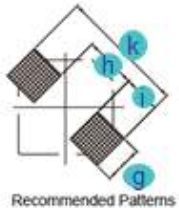
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS0214P	3.2 (0.126)	3.2 (0.126)	1.55 (0.061)	Ø2.1 (0.083)	3.3 (0.130)	1.0 (0.039)	1.3 (0.051)	1.7 (0.067)	1.3 (0.051)	4.3 (0.169)
Tol.	Max.	Max.	Max.	±0.1 (0.004)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.

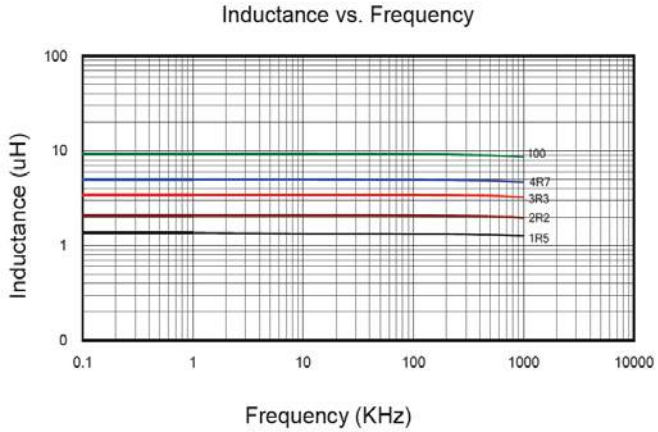


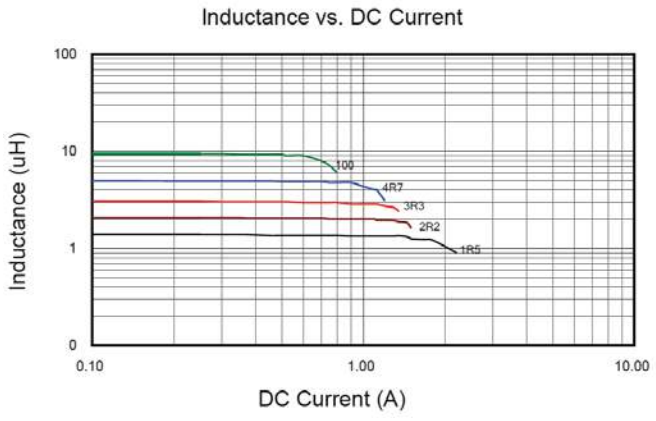






C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS0218P-SERIES

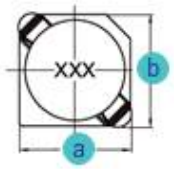
A. Electrical Specifications:

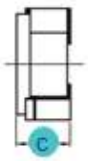
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (mΩ)	Rated Current (mA)	I sat (mA)
CSS0218P-2R2N	2R2	2.2	100	41	2300	850
CSS0218P-3R3N	3R3	3.3	100	54	2100	750
CSS0218P-4R7N	4R7	4.7	100	78	1650	630
CSS0218P-6R8N	6R8	6.8	100	106	1320	520
CSS0218P-100N	100	10.0	100	180	1000	430
CSS0218P-150N	150	15.0	100	220	800	350
CSS0218P-220N	220	22.0	100	320	680	300
CSS0218P-330N	330	33.0	100	460	560	240
CSS0218P-470N	470	47.0	100	660	480	200

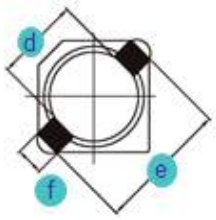
Note: 1. CSS0218P-xxx_, "CSS0218P" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 35% of initial value at Isat, temperature rise Δt < 40ºC at rated current.

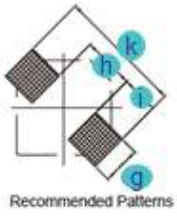
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS0218P	3.2 (0.126)	3.2 (0.126)	2.0 (0.079)	Ø2.1 (0.083)	3.3 (0.130)	1.0 (0.039)	1.3 (0.051)	1.7 (0.067)	1.3 (0.051)	4.3 (0.169)
Tol.	Max.	Max.	Max.	±0.1 (0.004)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.

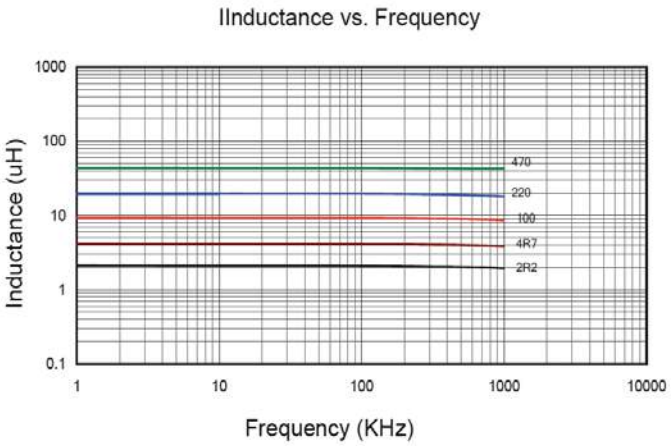


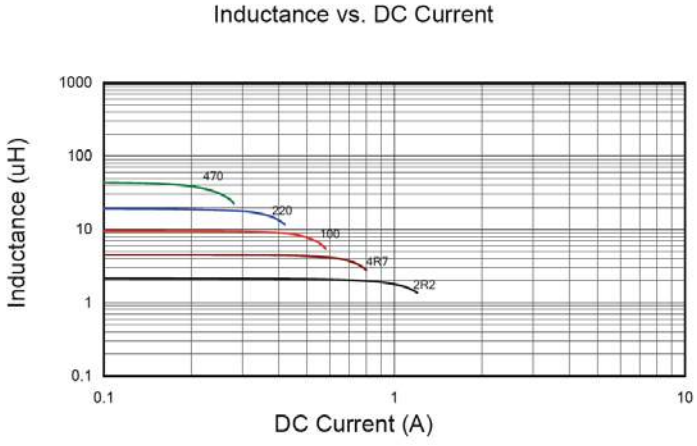






C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS0316P-SERIES

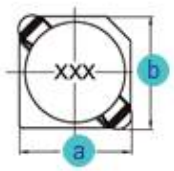
A. Electrical Specifications:

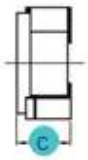
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (mΩ)	Rated Current (mA)
CSS0316P-1R5N	1R5	1.5	100	52	1550
CSS0316P-2R2N	2R2	2.2	100	72	1200
CSS0316P-3R3N	3R3	3.3	100	85	1100
CSS0316P-4R7N	4R7	4.7	100	105	900
CSS0316P-6R8N	6R8	6.8	100	170	730
CSS0316P-100N	100	10.0	100	210	550
CSS0316P-150N	150	15.0	100	295	450
CSS0316P-220N	220	22.0	100	430	400
CSS0316P-330N	330	33.0	100	675	320

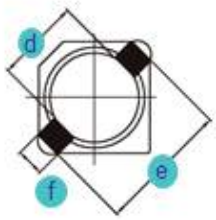
Note: 1. CSS0316P-xxx_, "CSS0316P" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 35% of initial value at Isat, temperature rise Δt < 40°C at rated current.

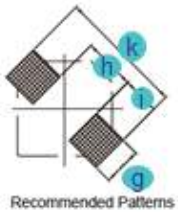
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS0316P	3.8 (0.150)	3.8 (0.150)	1.80 (0.071)	Ø2.1 (0.083)	4.4 (0.173)	1.1 (0.043)	1.5 (0.059)	2.4 (0.094)	1.4 (0.055)	5.2 (0.205)
Tol.	±0.2 (0.008)	±0.2 (0.008)	Max.	±0.1 (0.004)	±0.2 (0.008)	±0.2 (0.008)	Typ.	Typ.	Typ.	Typ.

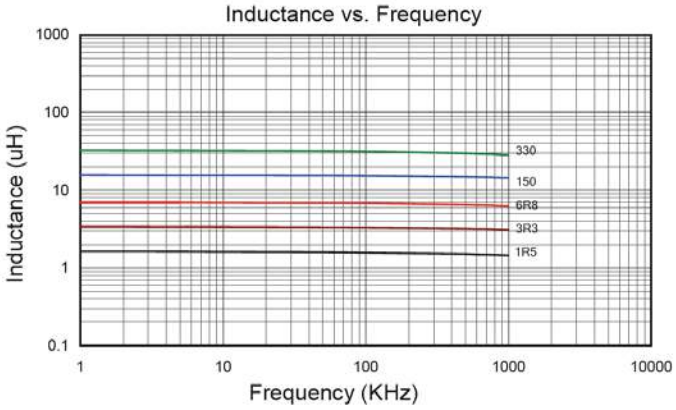


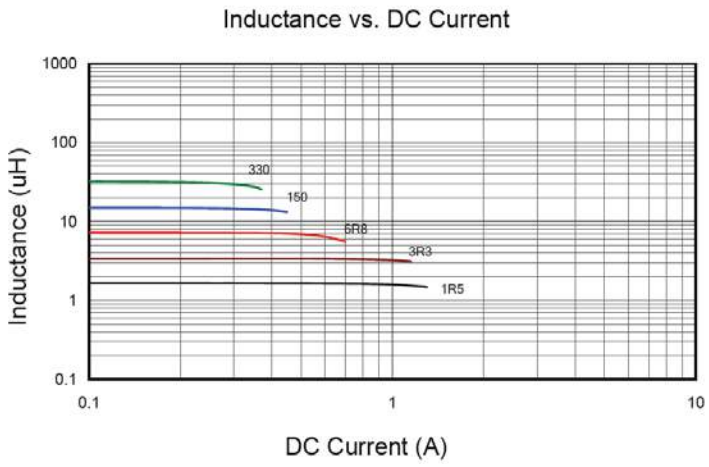






C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS0418P-SERIES

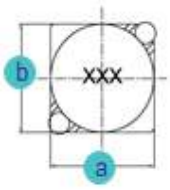
A. Electrical Specifications:

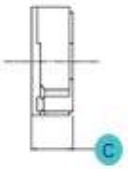
P/N	Marking	Inductance (µH)	Test Freq.	DCR Max. (mΩ)	Rated Current (A)
CSS0418P-1R0N	1R0	1.0	7.96MHz	45	1.72
CSS0418P-2R2N	2R2	2.2	7.96MHz	75	1.32
CSS0418P-2R7N	2R7	2.7	7.96MHz	105	1.28
CSS0418P-3R3N	3R3	3.3	7.96MHz	110	1.04
CSS0418P-3R9N	3R9	3.9	7.96MHz	155	0.88
CSS0418P-4R7N	4R7	4.7	7.96MHz	162	0.84
CSS0418P-5R6N	5R6	5.6	7.96MHz	170	0.80
CSS0418P-6R8N	6R8	6.8	7.96MHz	200	0.76
CSS0418P-8R2N	8R2	8.2	7.96MHz	245	0.68
CSS0418P-100N	100	10	100KHz	200	0.61
CSS0418P-120N	120	12	100KHz	210	0.56
CSS0418P-150N	150	15	100KHz	240	0.50
CSS0418P-180N	180	18	100KHz	338	0.48
CSS0418P-220N	220	22	100KHz	397	0.41
CSS0418P-270N	270	27	100KHz	441	0.35
CSS0418P-330N	330	33	100KHz	694	0.32
CSS0418P-390N	390	39	100KHz	709	0.30

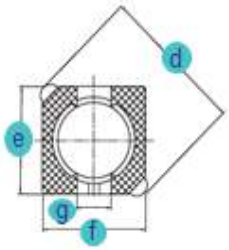
Note: 1. CSS0418P-xxx_, "CSS0418P" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 35% of initial value at Isat, temperature rise Δt < 40ºC at rated current.

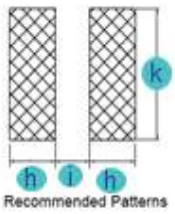
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS0418P	4.7 (0.185)	4.7 (0.185)	2.0 (0.079)	6.9 (0.272)	4.5 (0.177)	4.5 (0.177)	1.5 (0.059)	1.9 (0.075)	1.5 (0.059)	5.3 (0.209)
Tol.	±0.3 (0.012)	±0.3 (0.012)	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.

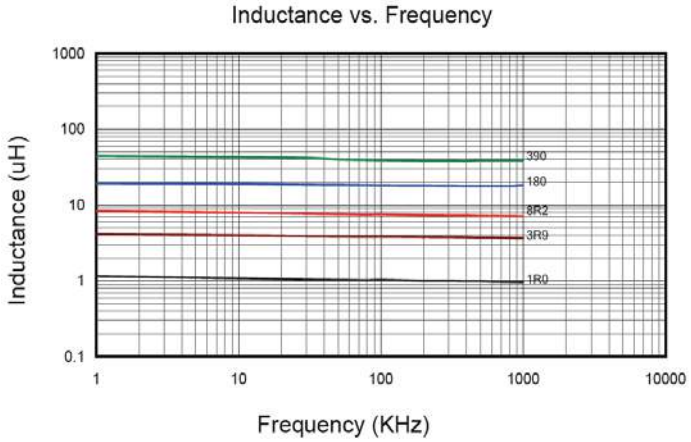


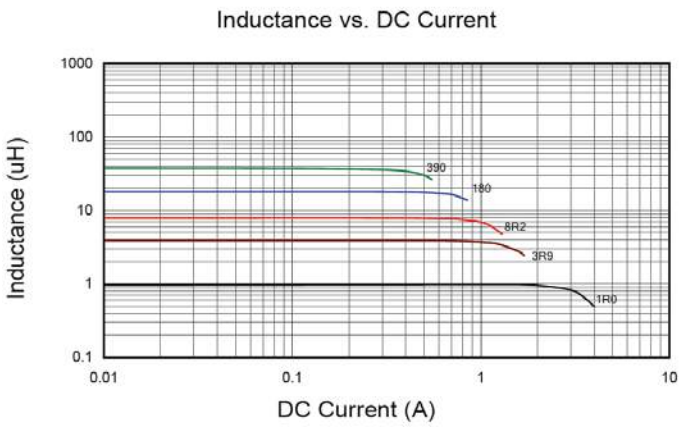






C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS0428P-SERIES

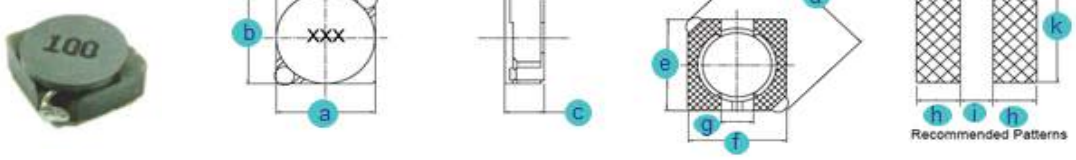
A. Electrical Specifications:

P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (mΩ)	Rated Current (A)
CSS0428P-1R2N	1R2	1.2	100	23.6	2.56
CSS0428P-1R8N	1R8	1.8	100	27.5	2.20
CSS0428P-2R2N	2R2	2.2	100	31.3	2.04
CSS0428P-2R7N	2R7	2.7	100	43.3	1.60
CSS0428P-3R3N	3R3	3.3	100	49.2	1.57
CSS0428P-3R9N	3R9	3.9	100	64.8	1.44
CSS0428P-4R7N	4R7	4.7	100	72.0	1.32
CSS0428P-5R6N	5R6	5.6	100	100.9	1.17
CSS0428P-6R8N	6R8	6.8	100	108.9	1.12
CSS0428P-8R2N	8R2	8.2	100	117.5	1.04
CSS0428P-100N	100	10	100	128.3	1.00
CSS0428P-120N	120	12	100	131.6	0.84
CSS0428P-150N	150	15	100	149.0	0.76
CSS0428P-180N	180	18	100	166.0	0.72
CSS0428P-220N	220	22	100	235.0	0.70
CSS0428P-270N	270	27	100	261.0	0.58
CSS0428P-330N	330	33	100	331.3	0.56
CSS0428P-390N	390	39	100	383.7	0.50
CSS0428P-470N	470	47	100	587.0	0.48
CSS0428P-560N	560	56	100	624.5	0.41
CSS0428P-680N	680	68	100	699.0	0.35
CSS0428P-820N	820	82	100	914.8	0.32
CSS0428P-101N	101	100	100	1020.0	0.29
CSS0428P-121N	121	120	100	1270.0	0.27
CSS0428P-151N	151	150	100	1350.0	0.24
CSS0428P-181N	181	180	100	1540.0	0.22

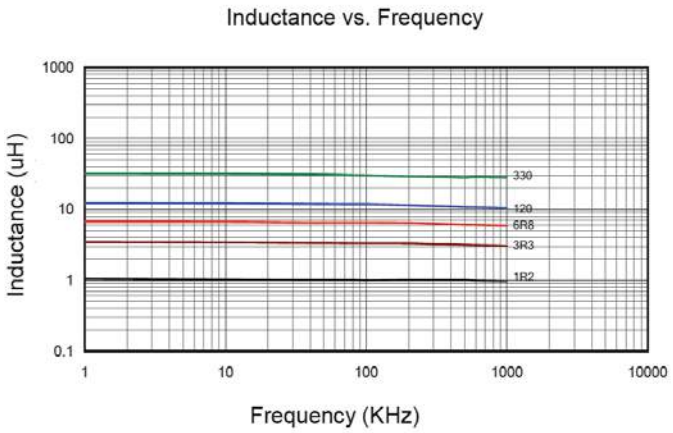
Note: 1. CSS0428P-xxx_, "CSS0428P" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 35% of initial value at Isat, temperature rise Δt < 40°C at rated current.

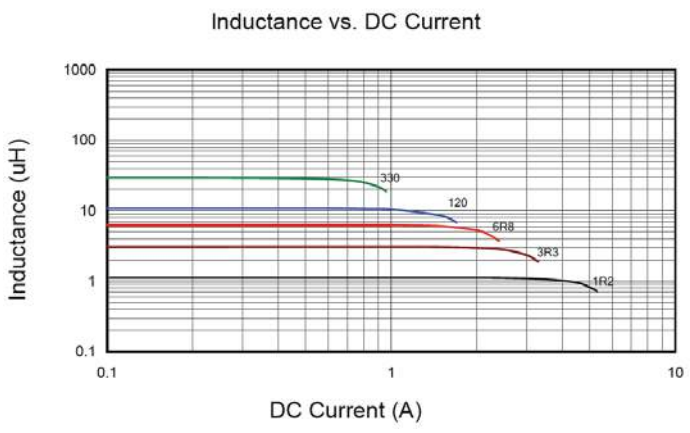
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS0428P	4.7(0.185)	4.7(0.185)	3.0(0.118)	6.9(0.272)	4.5(0.177)	4.5(0.177)	1.5(0.059)	1.9(0.075)	1.5(0.059)	5.3(0.209)
Tol.	±0.3(0.012)	±0.3(0.012)	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS0518P-SERIES

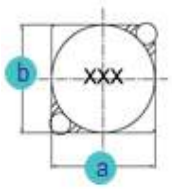
A. Electrical Specifications:

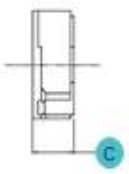
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (mΩ)	Rated Current (A)
CSS0518P-4R1N	4R1	4.1	10	57	1.95
CSS0518P-5R4N	5R4	5.4	10	76	1.60
CSS0518P-6R2N	6R2	6.2	10	96	1.40
CSS0518P-8R9N	8R9	8.9	10	116	1.25
CSS0518P-100N	100	10	10	124	1.20
CSS0518P-120N	120	12	10	153	1.10
CSS0518P-150N	150	15	10	196	0.97
CSS0518P-180N	180	18	10	210	0.85
CSS0518P-220N	220	22	10	290	0.80
CSS0518P-270N	270	27	10	330	0.75
CSS0518P-330N	330	33	10	385	0.65
CSS0518P-390N	390	39	10	520	0.57
CSS0518P-470N	470	47	10	595	0.54
CSS0518P-560N	560	56	10	665	0.50
CSS0518P-680N	680	68	10	840	0.43
CSS0518P-820N	820	82	10	978	0.41
CSS0518P-101N	101	100	10	1200	0.36

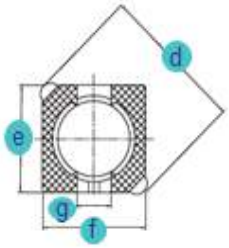
Note: 1. CSS0518P-xxx_, "CSS0518P" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 35% of initial value at Isat, temperature rise Δt < 40ºC at rated current.

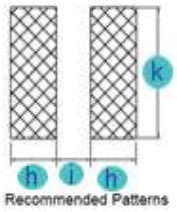
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS0518P	5.7 (0.224)	5.7 (0.224)	2.0 (0.049)	8.2 (0.323)	5.5 (0.217)	5.5 (0.217)	2.0 (0.079)	2.15 (0.085)	2.0 (0.079)	6.3 (0.248)
Tol.	±0.3 (0.012)	±0.3 (0.012)	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.

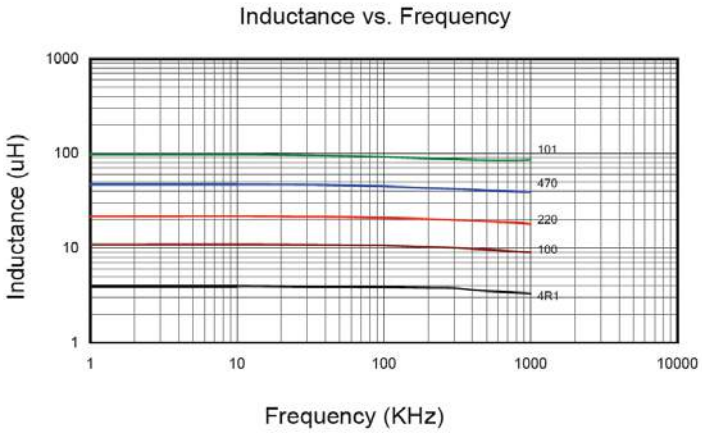


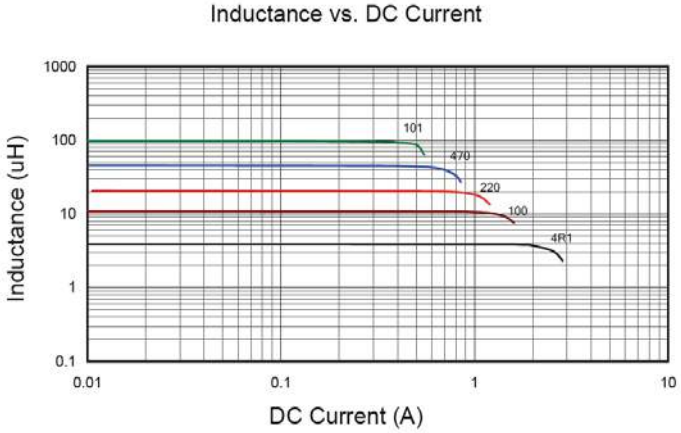






C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS0528P-SERIES

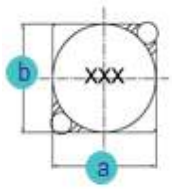
A. Electrical Specifications:

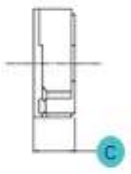
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (mΩ)	Rated Current (A)
CSS0528P-2R5N	2R5	2.5	10	18	2.60
CSS0528P-3R0N	3R0	3.0	10	24	2.40
CSS0528P-4R2N	4R2	4.2	10	31	2.20
CSS0528P-5R3N	5R3	5.3	10	38	1.90
CSS0528P-6R2N	6R2	6.2	10	45	1.80
CSS0528P-8R2N	8R2	8.2	10	53	1.60
CSS0528P-100N	100	10	10	65	1.30
CSS0528P-120N	120	12	10	76	1.20
CSS0528P-150N	150	15	10	103	1.10
CSS0528P-180N	180	18	10	110	1.00
CSS0528P-220N	220	22	10	122	0.90
CSS0528P-270N	270	27	10	175	0.85
CSS0528P-330N	330	33	10	189	0.75
CSS0528P-390N	390	39	10	212	0.70
CSS0528P-470N	470	47	10	250	0.62
CSS0528P-560N	560	56	10	305	0.58
CSS0528P-680N	680	68	10	355	0.52
CSS0528P-820N	820	82	10	463	0.46
CSS0528P-101N	101	100	10	520	0.42

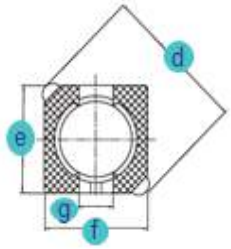
Note: 1. CSS0528P-xxx_, "CSS0528P" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 35% of initial value at Isat, temperature rise Δt < 40°C at rated current.

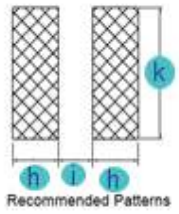
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS0528P	5.7 (0.224)	5.7 (0.224)	3.0 (0.118)	8.2 (0.323)	5.5 (0.217)	5.5 (0.217)	2.0 (0.079)	2.15 (0.085)	2.0 (0.079)	6.3 (0.248)
Tol.	±0.3 (0.012)	±0.3 (0.012)	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.

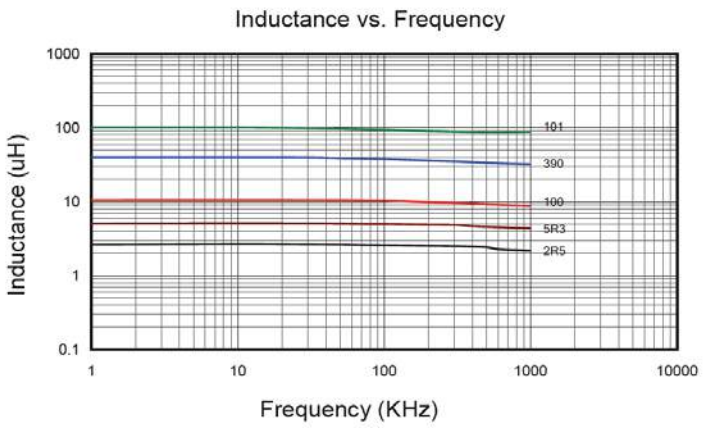


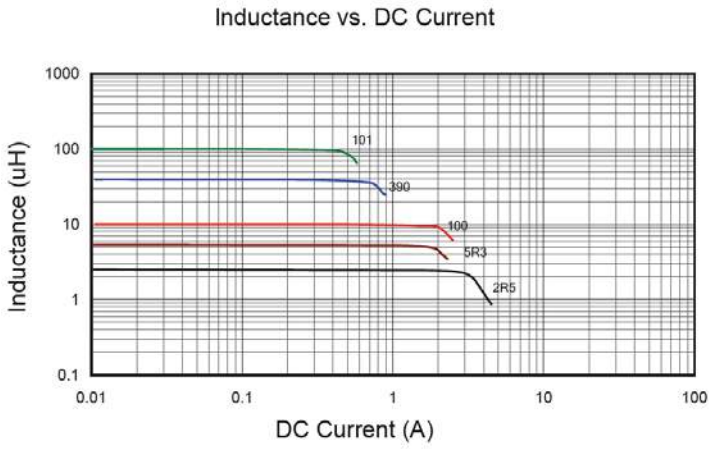






C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS0628P-SERIES

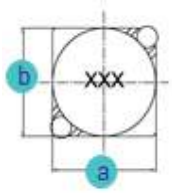
A. Electrical Specifications:

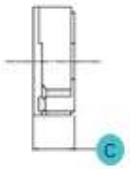
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (mΩ)	Rated Current (A)
CSS0628P-3R0N	3R0	3.0	10	24	3.00
CSS0628P-3R9N	3R9	3.9	10	27	2.60
CSS0628P-5R0N	5R0	5.0	10	31	2.40
CSS0628P-6R0N	6R0	6.0	10	35	2.25
CSS0628P-7R3N	7R3	7.3	10	54	2.10
CSS0628P-8R6N	8R6	8.6	10	58	1.85
CSS0628P-100N	100	10	10	65	1.70
CSS0628P-120N	120	12	10	70	1.55
CSS0628P-150N	150	15	10	84	1.40
CSS0628P-180N	180	18	10	95	1.32
CSS0628P-220N	220	22	10	128	1.20
CSS0628P-270N	270	27	10	142	1.05
CSS0628P-330N	330	33	10	165	0.97
CSS0628P-390N	390	39	10	210	0.86
CSS0628P-470N	470	47	10	238	0.80
CSS0628P-560N	560	56	10	277	0.73
CSS0628P-680N	680	68	10	304	0.65
CSS0628P-820N	820	82	10	390	0.60
CSS0628P-101N	101	100	10	535	0.54

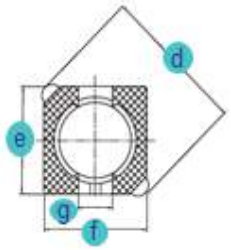
Note: 1. CSS0628P-xxx_, "CSS0628P" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 35% of initial value at Isat, temperature rise Δt < 40ºC at rated current.

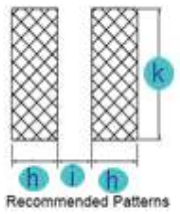
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS0628P	6.7 (0.264)	6.7 (0.264)	3.0 (0.118)	9.5 (0.374)	6.5 (0.256)	6.5 (0.256)	2.0 (0.079)	2.65 (0.104)	2.0 (0.079)	7.3 (0.287)
Tol.	±0.3 (0.012)	±0.3 (0.012)	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.

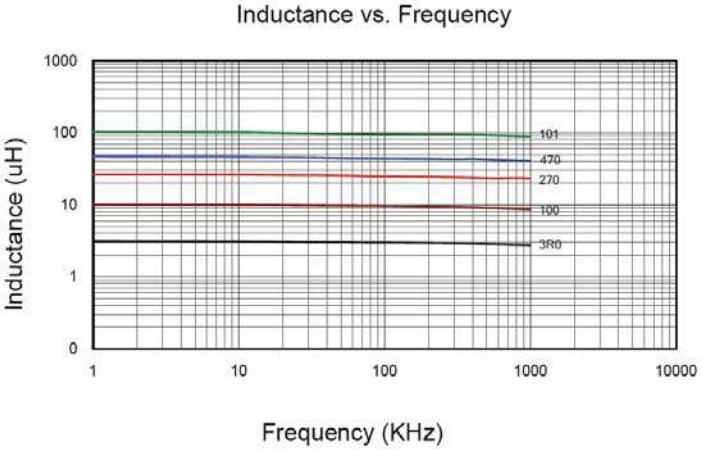


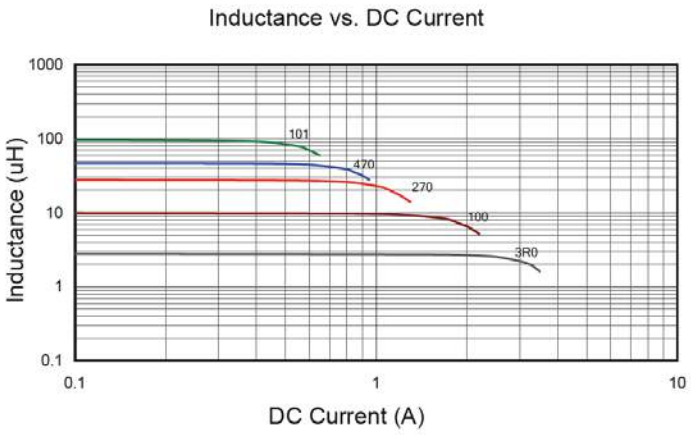






C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS0638P-SERIES

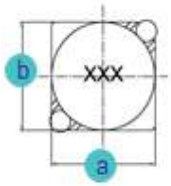
A. Electrical Specifications:

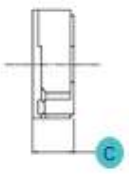
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (mΩ)	Rated Current (A)
CSS0638P-3R3N	3R3	3.3	10	20	3.50
CSS0638P-5R0N	5R0	5.0	10	24	2.90
CSS0638P-6R2N	6R2	6.2	10	27	2.50
CSS0638P-7R4N	7R4	7.4	10	31	2.30
CSS0638P-8R7N	8R7	8.7	10	34	2.20
CSS0638P-100N	100	10	10	38	2.00
CSS0638P-120N	120	12	10	53	1.70
CSS0638P-150N	150	15	10	57	1.60
CSS0638P-180N	180	18	10	92	1.50
CSS0638P-220N	220	22	10	96	1.30
CSS0638P-270N	270	27	10	109	1.20
CSS0638P-330N	330	33	10	124	1.10
CSS0638P-390N	390	39	10	138	1.00
CSS0638P-470N	470	47	10	155	0.95
CSS0638P-560N	560	56	10	202	0.85
CSS0638P-680N	680	68	10	234	0.75
CSS0638P-820N	820	82	10	324	0.70
CSS0638P-101N	101	100	10	358	0.65

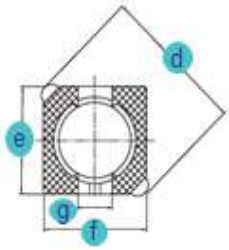
Note: 1. CSS0638P-xxx_, "CSS0638P" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 35% of initial value at Isat, temperature rise Δt < 40°C at rated current.

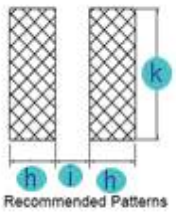
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS0638P	6.7 (0.264)	6.7 (0.264)	4.0 (0.157)	9.5 (0.374)	6.5 (0.256)	6.5 (0.256)	2.0 (0.079)	2.65 (0.104)	2.0 (0.079)	7.3 (0.287)
Tol.	±0.3 (0.012)	±0.3 (0.012)	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.

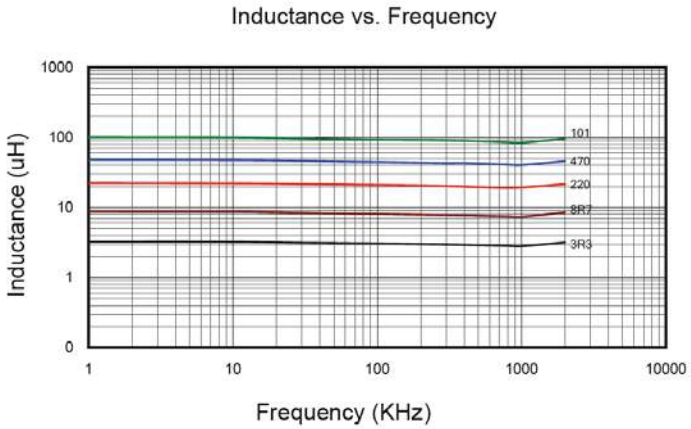


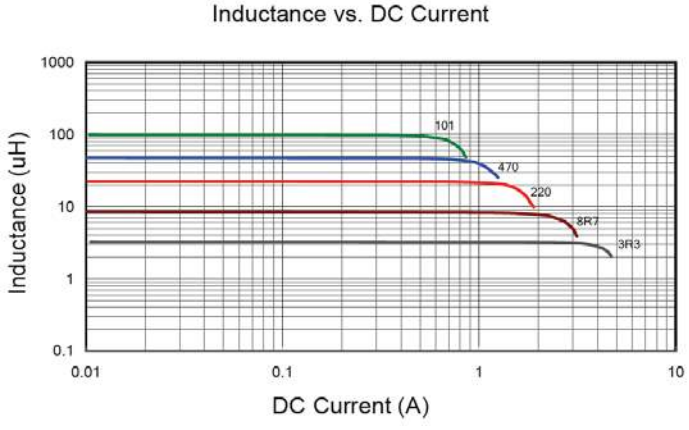






C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS1050P-SERIES

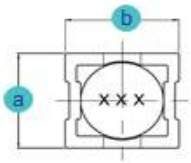
A. Electrical Specifications:

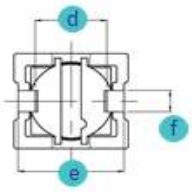
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (mΩ)	Rated Current (A)
CSS1050P-100M	100	10	1	50	2.40
CSS1050P-120M	120	12	1	54	2.25
CSS1050P-150M	150	15	1	61	2.00
CSS1050P-180M	180	18	1	84	1.80
CSS1050P-220M	220	22	1	94	1.65
CSS1050P-270M	270	27	1	110	1.45
CSS1050P-330M	330	33	1	150	1.35
CSS1050P-390M	390	39	1	170	1.20
CSS1050P-470M	470	47	1	210	1.10
CSS1050P-560M	560	56	1	230	1.00
CSS1050P-680M	680	68	1	260	0.93
CSS1050P-820M	820	82	1	360	0.84
CSS1050P-101M	101	100	1	410	0.76
CSS1050P-121M	121	120	1	450	0.70
CSS1050P-151M	151	150	1	640	0.63
CSS1050P-181M	181	180	1	840	0.57
CSS1050P-221M	221	220	1	960	0.52
CSS1050P-271M	271	270	1	1070	0.47
CSS1050P-331M	331	330	1	1370	0.43
CSS1050P-391M	391	390	1	1550	0.39
CSS1050P-471M	471	470	1	1740	0.36

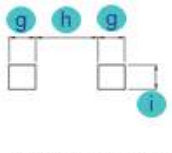
Note: 1. CSS1050P-xxx_, "CSS1050P" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 25% of initial value at Isat, temperature rise Δt < 40ºC at rated current.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i
CSS1050P	8.9 (0.350)	9.8 (0.386)	5.0 (0.197)	5.8 (0.228)	8.8 (0.346)	2.0 (0.079)	2.3 (0.091)	5.4 (0.213)	2.4 (0.094)
Tol.	±0.3 (0.012)	±0.3 (0.012)	Max.	Max.	±0.2 (0.008)	±0.2 (0.008)	Typ.	Typ.	Typ.

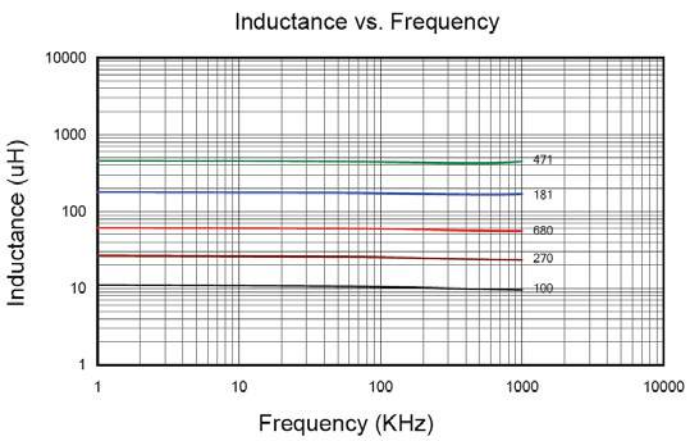


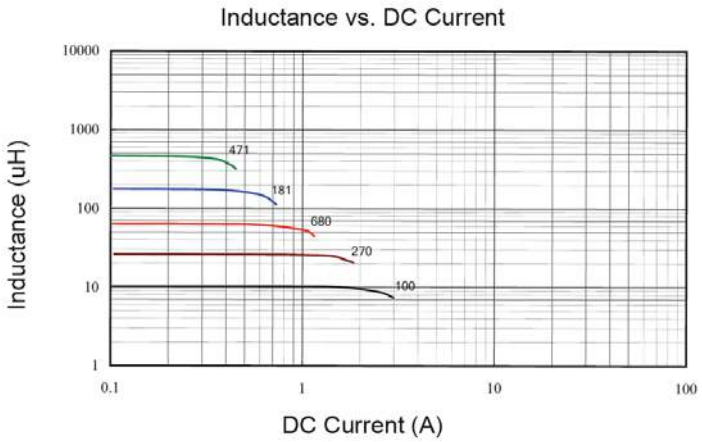




Recommended Patterns

C. Characteristics Curve:





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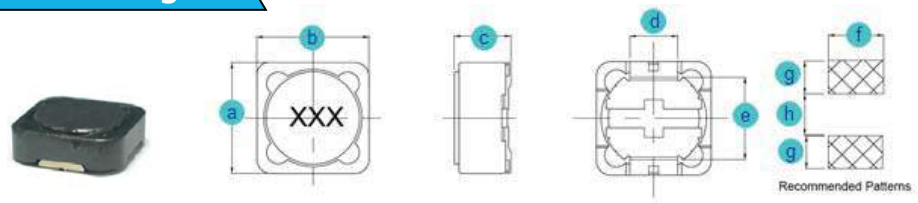
SMD POWER INDUCTORS (SHIELDED)
CSS***P/F-SERIES

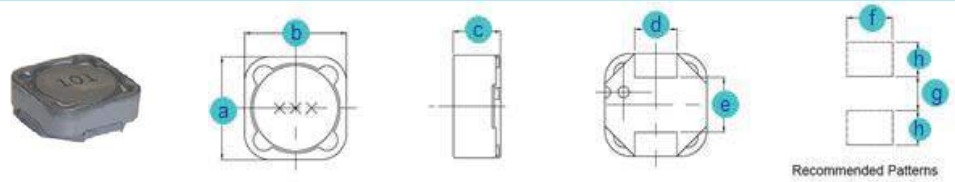
A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CSS124P	12.0(0.472)	12.0(0.472)	4.8(0.189)	5.0(0.197)	8.4(0.331)	5.4(0.213)	2.8(0.110)	7.0(0.276)
Tol.	±0.3(0.012)	±0.3(0.012)	Max.	Typ.	Typ.	Typ.	Typ.	Typ.
CSS125P	12.0(0.472)	12.0(0.472)	6.0(0.236)	5.0(0.197)	8.4(0.331)	5.4(0.213)	2.8(0.110)	7.0(0.276)
Tol.	±0.3(0.012)	±0.3(0.012)	Max.	Typ.	Typ.	Typ.	Typ.	Typ.
CSS127P	12.0(0.472)	12.0(0.472)	8.0(0.315)	5.0(0.197)	8.4(0.331)	5.4(0.213)	2.8(0.110)	7.0(0.276)
Tol.	±0.3(0.012)	±0.3(0.012)	Max.	Typ.	Typ.	Typ.	Typ.	Typ.
CSS124F	12.0(0.472)	12.0(0.472)	4.80(0.189)	5.0(0.197)	7.4(0.291)	5.4(0.213)	7.0(0.276)	2.8(0.110)
Tol.	±0.3(0.012)	±0.3(0.012)	Max.	Typ.	Typ.	Typ.	Typ.	Typ.
CSS125F	12.0(0.472)	12.0(0.472)	6.0(0.236)	5.0(0.197)	7.4(0.291)	5.4(0.213)	7.0(0.276)	2.8(0.110)
Tol.	±0.3(0.012)	±0.3(0.012)	Max.	Typ.	Typ.	Typ.	Typ.	Typ.
CSS127F	12.0(0.472)	12.0(0.472)	8.0(0.315)	5.0(0.197)	7.4(0.291)	5.4(0.213)	7.0(0.276)	2.8(0.110)
Tol.	±0.3(0.012)	±0.3(0.012)	Max.	Typ.	Typ.	Typ.	Typ.	Typ.

B. Mechanical Drawing:



CSS***P-series



CSS***F-series

C. General Information:

1. P/N: CSS***P/F-xxx_, "CSS***P/F" = Series, "xxx"= Inductance, "_" = Tolerance.
2. Tolerance "_": N: ± 30%, M: ± 20%, L: ± 15%, K: ± 10%.
3. Operating temperature range: -30ºC to +100ºC (Including self-heating).
4. Storage temperature: -40ºC to +85ºC.
5. Inductance measured using the HP4284A and Chroma1320 & 3302.
6. DCR measured using Chroma 16502 milliohm meter.
7. Inductance drop no more than 25% of initial value at rated current, temperature rise $\Delta t < 40$ºC.
8. MSL: Level 1.
9. Inductance and Current range:
   a. CSS124P: From 3.9µH (6.50A) to 330.0 µH (0.50A).
   b. CSS125P: From 1.3µH (8.00A) to 1000.0 µH (0.40A).
   c. CSS127P: From 1.2µH (9.80A) to 1000.0 µH (0.55A).
   d. CSS124F: From 3.90 µH (6.50A) to 330.0 µH (0.50A).
   e. CSS125F: From 1.30 µH (8.00A) to 1000.0 µH (0.40A).
   f. CSS127F: From 1.2 µH (9.80A) to 1000.0 µH (0.55A).

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. PDA, LCD, DVD, BRP, HD.

E. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS124P-SERIES

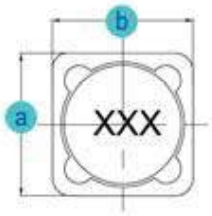
A. Electrical Specifications:

P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (mΩ)	Rated Current (A)
CSS124P-3R9M	3R9	3.9	100	15	6.50
CSS124P-4R7M	4R7	4.7	100	18	5.70
CSS124P-6R8M	6R8	6.8	100	23	4.90
CSS124P-8R2M	8R2	8.2	100	26	4.60
CSS124P-100M	100	10	100	28	4.50
CSS124P-120M	120	12	100	38	4.00
CSS124P-150M	150	15	100	50	3.20
CSS124P-180M	180	18	100	57	3.10
CSS124P-220M	220	22	100	66	2.90
CSS124P-270M	270	27	100	80	2.80
CSS124P-330M	330	33	100	97	2.70
CSS124P-390M	390	39	100	132	2.10
CSS124P-470M	470	47	100	150	1.90
CSS124P-560M	560	56	100	190	1.80
CSS124P-680M	680	68	100	220	1.50
CSS124P-820M	820	82	100	260	1.30
CSS124P-101M	101	100	100	308	1.20
CSS124P-121M	121	120	100	380	1.10
CSS124P-151M	151	150	100	530	0.95
CSS124P-181M	181	180	100	620	0.85
CSS124P-221M	221	220	100	700	0.80
CSS124P-271M	271	270	100	870	0.60
CSS124P-331M	331	330	100	990	0.50

Note: CSS124P-xxx_, "CSS124P" = P/N, "xxx" = Inductance, "_" = Tolerance.

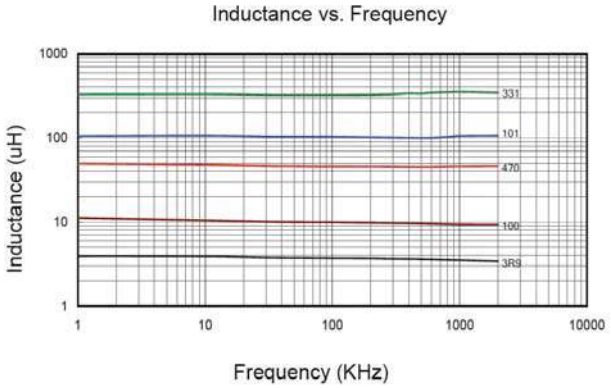
B. Dimensions: mm (Inch)

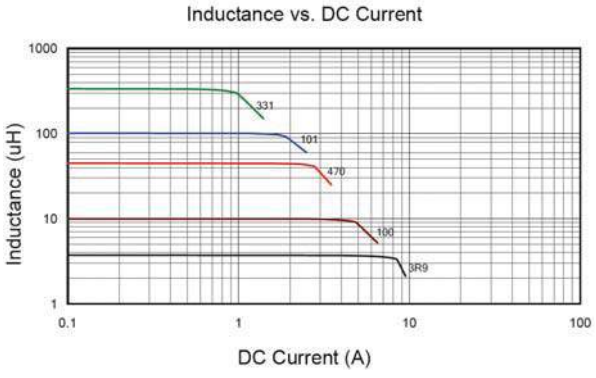
Series	a	b	c	d	e	f	g	h
CSS124P	12.0 (0.472)	12.0 (0.472)	4.8 (0.189)	5.0 (0.197)	8.4 (0.331)	5.4 (0.213)	2.8 (0.110)	7.0 (0.276)
Tol.	±0.3 (0.012)	±0.3 (0.012)	Max.	Typ.	Typ.	Typ.	Typ.	Typ.



Recommended Patterns

C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS125P-SERIES

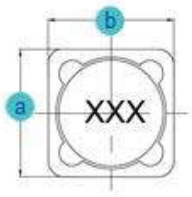
A. Electrical Specifications:

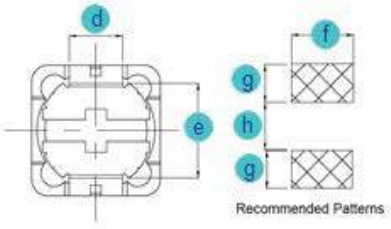
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSS125P-1R3N	1R3	1.3±30%	100	0.012	8.00
CSS125P-2R1N	2R1	2.1±30%	100	0.014	7.00
CSS125P-3R1N	3R1	3.1±30%	100	0.017	6.00
CSS125P-4R4N	4R4	4.4±30%	100	0.020	5.00
CSS125P-5R8N	5R8	5.8±30%	100	0.021	4.40
CSS125P-7R5N	7R5	7.5±30%	100	0.024	4.20
CSS125P-100M	100	10 ± 20%	1	0.025	4.00
CSS125P-120M	120	12 ± 20%	1	0.027	3.50
CSS125P-150M	150	15 ± 20%	1	0.030	3.30
CSS125P-180M	180	18 ± 20%	1	0.034	3.00
CSS125P-220M	220	22 ± 20%	1	0.036	2.80
CSS125P-270M	270	27 ± 20%	1	0.051	2.30
CSS125P-330M	330	33 ± 20%	1	0.057	2.10
CSS125P-390M	390	39 ± 20%	1	0.068	2.00
CSS125P-470M	470	47 ± 20%	1	0.075	1.80
CSS125P-560M	560	56 ± 20%	1	0.110	1.70
CSS125P-680M	680	68 ± 20%	1	0.120	1.50
CSS125P-820M	820	82 ± 20%	1	0.140	1.40
CSS125P-101M	101	100 ± 20%	1	0.160	1.30
CSS125P-121M	121	120 ± 20%	1	0.170	1.10
CSS125P-151M	151	150 ± 20%	1	0.230	1.00
CSS125P-181M	181	180 ± 20%	1	0.290	0.90
CSS125P-221M	221	220 ± 20%	1	0.400	0.80
CSS125P-271M	271	270 ± 20%	1	0.460	0.75
CSS125P-331M	331	330 ± 20%	1	0.510	0.68
CSS125P-391M	391	390 ± 20%	1	0.690	0.65
CSS125P-471M	471	470 ± 20%	1	0.770	0.58
CSS125P-561M	561	560 ± 20%	1	0.860	0.54
CSS125P-681M	681	680 ± 20%	1	1.200	0.48
CSS125P-821M	821	820 ± 20%	1	1.340	0.43
CSS125P-102M	102	1000 ± 20%	1	1.530	0.40

Note: CSS125P-xxx_, "CSS125P" = P/N, "xxx" = Inductance, "_" = Tolerance.

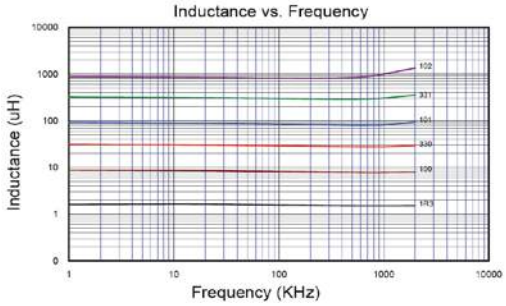
B. Dimensions: mm (Inch)

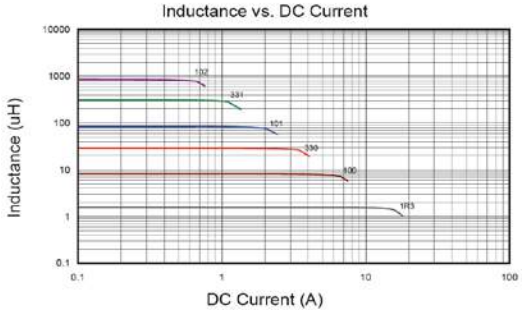
Series	a	b	c	d	e	f	g	h
CSS125P	12.0(0.472)	12.0(0.472)	6.0(0.236)	5.0(0.197)	8.4(0.331)	5.4(0.213)	2.8(0.110)	7.0(0.276)
Tol.	±0.3(0.012)	±0.3(0.012)	Max.	Typ.	Typ.	Typ.	Typ.	Typ.





C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS127P-SERIES

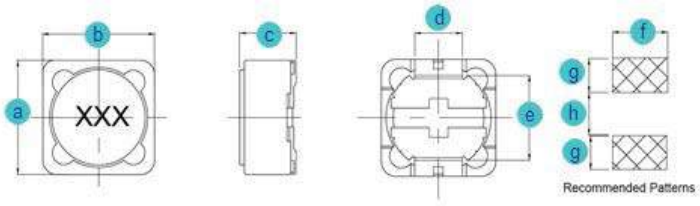
A. Electrical Specifications:

P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSS127P-1R2N	1R2	1.2+40%,-20%	100	0.0070	9.80
CSS127P-2R4N	2R4	2.4+40%,-20%	100	0.0115	8.00
CSS127P-3R5N	3R5	3.5+40%,-20%	100	0.0135	7.50
CSS127P-4R7N	4R7	4.7+40%,-20%	100	0.0158	6.80
CSS127P-6R1N	6R1	6.1+40%,-20%	100	0.0176	6.60
CSS127P-7R6N	7R6	7.6+40%,-20%	100	0.0200	5.90
CSS127P-100M	100	10 ± 20%	1	0.0216	5.40
CSS127P-120M	120	12 ± 20%	1	0.0243	4.90
CSS127P-150M	150	15 ± 20%	1	0.0270	4.50
CSS127P-180M	180	18 ± 20%	1	0.0392	3.90
CSS127P-220M	220	22 ± 20%	1	0.0432	3.60
CSS127P-270M	270	27 ± 20%	1	0.0459	3.40
CSS127P-330M	330	33 ± 20%	1	0.0648	3.00
CSS127P-390M	390	39 ± 20%	1	0.0729	2.75
CSS127P-470M	470	47 ± 20%	1	0.1000	2.50
CSS127P-560M	560	56 ± 20%	1	0.110	2.35
CSS127P-680M	680	68 ± 20%	1	0.140	2.10
CSS127P-820M	820	82 ± 20%	1	0.160	1.95
CSS127P-101M	101	100 ± 20%	1	0.220	1.70
CSS127P-121M	121	120 ± 20%	1	0.250	1.60
CSS127P-151M	151	150 ± 20%	1	0.280	1.42
CSS127P-181M	181	180 ± 20%	1	0.350	1.30
CSS127P-221M	221	220 ± 20%	1	0.390	1.16
CSS127P-271M	271	270 ± 20%	1	0.560	1.06
CSS127P-331M	331	330 ± 20%	1	0.640	0.95
CSS127P-391M	391	390 ± 20%	1	0.700	0.88
CSS127P-471M	471	470 ± 20%	1	0.980	0.79
CSS127P-561M	561	560 ± 20%	1	1.070	0.73
CSS127P-681M	681	680 ± 20%	1	1.460	0.67
CSS127P-821M	821	820 ± 20%	1	1.640	0.60
CSS127P-102M	102	1000 ± 20%	1	1.820	0.55

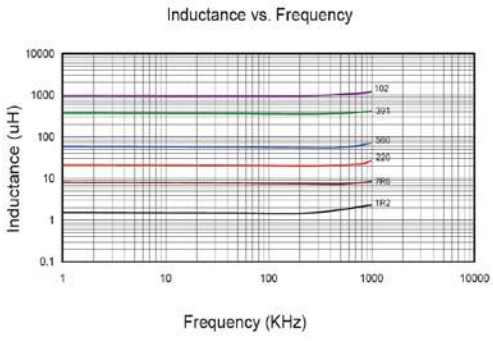
Note: CSS127P-xxx_, "CSS127P" = P/N, "xxx" = Inductance, "_" = Tolerance.

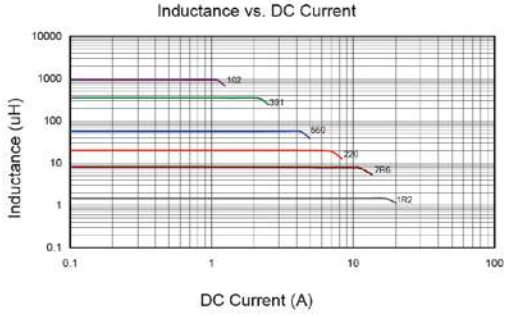
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CSS127P	12.0(0.472)	12.0(0.472)	8.0(0.315)	5.0(0.197)	8.4(0.331)	5.4(0.213)	2.8(0.110)	7.0(0.276)
Tol.	±0.3(0.012)	±0.3(0.012)	Max.	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS124F-SERIES

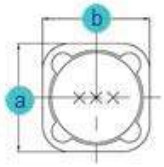
A. Electrical Specifications:

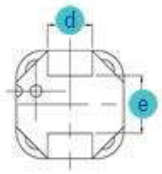
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (mΩ)	Rated Current (A)
CSS124F-3R9M	3R9	3.9	100	15	6.50
CSS124F-4R7M	4R7	4.7	100	18	5.70
CSS124F-6R8M	6R8	6.8	100	23	4.90
CSS124F-8R2M	8R2	8.2	100	26	4.60
CSS124F-100M	100	10	100	28	4.50
CSS124F-120M	120	12	100	38	4.00
CSS124F-150M	150	15	100	50	3.20
CSS124F-180M	180	18	100	57	3.10
CSS124F-220M	220	22	100	66	2.90
CSS124F-270M	270	27	100	80	2.80
CSS124F-330M	330	33	100	97	2.70
CSS124F-390M	390	39	100	132	2.10
CSS124F-470M	470	47	100	150	1.90
CSS124F-560M	560	56	100	190	1.80
CSS124F-680M	680	68	100	220	1.50
CSS124F-820M	820	82	100	260	1.30
CSS124F-101M	101	100	100	308	1.20
CSS124F-121M	121	120	100	380	1.10
CSS124F-151M	151	150	100	530	0.95
CSS124F-181M	181	180	100	620	0.85
CSS124F-221M	221	220	100	700	0.80
CSS124F-271M	271	270	100	870	0.60
CSS124F-331M	331	330	100	990	0.50

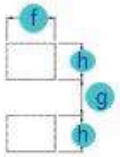
Note: CSS124F-xxx_, "CSS124F" = P/N, "xxx" = Inductance, "_" = Tolerance.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CSS124F	12.0 (0.472)	12.0 (0.472)	4.80 (0.189)	5.0 (0.197)	7.4 (0.291)	5.4 (0.213)	7.0 (0.276)	2.8 (0.110)
Tol.	±0.3 (0.012)	±0.3 (0.012)	Max.	Typ.	Typ.	Typ.	Typ.	Typ.

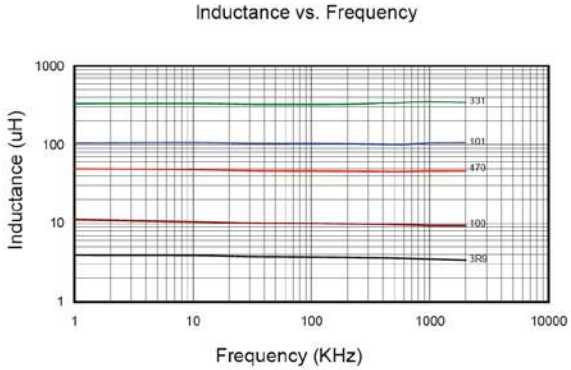


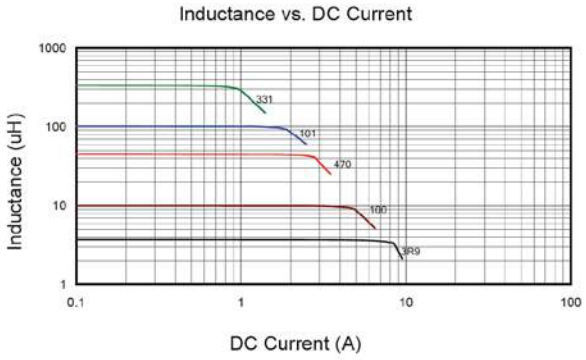




Recommended Patterns

C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS125F-SERIES

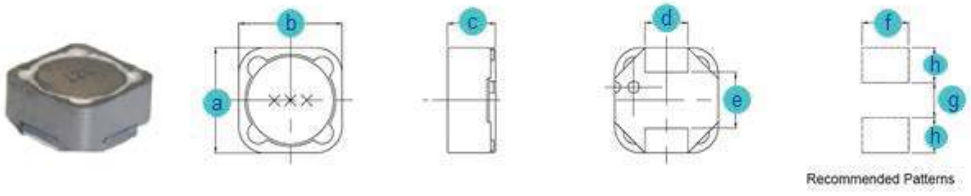
A. Electrical Specifications:

P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSS125F-1R3N	1R3	1.3±30%	100	0.012	8.00
CSS125F-2R1N	2R1	2.1±30%	100	0.014	7.00
CSS125F-3R1N	3R1	3.1±30%	100	0.017	6.00
CSS125F-4R4N	4R4	4.4±30%	100	0.020	5.00
CSS125F-5R8N	5R8	5.8±30%	100	0.021	4.40
CSS125F-7R5N	7R5	7.5±30%	100	0.024	4.20
CSS125F-100M	100	10 ± 20%	1	0.025	4.00
CSS125F-120M	120	12 ± 20%	1	0.027	3.50
CSS125F-150M	150	15 ± 20%	1	0.030	3.30
CSS125F-180M	180	18 ± 20%	1	0.034	3.00
CSS125F-220M	220	22 ± 20%	1	0.036	2.80
CSS125F-270M	270	27 ± 20%	1	0.051	2.30
CSS125F-330M	330	33 ± 20%	1	0.057	2.10
CSS125F-390M	390	39 ± 20%	1	0.068	2.00
CSS125F-470M	470	47 ± 20%	1	0.075	1.80
CSS125F-560M	560	56 ± 20%	1	0.110	1.70
CSS125F-680M	680	68 ± 20%	1	0.120	1.50
CSS125F-820M	820	82 ± 20%	1	0.140	1.40
CSS125F-101M	101	100 ± 20%	1	0.160	1.30
CSS125F-121M	121	120 ± 20%	1	0.170	1.10
CSS125F-151M	151	150 ± 20%	1	0.230	1.00
CSS125F-181M	181	180 ± 20%	1	0.290	0.90
CSS125F-221M	221	220 ± 20%	1	0.400	0.80
CSS125F-271M	271	270 ± 20%	1	0.460	0.75
CSS125F-331M	331	330 ± 20%	1	0.510	0.68
CSS125F-391M	391	390 ± 20%	1	0.690	0.65
CSS125F-471M	471	470 ± 20%	1	0.770	0.58
CSS125F-561M	561	560 ± 20%	1	0.860	0.54
CSS125F-681M	681	680 ± 20%	1	1.200	0.48
CSS125F-821M	821	820 ± 20%	1	1.340	0.43
CSS125F-102M	102	1000 ± 20%	1	1.530	0.40

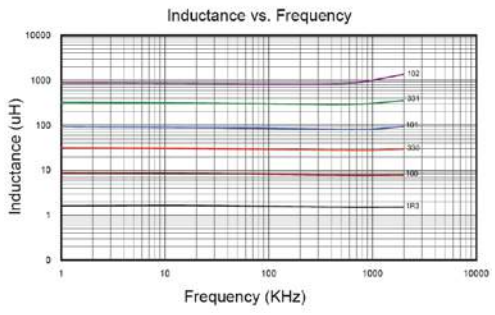
Note: CSS125F-xxx_, "CSS125F" = P/N, "xxx" = Inductance, "_" = Tolerance.

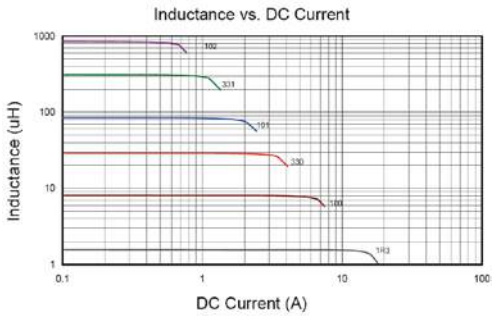
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CSS125F	12.0(0.472)	12.0(0.472)	6.0(0.236)	5.0(0.197)	7.4(0.291)	5.4(0.213)	7.0(0.276)	2.8(0.110)
Tol.	±0.3(0.012)	±0.3(0.012)	Max.	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS127F-SERIES

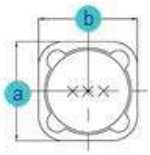
A. Electrical Specifications:

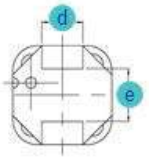
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSS127F-1R2N	1R2	1.2 + 40%, -20%	100	0.0070	9.80
CSS127F-2R4N	2R4	2.4 + 40%, -20%	100	0.0115	8.00
CSS127F-3R5N	3R5	3.5 + 40%, -20%	100	0.0135	7.50
CSS127F-4R7N	4R7	4.7 + 40%, -20%	100	0.0158	6.80
CSS127F-6R1N	6R1	6.1 + 40%, -20%	100	0.0176	6.60
CSS127F-7R6N	7R6	7.6 + 40%, -20%	100	0.0200	5.90
CSS127F-100M	100	10 ± 20%	1	0.0216	5.40
CSS127F-120M	120	12 ± 20%	1	0.0243	4.90
CSS127F-150M	150	15 ± 20%	1	0.0270	4.50
CSS127F-180M	180	18 ± 20%	1	0.0392	3.90
CSS127F-220M	220	22 ± 20%	1	0.0432	3.60
CSS127F-270M	270	27 ± 20%	1	0.0459	3.40
CSS127F-330M	330	33 ± 20%	1	0.0648	3.00
CSS127F-390M	390	39 ± 20%	1	0.0729	2.75
CSS127F-470M	470	47 ± 20%	1	0.1000	2.50
CSS127F-560M	560	56 ± 20%	1	0.110	2.35
CSS127F-680M	680	68 ± 20%	1	0.140	2.10
CSS127F-820M	820	82 ± 20%	1	0.160	1.95
CSS127F-101M	101	100 ± 20%	1	0.220	1.70
CSS127F-121M	121	120 ± 20%	1	0.250	1.60
CSS127F-151M	151	150 ± 20%	1	0.280	1.42
CSS127F-181M	181	180 ± 20%	1	0.350	1.30
CSS127F-221M	221	220 ± 20%	1	0.390	1.16
CSS127F-271M	271	270 ± 20%	1	0.560	1.06
CSS127F-331M	331	330 ± 20%	1	0.640	0.95
CSS127F-391M	391	390 ± 20%	1	0.700	0.88
CSS127F-471M	471	470 ± 20%	1	0.980	0.79
CSS127F-561M	561	560 ± 20%	1	1.070	0.73
CSS127F-681M	681	680 ± 20%	1	1.460	0.67
CSS127F-821M	821	820 ± 20%	1	1.640	0.60
CSS127F-102M	102	1000 ± 20%	1	1.820	0.55

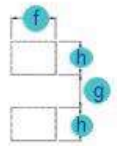
Note: CSS127F-xxx_, "CSS127F" = P/N, "xxx" = Inductance, "_" = Tolerance.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CSS127F	12.0(0.472)	12.0(0.472)	8.0(0.315)	5.0(0.197)	7.4(0.291)	5.4(0.213)	7.0(0.276)	2.8(0.110)
Tol.	±0.3(0.012)	±0.3(0.012)	Max.	Typ.	Typ.	Typ.	Typ.	Typ.



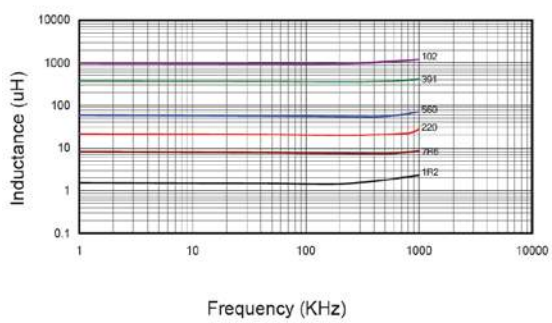




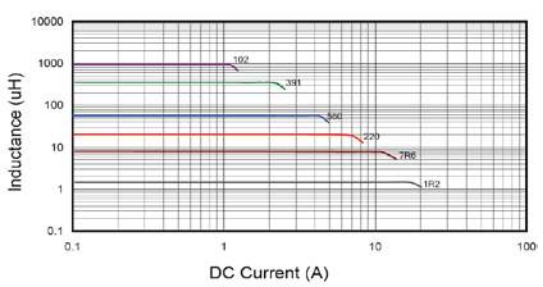
Recommended Patterns

C. Characteristics Curve:

Inductance vs. Frequency



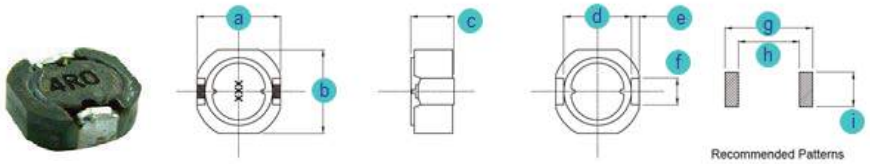
Inductance vs. DC Current



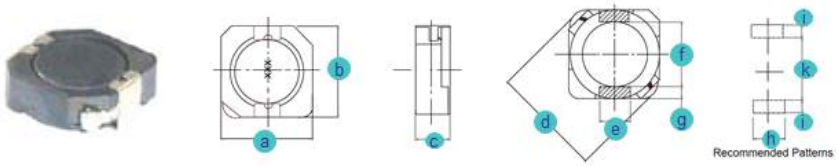
A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS0630G	6.3(0.248)	6.2(0.244)	3.0(0.118)	4.8(0.189)	0.6(0.024)	2.0(0.079)	6.6(0.260)	4.6(0.181)	2.6(0.102)	N/A
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	N/A
CSS1038G	10.3(0.406)	10.4(0.409)	4.0(0.157)	13.5(0.531)	3.0(0.118)	7.7(0.303)	1.2(0.047)	3.2(0.126)	1.6(0.063)	7.3(0.287)
Tol.	Max.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.
CSS1050G	10.3(0.406)	10.5(0.413)	5.1(0.201)	13.5(0.531)	3.0(0.118)	7.7(0.303)	1.2(0.047)	3.2(0.126)	1.6(0.063)	7.3(0.287)
Tol.	Max.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.

B. Mechanical Drawing:



CSS0603G-series



CSS1038G-series & CSS1050G-series

C. General Information:

1. P/N: CSS****G-xxx_, "CSS****G" = Series, "xxx" = Inductance, "_" = Tolerance.
2. Tolerance "_": N: ± 30%, M: ± 20%, L= ± 15%.
3. Operating temperature range: -30ºC to +100ºC (Including self-heating).
4. Storage temperature: -40ºC to +85ºC.
5. Inductance measured using the HP4284A and Chroma1320 & 3302.
6. DCR measured using Chroma 16502 milliohm meter.
7. MSL: Level 1.
8. Inductance and Current range:
   a. CSS0630G: From 1.0µH (3.59A) to 150.0 µH (0.31A).
   b. CSS1038G: From 1.5µH (6.50A) to 330.0 µH (0.52A).
   c. CSS1050G: From 0.80µH (9.50A) to 1000.0 µH (0.42A).

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. PDA, LCD, DVD, BRP, HD.

E. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS0630G-SERIES

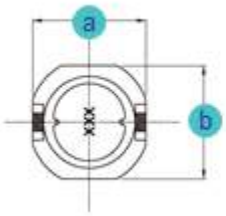
A. Electrical Specifications:

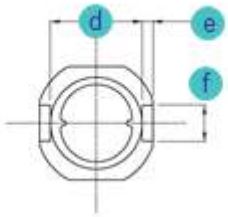
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)	I sat (A)
CSS0630G-1R0G	1R0	1.0	100	0.014	3.59	4.03
CSS0630G-1R5G	1R5	1.5	100	0.016	2.93	3.63
CSS0630G-2R2G	2R2	2.2	100	0.020	2.42	3.30
CSS0630G-3R6G	3R6	3.6	100	0.026	1.89	2.83
CSS0630G-4R7G	4R7	4.7	100	0.033	1.66	2.45
CSS0630G-6R2G	6R2	6.2	100	0.039	1.45	2.20
CSS0630G-100G	100	10	100	0.059	1.14	1.77
CSS0630G-120G	120	12	100	0.063	1.04	1.70
CSS0630G-150G	150	15	100	0.075	0.93	1.55
CSS0630G-180G	180	18	100	0.089	0.85	1.41
CSS0630G-220G	220	22	100	0.115	0.77	1.23
CSS0630G-270G	270	27	100	0.144	0.70	1.08
CSS0630G-330G	330	33	100	0.168	0.63	0.99
CSS0630G-390G	390	39	100	0.180	0.58	0.95
CSS0630G-470G	470	47	100	0.225	0.53	0.84
CSS0630G-560G	560	56	100	0.264	0.48	0.76
CSS0630G-680G	680	68	100	0.324	0.44	0.69
CSS0630G-820G	820	82	100	0.396	0.40	0.61
CSS0630G-101G	101	100	100	0.498	0.36	0.54
CSS0630G-151G	151	150	100	0.738	0.31	0.42

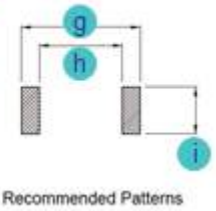
Note: 1. CSS0630G-xxx_, "CSS0630G" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 30% of initial value at rated current, temperature rise Δt < 40°C at rated current.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i
CSS0630G	6.3 (0.248)	6.2 (0.244)	3.0 (0.118)	4.8 (0.189)	0.6 (0.024)	2.0 (0.079)	6.6 (0.260)	4.6 (0.181)	2.6 (0.102)
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.

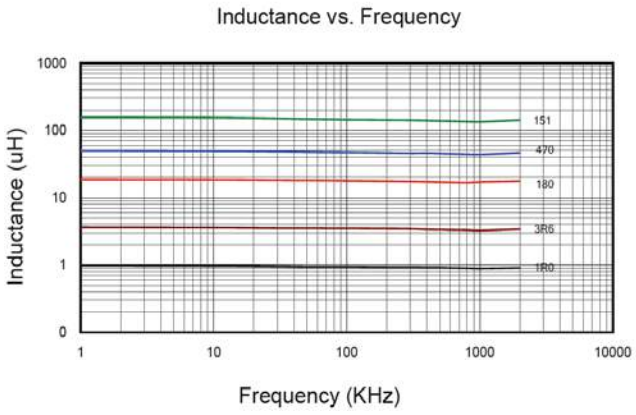


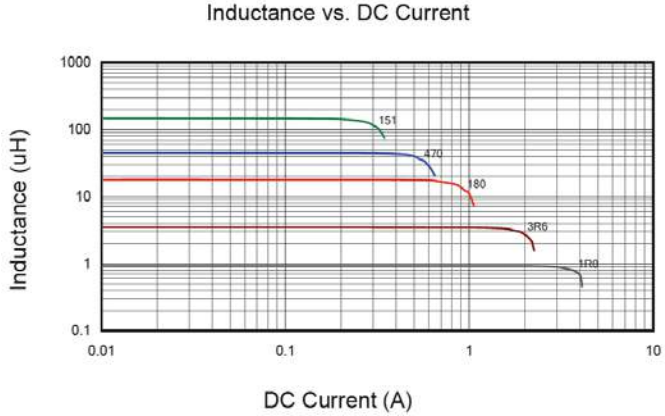




Recommended Patterns

C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS1038G-SERIES

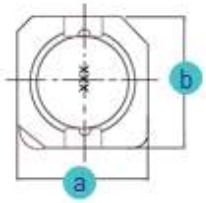
A. Electrical Specifications:

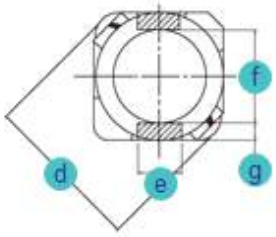
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (mΩ)	Rated Current (Ω)	I sat (A)
CSS1038G-1R5N	1R5	1.5	100	8.1	6.50	10.0
CSS1038G-2R5N	2R5	2.5	100	10.5	6.10	7.50
CSS1038G-3R8N	3R8	3.8	100	13	5.50	6.00
CSS1038G-5R2N	5R2	5.2	100	22	5.40	5.50
CSS1038G-6R8N	6R8	6.8	100	25	4.50	4.80
CSS1038G-7R0N	7R0	7.0	100	27	4.50	4.80
CSS1038G-100N	100	10	100	35	3.80	4.40
CSS1038G-150N	150	15	100	50	3.10	3.60
CSS1038G-220N	220	22	100	73	2.50	2.90
CSS1038G-330N	330	33	100	93	2.20	2.30
CSS1038G-470N	470	47	100	128	1.90	2.10
CSS1038G-680N	680	68	100	213	1.42	1.50
CSS1038G-101N	101	100	100	304	1.25	1.35
CSS1038G-151N	151	150	100	506	0.85	1.15
CSS1038G-221N	221	220	100	756	0.70	0.92
CSS1038G-331N	331	330	100	1090	0.52	0.70

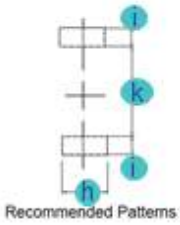
Note: 1. CSS1038G-xxx_, "CSS1038G" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 35% of initial value at Isat, temperature rise Δt < 30ºC at rated current.

B. Dimensions: mm (Inch)

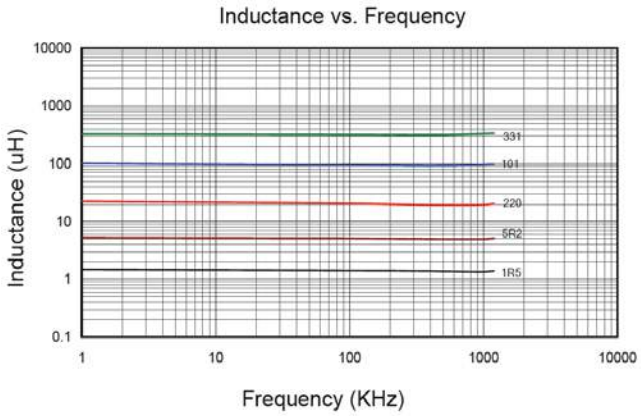
Series	a	b	c	d	e	f	g	h	i	k
CSS1038G	10.3 (0.406)	10.4 (0.409)	4.0 (0.157)	13.5 (0.531)	3.0 (0.118)	7.7 (0.303)	1.2 (0.047)	3.2 (0.126)	1.6 (0.063)	7.3 (0.287)
Tol.	Max.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.

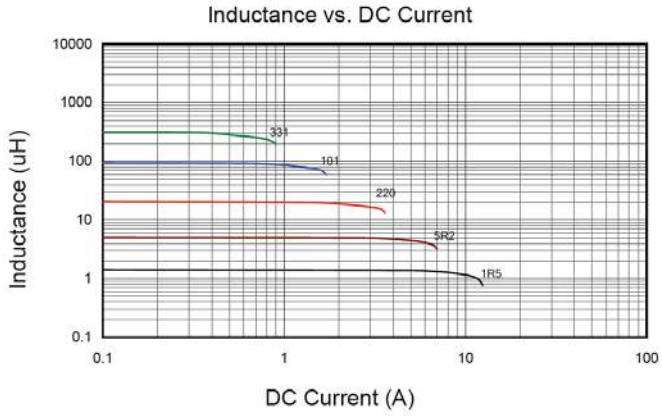






C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS1050G-SERIES

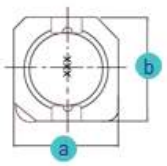
A. Electrical Specifications:

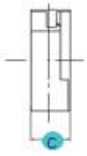
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (mΩ)	Rated Current (A)	I sat (A)
CSS1050G-R80N	R80	0.80	100	4.3	9.50	13.5
CSS1050G-1R5N	1R5	1.50	100	5.8	8.30	10.5
CSS1050G-2R2N	2R2	2.20	100	7.2	7.50	9.25
CSS1050G-3R3N	3R3	3.30	100	10.4	6.50	7.80
CSS1050G-4R7N	4R7	4.70	100	12.3	6.10	6.40
CSS1050G-6R8N	6R8	6.80	100	18.0	5.40	5.40
CSS1050G-8R2N	8R2	8.20	100	20.0	5.00	4.85
CSS1050G-100N	100	10.0	100	26.0	4.50	4.45
CSS1050G-120N	120	12.0	100	33.0	3.80	4.00
CSS1050G-150N	150	15.0	100	41.0	3.40	3.60
CSS1050G-180N	180	18.0	100	46.0	3.10	3.20
CSS1050G-220N	220	22.0	100	61.0	2.90	2.95
CSS1050G-270N	270	27.0	100	69.0	2.60	2.70
CSS1050G-330N	330	33.0	100	84.0	2.50	2.40
CSS1050G-390N	390	39.0	100	106.0	2.25	2.30
CSS1050G-470N	470	47.0	100	130.0	2.00	2.00
CSS1050G-560N	560	56.0	100	149.0	1.90	1.90
CSS1050G-680N	680	68.0	100	201.0	1.60	1.65
CSS1050G-820N	820	82.0	100	227.0	1.45	1.50
CSS1050G-101N	101	100	100	253.0	1.35	1.35
CSS1050G-121N	121	120	100	303.0	1.18	1.28
CSS1050G-151N	151	150	100	370.0	1.10	1.12
CSS1050G-181N	181	180	100	419.0	1.00	1.04
CSS1050G-221N	221	220	100	500.0	0.94	0.94
CSS1050G-271N	271	270	100	672.0	0.80	0.84
CSS1050G-331N	331	330	100	812.0	0.73	0.75
CSS1050G-391N	391	390	100	953.0	0.70	0.70
CSS1050G-471N	471	470	100	1289	0.54	0.60
CSS1050G-561N	561	560	100	1430	0.52	0.54
CSS1050G-681N	681	680	100	1599	0.51	0.52
CSS1050G-821N	821	820	100	1768	0.48	0.50
CSS1050G-102N	102	1000	100	1989	0.42	0.48

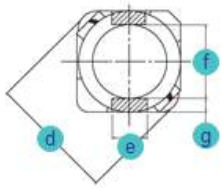
Note: 1. CSS1050G-xxx_, "CSS1050G" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 35% of initial value at Isat, temperature rise Δt < 40ºC at rated current.

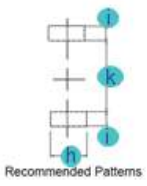
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS1050G	10.3(0.406)	10.5(0.413)	5.1(0.201)	13.5(0.531)	3.0(0.118)	7.7(0.303)	1.2(0.047)	3.2(0.126)	1.6(0.063)	7.3(0.287)
Tol.	Max.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.

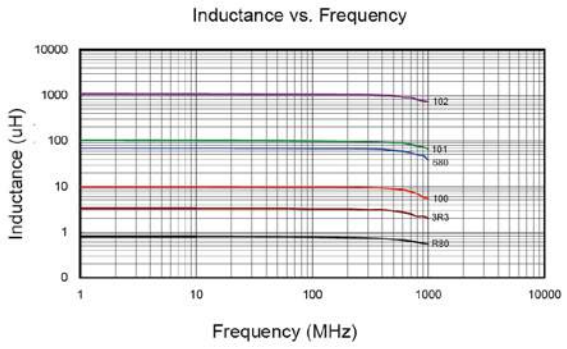


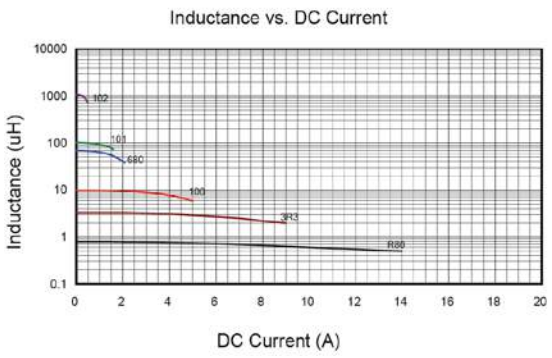






C. Characteristics Curve:



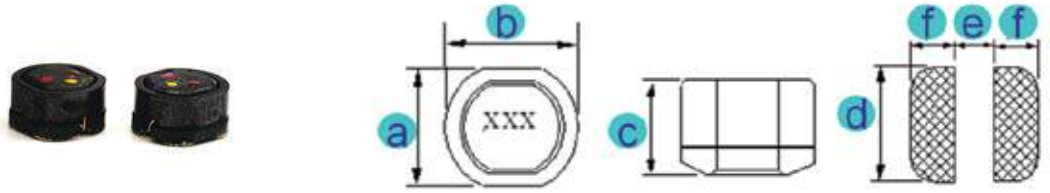


SMD POWER INDUCTORS (SHIELDED)
CSS***D-SERIES

A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f
CSS054D	7.0(0.276)	7.5(0.295)	4.5(0.177)	7.5(0.295)	2.0(0.079)	4.0(0.157)
Tol.	±0.35(0.014)	±0.35(0.014)	±0.4(0.016)	Typ.	Typ.	Typ.
CSS063D	5.6(0.220)	6.2(0.244)	3.2(0.126)	5.5(0.217)	1.7(0.067)	2.25(0.089)
Tol.	±0.3(0.012)	±0.3(0.012)	±0.3(0.012)	Typ.	Typ.	Typ.
CSS075D	9.0(0.354)	10.0(0.394)	5.0(0.197)	9.5(0.0.374)	2.5(0.098)	5.0(0.197)
Tol.	±0.4(0.016)	±0.4(0.016)	±0.5(0.020)	Typ.	Typ.	Typ.
CSS105D	11.6(0.457)	12.6(0.496)	5.4(0.213)	9.5(0.0.374)	2.5(0.098)	5.0(0.197)
Tol.	±0.5(0.020)	±0.5(0.020)	±0.5(0.020)	Typ.	Typ.	Typ.

B. Mechanical Drawing:



CSS***D

C. General Information:

1. P/N: CSS***D-xxx_, "CSS***D" = Series, "xxx" = Inductance, "_" = Tolerance.
2. Tolerance "_": ≥10uH M: ± 20%
3. <10uH 30%
4. Operating temperature range: -25ºC to +85ºC (Including self-heating).
5. Inductance measured using the HP4284A LCR meter.
6. DCR measured using 502BC milli-ohm meter.
7. Inductance drop no more than 10% of initial value at rated current, temperature rise Δt < 40ºC.
8. MSL: Level 1.
9. Inductance and Current range:
   a. CSS054D: From 10uH(1.65A) to 270uH(0.33A).
   b. CSS063D: From 10uH(1.00A) to 68uH(0.42A).
   c. CSS075D: From 10uH(2.06A) to 470uH(0.33A).
   d. CSS105D: From 10uH(2.65A) to 820uH(0.36A).

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. PDA, LCD, DVD, BRP, HD

E. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS054D-SERIES

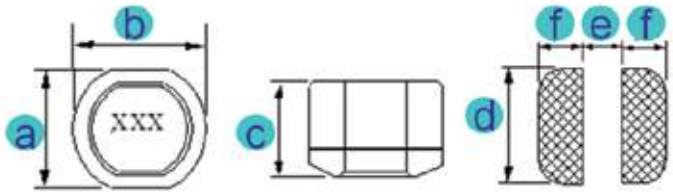
A. Electrical Specifications:

P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A) Max.
CSS054D-100_	100	10	100	0.07	1.65
CSS054D-120_	120	12	100	0.07	1.57
CSS054D-150_	150	15	100	0.08	1.39
CSS054D-180_	180	18	100	0.10	1.29
CSS054D-220_	220	22	100	0.13	1.12
CSS054D-270_	270	27	100	0.16	1.06
CSS054D-330_	330	33	100	0.18	0.97
CSS054D-390_	390	39	100	0.18	0.91
CSS054D-470_	470	47	100	0.27	0.80
CSS054D-560_	560	56	100	0.29	0.76
CSS054D-680_	680	68	100	0.33	0.68
CSS054D-820_	820	82	100	0.43	0.62
CSS054D-101_	101	100	10	0.49	0.55
CSS054D-121_	121	120	10	0.68	0.49
CSS054D-151_	151	150	10	0.94	0.44
CSS054D-181_	181	180	10	1.00	0.40
CSS054D-221_	221	220	10	1.18	0.36
CSS054D-271_	271	270	10	1.30	0.33

Note: CSS054D-xxx_, "CSS054D" = P/N, "xxx" = Inductance, "_" = Tolerance.

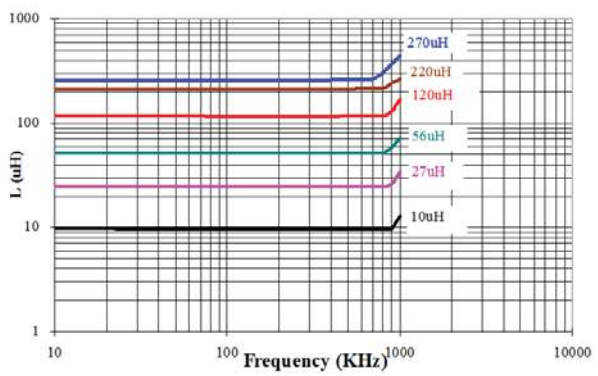
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f
CSS054D	7.0 (0.276)	7.5 (0.295)	4.5 (0.177)	7.5 (0.295)	2.0 (0.079)	4.0 (0.157)
Tol.	±0.35 (0.014)	±0.35 (0.014)	±0.4 (0.016)	Typ.	Typ.	Typ.

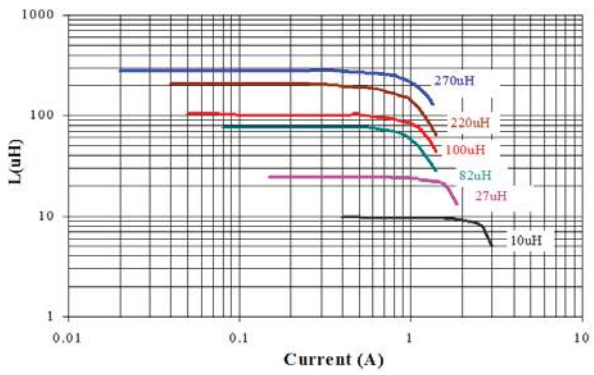


C. Characteristics Curve:

L vs. Frequency:



L vs. Current:



SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS063D-SERIES

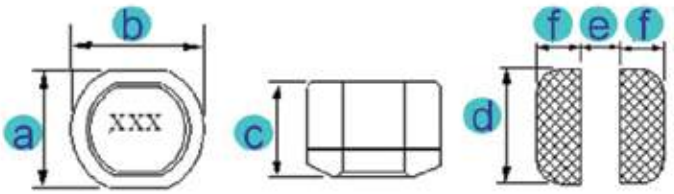
A. Electrical Specifications:

P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A) Max.
CSS063D-100_	100	10	100	0.14	1.00
CSS063D-120_	120	12	100	0.16	0.94
CSS063D-150_	150	15	100	0.18	0.86
CSS063D-180_	180	18	100	0.25	0.78
CSS063D-220_	220	22	100	0.32	0.76
CSS063D-270_	270	27	100	0.36	0.64
CSS063D-330_	330	33	100	0.41	0.61
CSS063D-390_	390	39	100	0.47	0.53
CSS063D-470_	470	47	100	0.51	0.50
CSS063D-560_	560	56	100	0.72	0.46
CSS063D-680_	680	68	100	0.82	0.42

Note: CSS063D-xxx_, "CSS063D" = P/N, "xxx" = Inductance, "_" = Tolerance.

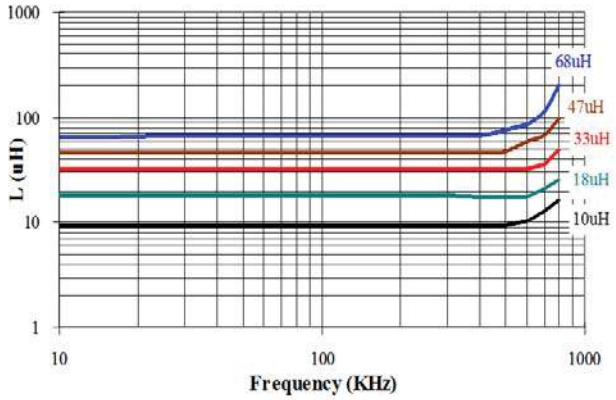
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f
CSS063D	5.6 (0.220)	6.2 (0.244)	3.2 (0.126)	5.5 (0.217)	1.7 (0.067)	2.25 (0.089)
Tol.	±0.3 (0.012)	±0.3 (0.012)	±0.3 (0.012)	Typ.	Typ.	Typ.

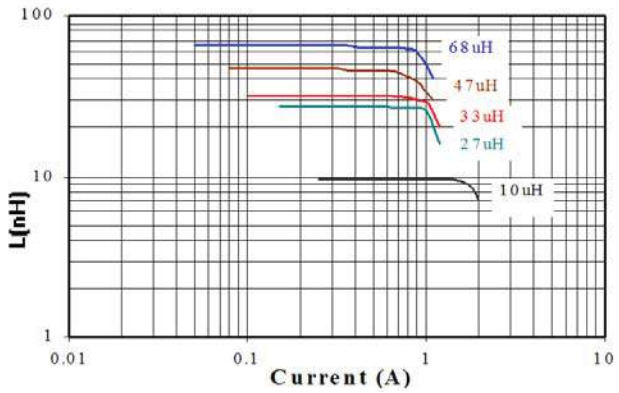


C. Characteristics Curve:

L vs. Frequency:



L vs. Current:



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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS075D-SERIES

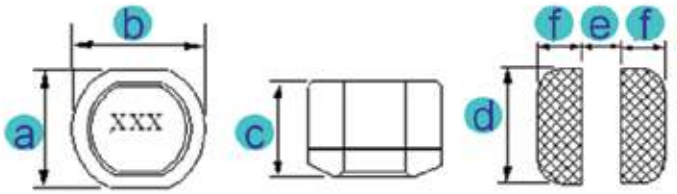
A. Electrical Specifications:

P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A) Max.
CSS075D-100_	100	10	100	0.06	2.06
CSS075D-120_	120	12	100	0.07	1.94
CSS075D-150_	150	15	100	0.07	1.72
CSS075D-180_	180	18	100	0.08	1.58
CSS075D-220_	220	22	100	0.08	1.42
CSS075D-270_	270	27	100	0.10	1.32
CSS075D-330_	330	33	100	0.11	1.16
CSS075D-390_	390	39	100	0.12	1.10
CSS075D-470_	470	47	100	0.14	1.00
CSS075D-560_	560	56	100	0.19	0.93
CSS075D-680_	680	68	100	0.21	0.85
CSS075D-820_	820	82	100	0.28	0.79
CSS075D-101_	101	100	10	0.34	0.72
CSS075D-121_	121	120	10	0.37	0.63
CSS075D-151_	151	150	10	0.51	0.55
CSS075D-181_	181	180	10	0.57	0.50
CSS075D-221_	221	220	10	0.78	0.47
CSS075D-271_	271	270	10	0.87	0.41
CSS075D-331_	331	330	10	1.20	0.37
CSS075D-391_	391	390	10	1.34	0.35
CSS075D-471_	471	470	10	1.50	0.33

Note: CSS075D-xxx_, "CSS075D" = P/N, "xxx" = Inductance, "_" = Tolerance.

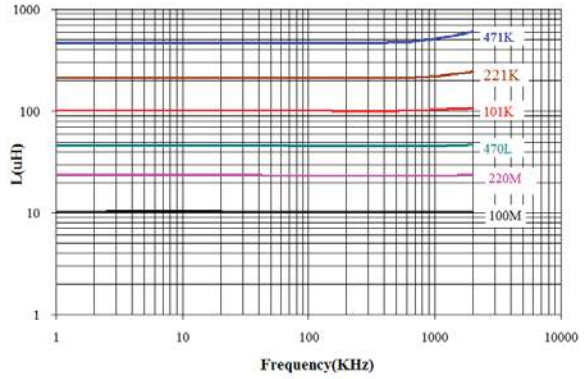
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f
CSS075D	9.0 (0.354)	10.0 (0.394)	5.0 (0.197)	9.5 (0.0.374)	2.5 (0.098)	5.0 (0.197)
Tol.	±0.4 (0.016)	±0.4 (0.016)	±0.5 (0.020)	Typ.	Typ.	Typ.

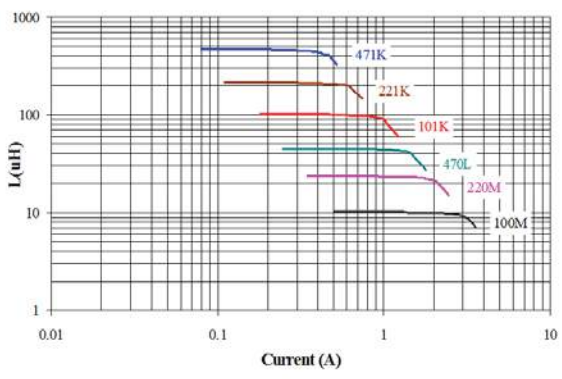


C. Characteristics Curve:

L vs. Frequency:



L vs. Current:



SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS105D-SERIES

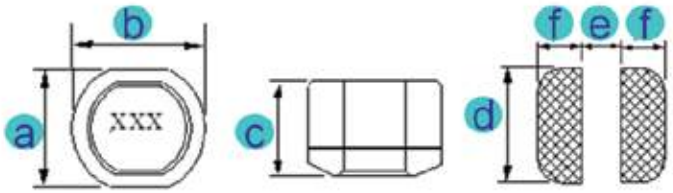
A. Electrical Specifications:

P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A) Max.
CSS105D-100_	100	10	100	0.05	2.65
CSS105D-120_	120	12	100	0.05	2.50
CSS105D-150_	150	15	100	0.06	2.45
CSS105D-180_	180	18	100	0.06	2.40
CSS105D-220_	220	22	100	0.07	2.20
CSS105D-270_	270	27	100	0.08	2.00
CSS105D-330_	330	33	100	0.10	1.80
CSS105D-390_	390	39	100	0.11	1.65
CSS105D-470_	470	47	100	0.12	1.50
CSS105D-560_	560	56	100	0.15	1.38
CSS105D-680_	680	68	100	0.17	1.26
CSS105D-820_	820	82	100	0.20	1.14
CSS105D-101_	101	100	10	0.25	1.05
CSS105D-121_	121	120	10	0.28	0.95
CSS105D-151_	151	150	10	0.40	0.85
CSS105D-181_	181	180	10	0.48	0.77
CSS105D-221_	221	220	10	0.52	0.70
CSS105D-271_	271	270	10	0.70	0.63
CSS105D-331_	331	330	10	0.80	0.57
CSS105D-391_	391	390	10	1.08	0.52
CSS105D-471_	471	470	10	1.20	0.48
CSS105D-561_	561	560	10	1.34	0.44
CSS105D-681_	681	680	10	1.78	0.40
CSS105D-821_	821	820	10	2.00	0.36

Note: CSS105D-xxx_, "CSS105D" = P/N, "xxx" = Inductance, "_" = Tolerance.

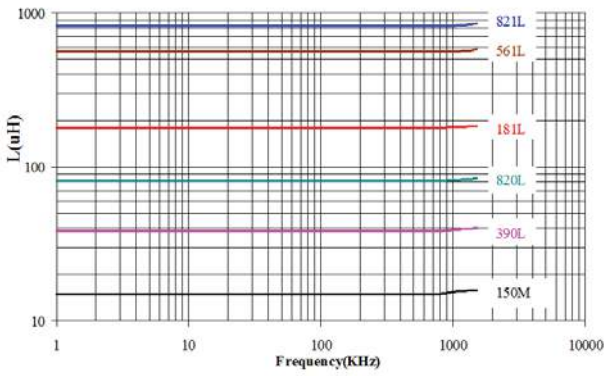
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f
CSS105D	11.6 (0.457)	12.6 (0.496)	5.4 (0.213)	9.5 (0.0.374)	2.5 (0.098)	5.0 (0.197)
Tol.	±0.5 (0.020)	±0.5 (0.020)	±0.5 (0.020)	Typ.	Typ.	Typ.

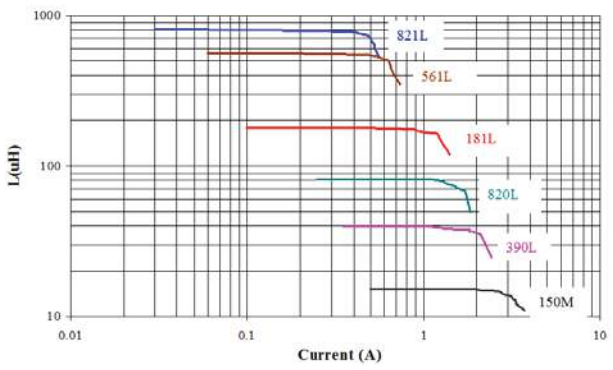


C. Characteristics Curve:

L vs. Frequency:



L vs. Current:



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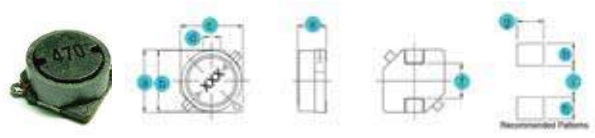
SMD POWER INDUCTORS (SHIELDED)
CSS***F-SERIES

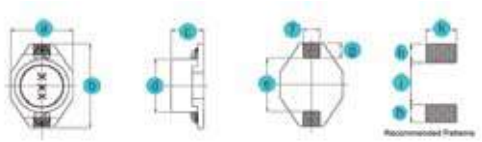
A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k	Type
CSS073F	7.6(0.299)	6.8(0.268)	7.6(0.299)	2.0(0.079)	3.5(0.138)	3.9(0.154)	3.0(0.118)	2.5(0.098)	3.5(0.138)	N/A	1
Tol.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Typ.	Typ.	Typ.	N/A	
CSS075F	7.6(0.299)	6.8(0.268)	7.6(0.299)	2.0(0.079)	5.1(0.201)	3.9(0.154)	3.0(0.118)	2.5(0.098)	3.5(0.138)	N/A	1
Tol.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Typ.	Typ.	Typ.	N/A	
CSS084F	9.4(0.370)	12.95(0.510)	5.08(0.200)	8.38(0.330)	7.6(0.299)	2.5(0.098)	2.5(0.098)	2.92(0.115)	7.37(0.290)	2.79(0.110)	2
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
CSS136F	15.24(0.600)	18.54(0.730)	7.62(0.300)	12.7(0.500)	13.0(0.512)	2.5(0.098)	2.5(0.098)	2.92(0.115)	12.45(0.490)	3.1(0.122)	2
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	

B. Mechanical Drawing:



Type-1 CSS***F



Type-2 CSS***F

C. General Information:

1. P/N: CSS***F-xxx_, "CSS***F" = Series, "xxx" = Inductance, "_" = Tolerance.
2. Tolerance "_": N = ±30%, M: ± 20%, L= ± 15%, K = ±10%.
3. Operating temperature range: -30ºC to +100ºC (Including self-heating).
4. Storage temperature: -40ºC to +85ºC.
5. Inductance measured using the HP4284A and Chroma1320 & 3302.
6. DCR measured using Chroma 16502 milliohm meter.
7. Inductance drop no more than 10% of initial value at rated current, temperature rise $\Delta t < 40$ºC.
8. MSL: Level 1.
9. Inductance and Current range:
   a. CSS073F: From 1.0µH (3.12A) to 100.0 µH (0.41A).
   b. CSS075F: From 1.0µH (2.88A) to 560.0 µH (0.22A).
   c. CSS084F: From 1.0µH (5.0A) to 47.0 µH (0.8A).
   d. CSS136F: From 10.0µH (3.90A) to 1000.0 µH (0.53A).

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. PDA, LCD, DVD, BRP, HD

E. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS073F-SERIES

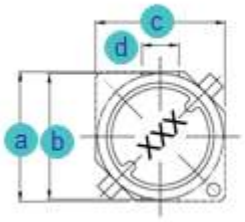
A. Electrical Specifications:

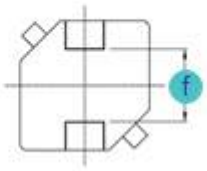
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSS073F-1R0M	1R0	1.0	100	0.019	3.12
CSS073F-1R5M	1R5	1.5	100	0.023	2.85
CSS073F-2R2M	2R2	2.2	100	0.028	2.66
CSS073F-3R3M	3R3	3.3	100	0.035	2.26
CSS073F-4R7M	4R7	4.7	100	0.043	1.96
CSS073F-6R8M	6R8	6.8	100	0.055	1.76
CSS073F-100M	100	10	100	0.080	1.34
CSS073F-120M	120	12	100	0.090	1.23
CSS073F-150M	150	15	100	0.120	1.09
CSS073F-180M	180	18	100	0.130	0.99
CSS073F-220M	220	22	100	0.150	0.90
CSS073F-270M	270	27	100	0.210	0.81
CSS073F-330M	330	33	100	0.250	0.72
CSS073F-390M	390	39	100	0.310	0.67
CSS073F-470M	470	47	100	0.350	0.60
CSS073F-560M	560	56	100	0.430	0.55
CSS073F-680M	680	68	100	0.520	0.50
CSS073F-820M	820	82	100	0.600	0.46
CSS073F-101M	101	100	100	0.790	0.41

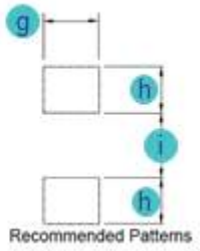
Note: CSS073F-xxx_, "CSS073F" = P/N, "xxx" = Inductance, "_" = Tolerance.

B. Dimensions: mm (Inch)

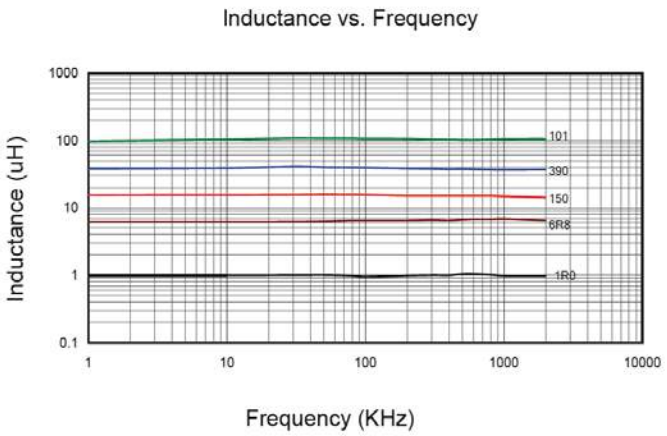
Series	a	b	c	d	e	f	g	h	i
CSS073F	7.6 (0.299)	6.8 (0.268)	7.6 (0.299)	2.0 (0.079)	3.5 (0.138)	3.9 (0.154)	3.0 (0.118)	2.5 (0.098)	3.5 (0.138)
Tol.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Typ.	Typ.	Typ.

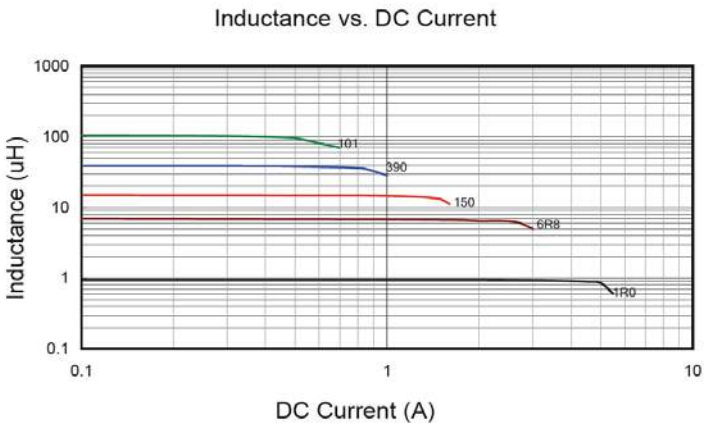






C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS075F-SERIES

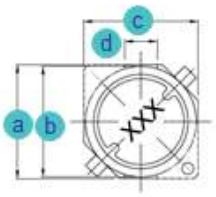
A. Electrical Specifications:

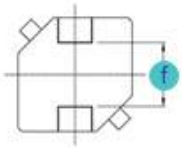
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSS075F-1R0M	1R0	1.0	100	0.023	2.88
CSS075F-1R5M	1R5	1.5	100	0.027	2.61
CSS075F-2R2M	2R2	2.2	100	0.030	2.46
CSS075F-3R3M	3R3	3.3	100	0.035	2.28
CSS075F-4R7M	4R7	4.7	100	0.041	2.08
CSS075F-6R8M	6R8	6.8	100	0.047	1.94
CSS075F-100M	100	10.0	100	0.050	1.68
CSS075F-120M	120	12.0	100	0.070	1.54
CSS075F-150M	150	15.0	100	0.080	1.39
CSS075F-180M	180	18.0	100	0.090	1.26
CSS075F-220M	220	22.0	100	0.110	1.13
CSS075F-270M	270	27.0	100	0.150	1.02
CSS075F-330M	330	33.0	100	0.170	0.84
CSS075F-390M	390	39.0	100	0.180	0.80
CSS075F-470M	470	47.0	100	0.200	0.76
CSS075F-560M	560	56.0	100	0.280	0.64
CSS075F-680M	680	68.0	100	0.320	0.60
CSS075F-820M	820	82.0	100	0.350	0.57
CSS075F-101M	101	100.0	100	0.400	0.50
CSS075F-121M	121	120.0	100	0.440	0.47
CSS075F-151M	151	150.0	100	0.730	0.40
CSS075F-181M	181	180.0	100	0.780	0.39
CSS075F-221M	221	220.0	100	0.940	0.33
CSS075F-271M	271	270.0	100	1.250	0.31
CSS075F-331M	331	330.0	100	1.400	0.27
CSS075F-391M	391	390.0	100	1.520	0.27
CSS075F-471M	471	470.0	100	1.700	0.25
CSS075F-561M	561	560.0	100	2.390	0.22

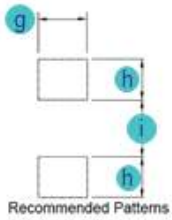
Note: CSS075F-xxx_, "CSS075F" = P/N, "xxx" = Inductance, "_" = Tolerance.

B. Dimensions: mm (Inch)

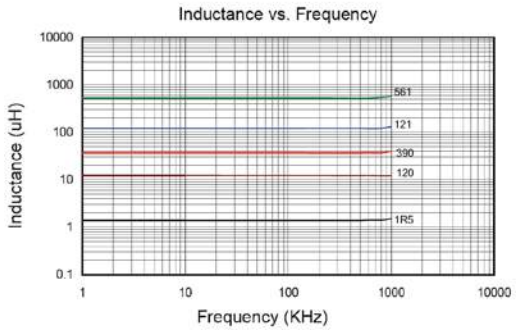
Series	a	b	c	d	e	f	g	h	i
CSS075F	7.6(0.299)	6.8(0.268)	7.6(0.299)	2.0(0.079)	5.1(0.201)	3.9(0.154)	3.0(0.118)	2.5(0.098)	3.5(0.138)
Tol.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Typ.	Typ.	Typ.

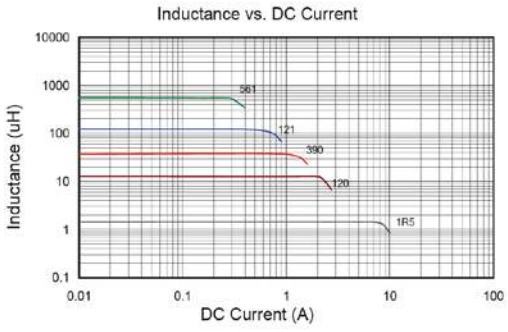






C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS084F-SERIES

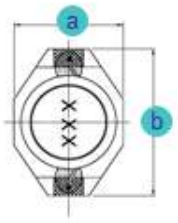
A. Electrical Specifications:

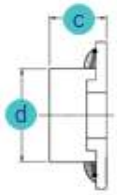
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)	I sat (A)
CSS084F-1R0M	1R0	1.0	100	0.021	5.0	5.6
CSS084F-1R5M	1R5	1.5	100	0.022	4.5	5.2
CSS084F-2R2M	2R2	2.2	100	0.032	3.8	5.0
CSS084F-3R3M	3R3	3.3	100	0.039	3.3	3.9
CSS084F-4R7M	4R7	4.7	100	0.054	2.7	3.2
CSS084F-6R8M	6R8	6.8	100	0.075	2.2	2.8
CSS084F-100M	100	10.0	100	0.101	2.0	2.4
CSS084F-150M	150	15.0	100	0.150	1.5	2.0
CSS084F-220M	220	22.0	100	0.207	1.3	1.6
CSS084F-330M	330	33.0	100	0.334	1.1	1.4
CSS084F-470M	470	47.0	100	0.472	0.8	1.0

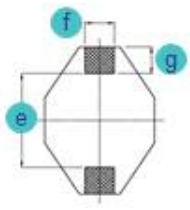
Note: CSS084F-xxx_, "CSS084F" = P/N, "xxx" = Inductance, "_" = Tolerance.

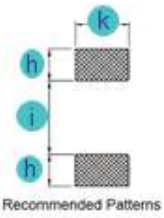
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS084F	9.4 (0.370)	12.95 (0.510)	5.08 (0.200)	8.38 (0.330)	7.6 (0.299)	2.5 (0.098)	2.5 (0.098)	2.92 (0.115)	7.37 (0.290)	2.79 (0.110)
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.

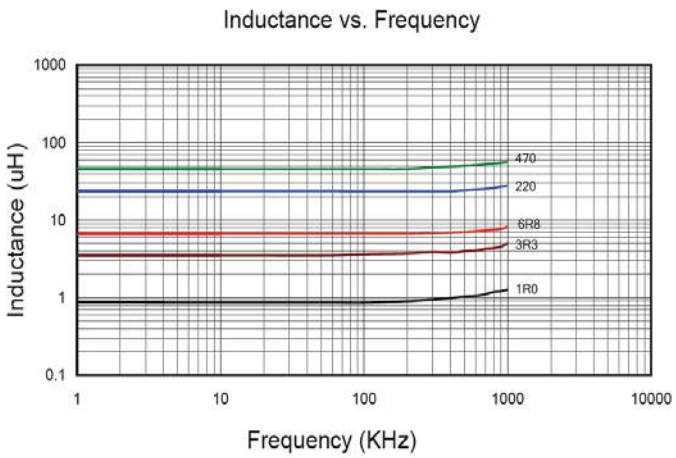


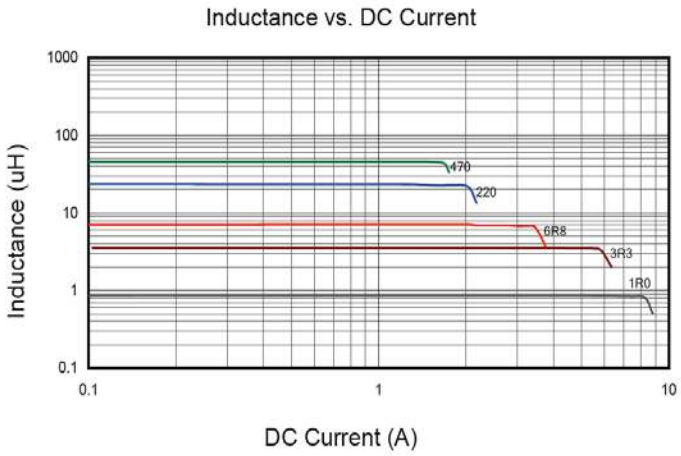






C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS136F-SERIES

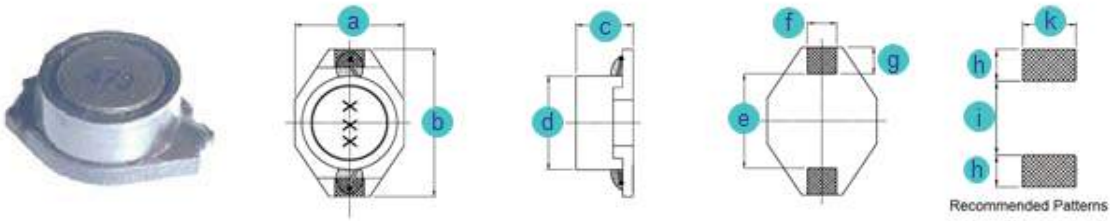
A. Electrical Specifications:

P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSS136F-100M	100	10	100	0.040	3.90
CSS136F-150M	150	15	100	0.048	3.40
CSS136F-220M	220	22	100	0.059	3.10
CSS136F-330M	330	33	100	0.075	2.80
CSS136F-470M	470	47	100	0.097	2.40
CSS136F-680M	680	68	100	0.138	2.00
CSS136F-101M	101	100	100	0.207	1.70
CSS136F-151M	151	150	100	0.293	1.30
CSS136F-221M	221	220	100	0.470	1.10
CSS136F-331M	331	330	100	0.780	0.86
CSS136F-471M	471	470	100	1.080	0.73
CSS136F-681M	681	680	100	1.400	0.64
CSS136F-102M	102	1000	100	2.010	0.53

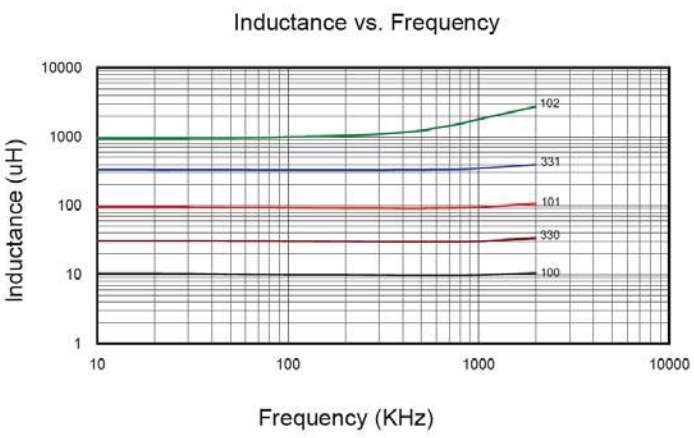
Note: CSS136F-xxx_, "CSS136F" = P/N, "xxx" = Inductance, "_" = Tolerance.

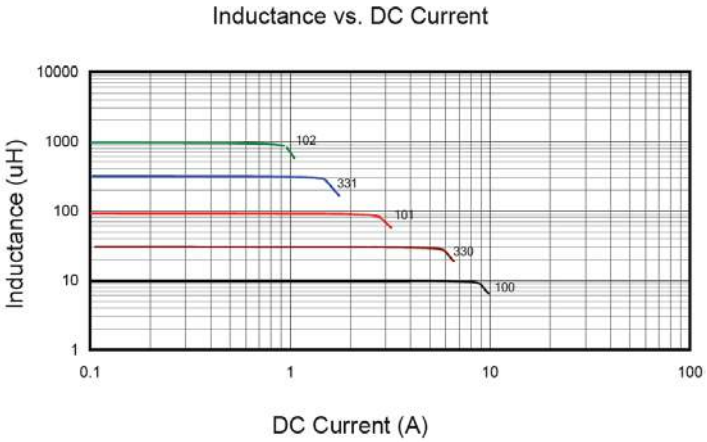
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS136F	15.24 (0.600)	18.54 (0.730)	7.62 (0.300)	12.7 (0.500)	13.0 (0.512)	2.5 (0.098)	2.5 (0.098)	2.92 (0.115)	12.45 (0.490)	3.1 (0.122)
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:



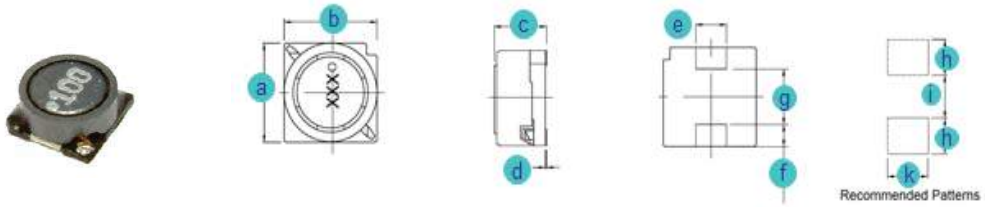


SMD POWER INDUCTORS (SHIELDED)
CSS****F-SERIES

A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS0625F	6.0(0.236)	6.0(0.236)	2.5(0.098)	0.1(0.004)	2.0(0.079)	0.9(0.035)	4.9(0.193)	1.5(0.059)	4.0(0.157)	2.2(0.087)
Tol.	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	Typ.	±0.1(0.004)	Typ.	Typ.	Typ.	Typ.	Typ.
CSS0628F	6.0(0.236)	6.0(0.236)	2.8(0.110)	0.05(0.002)	2.0(0.079)	0.9(0.035)	4.0(0.157)	1.5(0.059)	4.0(0.157)	2.2(0.087)
Tol.	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	Typ.	±0.1(0.004)	Typ.	Typ.	Typ.	Typ.	Typ.
CSS0728F	7.0(0.276)	7.0(0.276)	2.8(0.110)	0.1(0.004)	2.0(0.079)	0.9(0.035)	4.9(0.193)	1.5(0.059)	4.9(0.193)	2.2(0.087)
Tol.	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	Typ.	±0.1(0.004)	Typ.	Typ.	Typ.	Typ.	Typ.
CSS0730F	7.0(0.276)	7.0(0.276)	3.0(0.118)	0.1(0.004)	2.0(0.079)	0.9(0.035)	4.9(0.193)	1.5(0.059)	4.9(0.193)	2.2(0.087)
Tol.	±0.2(0.008)	±0.2(0.008)	±0.22(0.009)	Typ.	±0.1(0.004)	Typ.	Typ.	Typ.	Typ.	Typ.
CSS0732F	7.0(0.276)	7.0(0.276)	3.2(0.126)	0.1(0.004)	2.0(0.079)	0.9(0.035)	4.9(0.193)	1.5(0.059)	4.9(0.193)	2.2(0.087)
Tol.	±0.2(0.008)	±0.2(0.008)	±0.2(0.008)	Typ.	±0.1(0.004)	Typ.	Typ.	Typ.	Typ.	Typ.
CSS0745F	7.0(0.276)	7.0(0.276)	4.5(0.177)	0.1(0.004)	2.0(0.079)	0.9(0.035)	4.9(0.193)	1.5(0.059)	4.9(0.193)	2.2(0.087)
Tol.	±0.2(0.008)	±0.2(0.008)	±0.3(0.012)	Typ.	±0.1(0.004)	Typ.	Typ.	Typ.	Typ.	Typ.
CSS1045F	10.1(0.398)	10.1(0.398)	4.5(0.177)	0.15(0.006)	3.0(0.118)	2.0(0.079)	6.0(0.236)	2.5(0.098)	5.6(0.220)	3.2(0.126)
Tol.	±0.3(0.012)	±0.3(0.012)	±0.3(0.012)	Typ.	±0.1(0.004)	±0.15(0.006)	±0.2(0.008)	Typ.	Typ.	Typ.
CSS1355F	12.5(0.492)	12.5(0.492)	5.5(0.217)	0.15(0.006)	3.0(0.118)	2.0(0.079)	8.6(0.339)	2.5(0.098)	8.6(0.339)	3.2(0.126)
Tol.	±0.3(0.012)	±0.3(0.012)	±0.35(0.014)	Typ.	±0.1(0.004)	±0.15(0.006)	±0.3(0.012)	Typ.	Typ.	Typ.
CSS1365F	12.5(0.492)	12.5(0.492)	6.5(0.256)	0.1(0.004)	3.0(0.118)	2.0(0.079)	8.6(0.339)	2.5(0.098)	8.6(0.339)	3.2(0.126)
Tol.	±0.3(0.012)	±0.3(0.012)	±0.35(0.014)	Typ.	±0.1(0.004)	±0.15(0.006)	±0.3(0.012)	Typ.	Typ.	Typ.
CSS1375F	12.5(0.492)	12.5(0.492)	7.5(0.295)	0.15(0.006)	3.0(0.118)	2.0(0.079)	8.6(0.339)	2.5(0.098)	8.6(0.339)	3.2(0.126)
Tol.	±0.3(0.012)	±0.3(0.012)	±0.35(0.014)	Typ.	±0.1(0.004)	±0.15(0.006)	±0.3(0.012)	Typ.	Typ.	Typ.

B. Mechanical Drawing:



CSS****F

C. General Information:

1. P/N: CSS****F-xxx_, "CSS****F" = Series, "xxx" = Inductance, "_" = Tolerance.
2. Tolerance "_": N: ± 30%, M: ± 20%.
3. Operating temperature range: -30ºC to +100ºC (Including self-heating).
4. Storage temperature: -40ºC to +85ºC.
5. Inductance measured using the HP4284A and Chroma1320 & 3302.
6. DCR measured using Chroma 16502 milliohm meter.
7. MSL: Level 1.
8. Inductance and Current range:
   a. CSS0625F: From 4.7 µH (1.50A) to 100.0 µH (0.33A).
   b. CSS0628F: From 4.7 µH (1.60A) to 100.0 µH (0.42A).
   c. CSS0728F: From 3.3 µH (1.60A) to 47.0 µH (0.54A).
   d. CSS0730F: From 3.3 µH (1.80A) to 100.0 µH (0.35A).
   e. CSS0732F: From 3.3 µH (1.90A) to 1000.0 µH (0.13A).
   f. CSS0745F: From 3.3 µH (2.30A) to 1000.0 µH (0.25A).
   g. CSS1045F: From 10.0 µH (2.50A) to 1500.0 µH (0.26A).
   h. CSS1355F: From 6.0 µH (4.90A) to 1500.0 µH (0.48A).
   i. CSS1365F: From 2.0 µH (6.20A) to 220.0 µH (1.20A).
   j. CSS1375F: From 1.2 µH (8.20A) to 220.0 µH (1.30A).

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. PDA, LCD, DVD, BRP, HD

E. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS0625F-SERIES

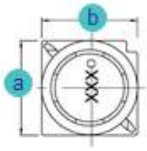
A. Electrical Specifications:

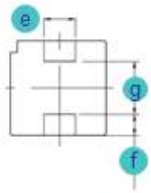
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSS0625F-4R7M	4R7	4.7	1	0.0367	1.50
CSS0625F-6R8M	6R8	6.8	1	0.0530	1.30
CSS0625F-100M	100	10	1	0.0688	1.00
CSS0625F-150M	150	15	1	0.102	0.88
CSS0625F-220M	220	22	1	0.146	0.73
CSS0625F-330M	330	33	1	0.216	0.59
CSS0625F-470M	470	47	1	0.288	0.48
CSS0625F-680M	680	68	1	0.444	0.42
CSS0625F-101M	101	100	1	0.600	0.33

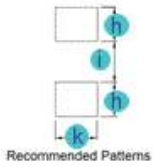
Note: 1. CSS0625F-xxx_, "CSS0625F" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 30% of initial value at rated current, temperature rise Δt < 25ºC.

B. Dimensions: mm (Inch)

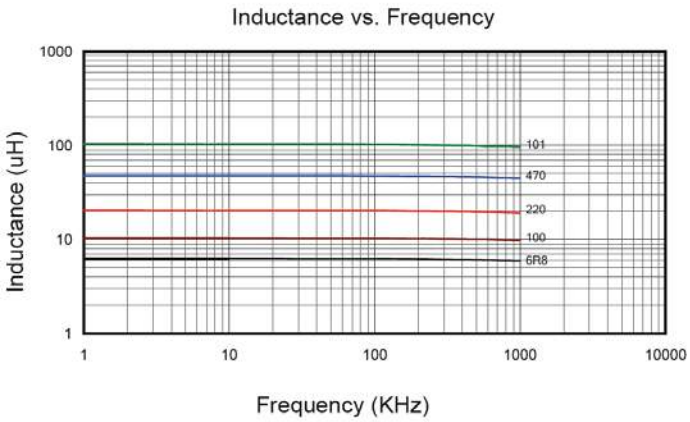
Series	a	b	c	d	e	f	g	h	i	k
CSS0625F	6.0 (0.236)	6.0 (0.236)	2.5 (0.098)	0.1 (0.004)	2.0 (0.079)	0.9 (0.035)	4.9 (0.193)	1.5 (0.059)	4.0 (0.157)	2.2 (0.087)
Tol.	±0.2 (0.008)	±0.2 (0.008)	±0.2 (0.008)	Typ.	±0.1 (0.004)	Typ.	Typ.	Typ.	Typ.	Typ.

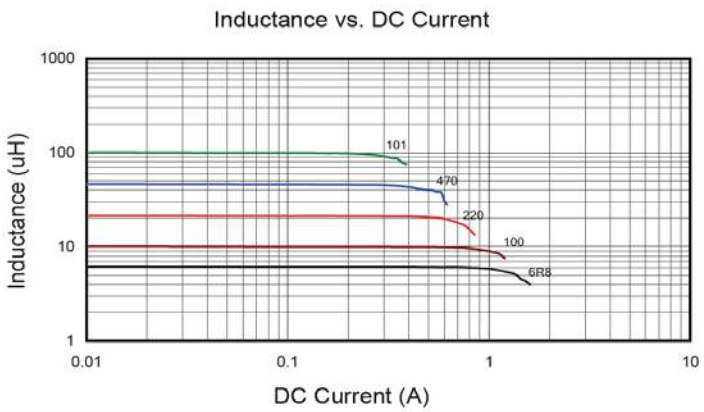






C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS0628F-SERIES

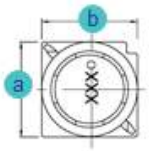
A. Electrical Specifications:

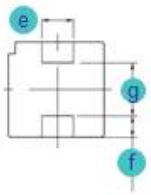
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSS0628F-4R7M	4R7	4.7	1	0.0340	1.60
CSS0628F-6R8M	6R8	6.8	1	0.0424	1.50
CSS0628F-100M	100	10	1	0.0638	1.30
CSS0628F-150M	150	15	1	0.0894	1.00
CSS0628F-220M	220	22	1	0.1240	0.77
CSS0628F-330M	330	33	1	0.1770	0.69
CSS0628F-470M	470	47	1	0.2520	0.59
CSS0628F-680M	680	68	1	0.3480	0.50
CSS0628F-101M	101	100	1	0.5160	0.42

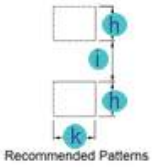
Note: 1. CSS0628F-xxx_, "CSS0628F" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 30% of initial value at rated current, temperature rise Δt < 25°C.

B. Dimensions: mm (Inch)

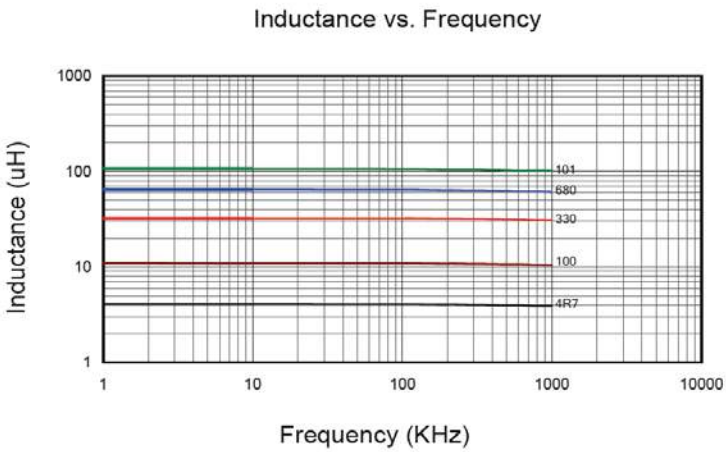
Series	a	b	c	d	e	f	g	h	i	k
CSS0628F	6.0 (0.236)	6.0 (0.236)	2.8 (0.110)	0.05 (0.002)	2.0 (0.079)	0.9 (0.035)	4.0 (0.157)	1.5 (0.059)	4.0 (0.157)	2.2 (0.087)
Tol.	±0.2 (0.008)	±0.2 (0.008)	±0.2 (0.008)	Typ.	±0.1 (0.004)	Typ.	Typ.	Typ.	Typ.	Typ.

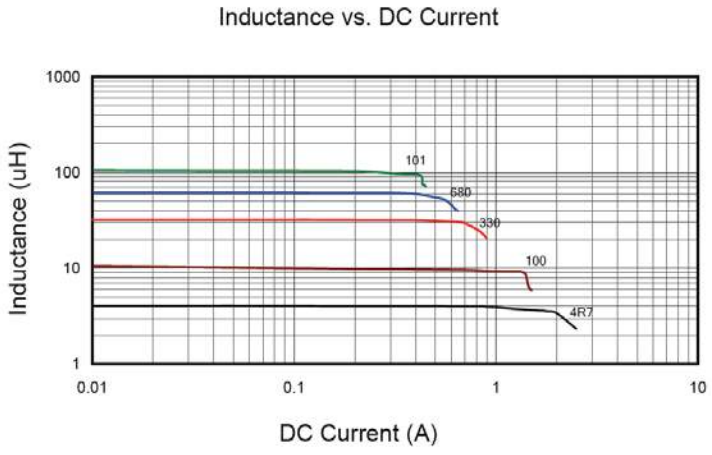






C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS0728F-SERIES

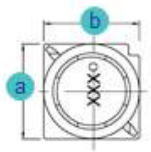
A. Electrical Specifications:

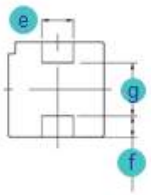
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSS0728F-3R3M	3R3	3.3	1	0.045	1.60
CSS0728F-4R7M	4R7	4.7	1	0.054	1.50
CSS0728F-6R8M	6R8	6.8	1	0.071	1.30
CSS0728F-100M	100	10	1	0.100	1.10
CSS0728F-150M	150	15	1	0.156	0.88
CSS0728F-220M	220	22	1	0.216	0.75
CSS0728F-330M	330	33	1	0.288	0.65
CSS0728F-470M	470	47	1	0.408	0.54

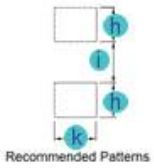
Note: 1. CSS0728F-xxx_, "CSS0728F" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 10% of initial value at rated current, temperature rise Δt < 40ºC.

B. Dimensions: mm (Inch)

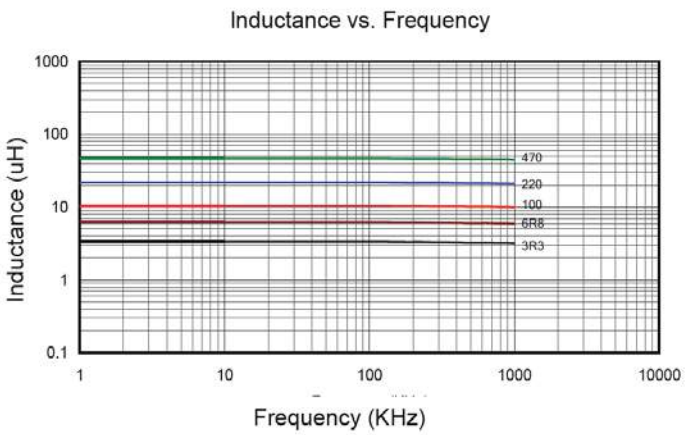
Series	a	b	c	d	e	f	g	h	i	k
CSS0728F	7.0 (0.276)	7.0 (0.276)	2.8 (0.110)	0.1 (0.004)	2.0 (0.079)	0.9 (0.035)	4.9 (0.193)	1.5 (0.059)	4.9 (0.193)	2.2 (0.087)
Tol.	±0.2 (0.008)	±0.2 (0.008)	±0.2 (0.008)	Typ.	±0.1 (0.004)	Typ.	Typ.	Typ.	Typ.	Typ.

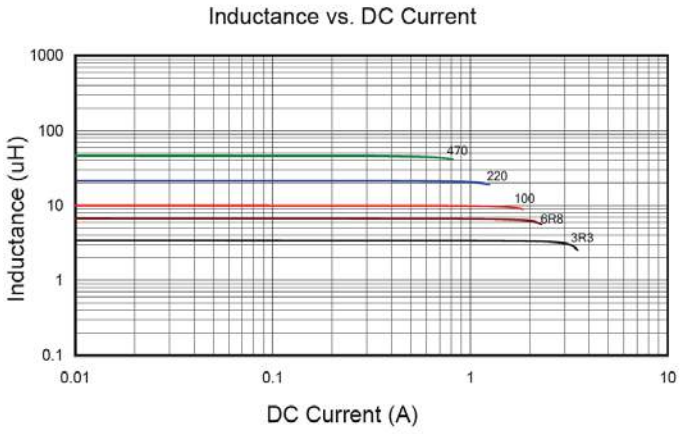






C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS0730F-SERIES

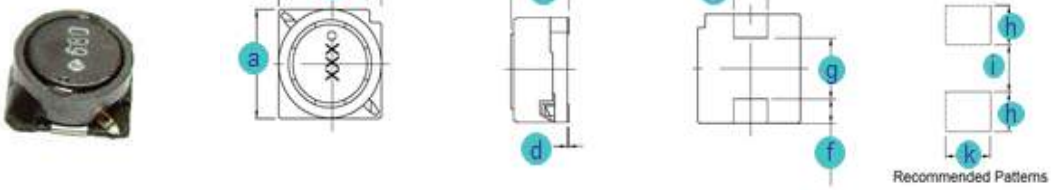
A. Electrical Specifications:

P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSS0730F-3R3M	3R3	3.3	1	0.028	1.80
CSS0730F-4R7M	4R7	4.7	1	0.044	1.60
CSS0730F-6R8M	6R8	6.8	1	0.050	1.50
CSS0730F-100M	100	10	1	0.064	1.30
CSS0730F-150M	150	15	1	0.104	1.00
CSS0730F-220M	220	22	1	0.132	0.86
CSS0730F-330M	330	33	1	0.192	0.65
CSS0730F-470M	470	47	1	0.288	0.57
CSS0730F-680M	680	68	1	0.372	0.49
CSS0730F-101M	101	100	1	0.540	0.35

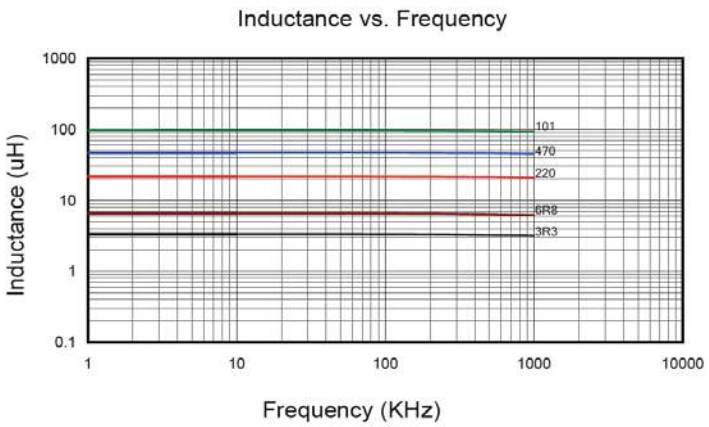
Note: 1. CSS0730F-xxx_, "CSS0730F" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 10% of initial value at rated current, temperature rise Δt < 40ºC.

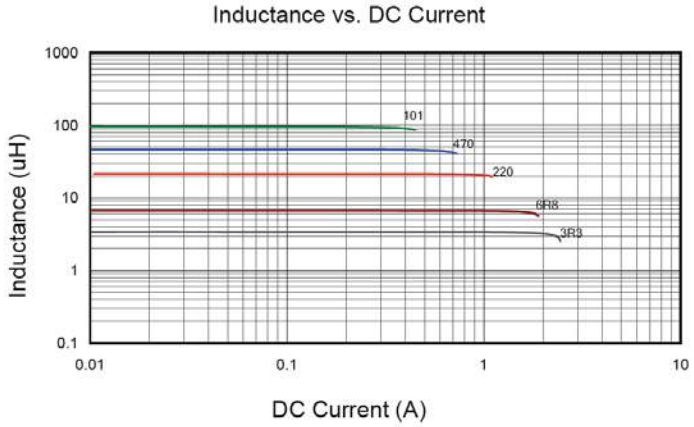
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS0730F	7.0 (0.276)	7.0 (0.276)	3.0 (0.118)	0.1 (0.004)	2.0 (0.079)	0.9 (0.035)	4.9 (0.193)	1.5 (0.059)	4.9 (0.193)	2.2 (0.087)
Tol.	±0.2 (0.008)	±0.2 (0.008)	±0.22 (0.009)	Typ.	±0.1 (0.004)	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS0732F-SERIES

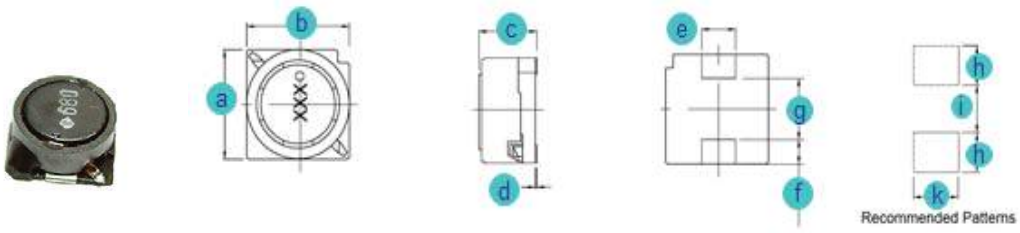
A. Electrical Specifications:

P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSS0732F-3R3M	3R3	3.3	1	0.028	1.90
CSS0732F-4R7M	4R7	4.7	1	0.044	1.70
CSS0732F-6R8M	6R8	6.8	1	0.050	1.60
CSS0732F-100M	100	10	1	0.064	1.40
CSS0732F-150M	150	15	1	0.090	1.10
CSS0732F-220M	220	22	1	0.132	0.96
CSS0732F-330M	330	33	1	0.192	0.75
CSS0732F-470M	470	47	1	0.288	0.67
CSS0732F-680M	680	68	1	0.372	0.59
CSS0732F-101M	101	100	1	0.540	0.45
CSS0732F-151M	151	150	1	0.780	0.37
CSS0732F-221M	221	220	1	1.260	0.29
CSS0732F-331M	331	330	1	2.000	0.22
CSS0732F-471M	471	470	1	2.460	0.20
CSS0732F-681M	681	680	1	3.780	0.16
CSS0732F-102M	102	1000	1	5.740	0.13

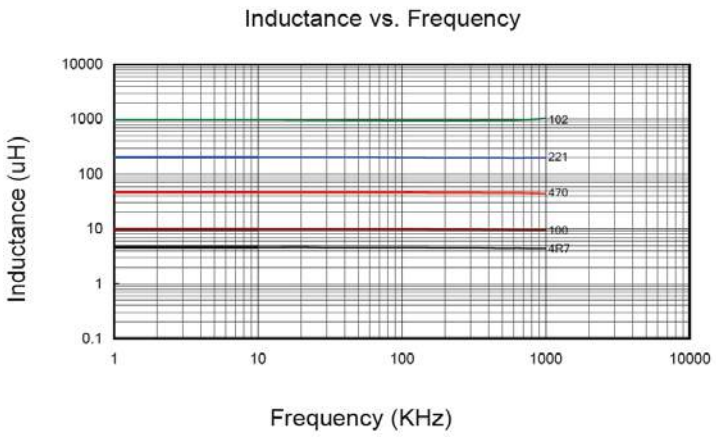
Note: 1. CSS0732F-xxx_, "CSS0732F" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 10% of initial value at rated current, temperature rise Δt < 40°C.

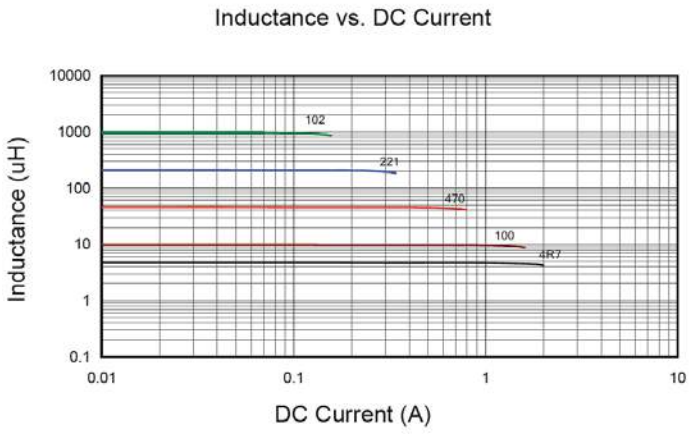
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS0732F	7.0 (0.276)	7.0 (0.276)	3.2 (0.126)	0.1 (0.004)	2.0 (0.079)	0.9 (0.035)	4.9 (0.193)	1.5 (0.059)	4.9 (0.193)	2.2 (0.087)
Tol.	±0.2 (0.008)	±0.2 (0.008)	±0.2 (0.008)	Typ.	±0.1 (0.004)	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS0745F-SERIES

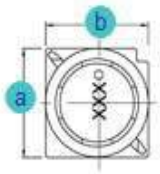
A. Electrical Specifications:

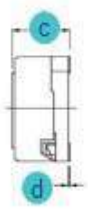
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)	I sat (A)
CSS0745F-3R3M	3R3	3.3	1	0.024	2.30	2.50
CSS0745F-4R7M	4R7	4.7	1	0.036	2.10	2.00
CSS0745F-6R8M	6R8	6.8	1	0.047	1.74	1.70
CSS0745F-100M	100	10	1	0.044	1.76	1.30
CSS0745F-150M	150	15	1	0.063	1.53	1.10
CSS0745F-220M	220	22	1	0.074	1.34	0.90
CSS0745F-330M	330	33	1	0.116	1.09	0.82
CSS0745F-470M	470	47	1	0.150	0.92	0.75
CSS0745F-680M	680	68	1	0.210	0.77	0.60
CSS0745F-101M	101	100	1	0.300	0.65	0.50
CSS0745F-151M	151	150	1	0.408	0.55	0.40
CSS0745F-221M	221	220	1	0.624	0.45	0.33
CSS0745F-331M	331	330	1	0.888	0.37	0.25
CSS0745F-471M	471	470	1	1.260	0.31	0.22
CSS0745F-681M	681	680	1	1.776	0.27	0.20
CSS0745F-102M	102	1000	1	2.736	0.25	0.14

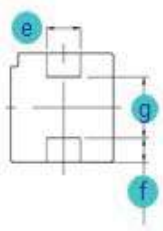
Note: 1. CSS0745F-xxx_, "CSS0745F" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 10% of initial value at rated current, temperature rise Δt < 40°C.

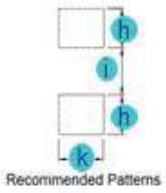
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS0745F	7.0 (0.276)	7.0 (0.276)	4.5 (0.177)	0.1 (0.004)	2.0 (0.079)	0.9 (0.035)	4.9 (0.193)	1.5 (0.059)	4.9 (0.193)	2.2 (0.087)
Tol.	±0.2 (0.008)	±0.2 (0.008)	±0.3 (0.012)	Typ.	±0.1 (0.004)	Typ.	Typ.	Typ.	Typ.	Typ.

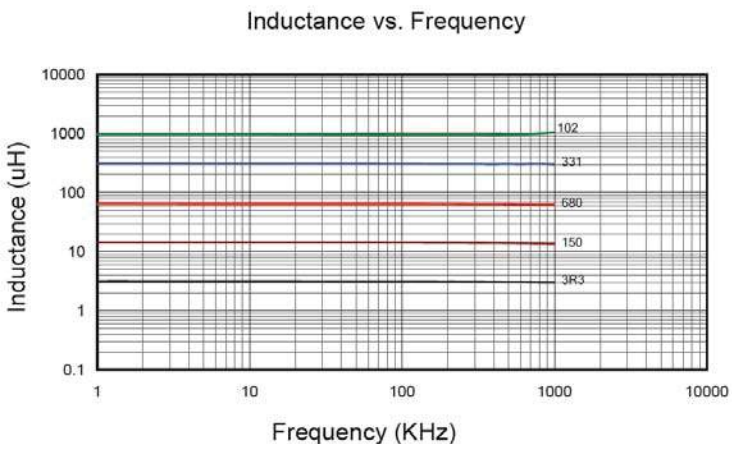


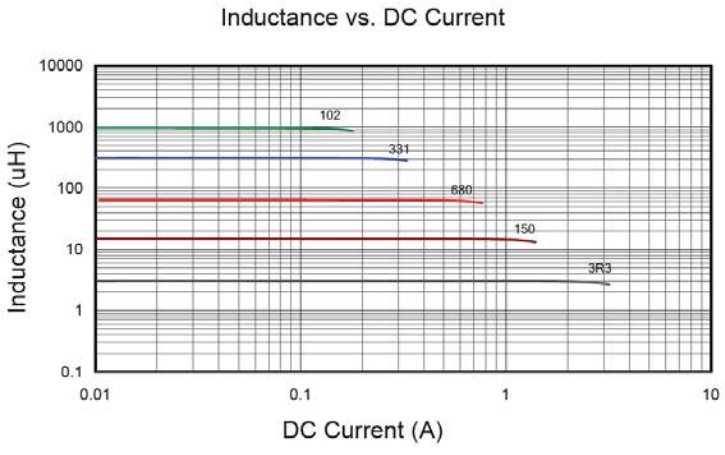






C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS1045F-SERIES

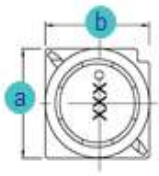
A. Electrical Specifications:

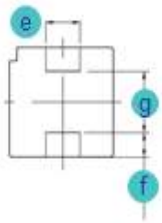
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)	I sat (A)
CSS1045F-100M	100	10	1	0.0437	2.50	3.00
CSS1045F-150M	150	15	1	0.0567	2.20	2.40
CSS1045F-220M	220	22	1	0.0709	1.90	2.10
CSS1045F-330M	330	33	1	0.0978	1.70	1.60
CSS1045F-470M	470	47	1	0.1400	1.50	1.40
CSS1045F-680M	680	68	1	0.2030	1.30	1.20
CSS1045F-101M	101	100	1	0.2820	1.10	1.00
CSS1045F-151M	151	150	1	0.4200	0.81	0.79
CSS1045F-221M	221	220	1	0.7050	0.70	0.65
CSS1045F-331M	331	330	1	0.9140	0.58	0.54
CSS1045F-471M	471	470	1	1.5340	0.47	0.47
CSS1045F-681M	681	680	1	2.0450	0.38	0.38
CSS1045F-102M	102	1000	1	3.3600	0.29	0.32
CSS1045F-152M	152	1500	1	4.0800	0.26	0.22

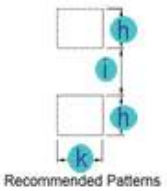
Note: 1. CSS1045F-xxx_, "CSS1045F" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 10% of initial value at rated current, temperature rise Δt < 30°C.

B. Dimensions: mm (Inch)

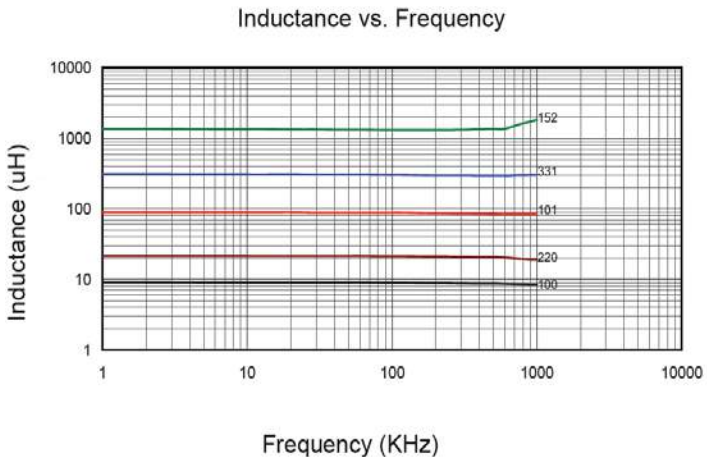
Series	a	b	c	d	e	f	g	h	i	k
CSS1045F	10.1 (0.398)	10.1 (0.398)	4.5 (0.177)	0.15 (0.006)	3.0 (0.118)	2.0 (0.079)	6.0 (0.236)	2.5 (0.098)	5.6 (0.220)	3.2 (0.126)
Tol.	±0.3 (0.012)	±0.3 (0.012)	±0.3 (0.012)	Typ.	±0.1 (0.004)	±0.15 (0.006)	±0.2 (0.008)	Typ.	Typ.	Typ.

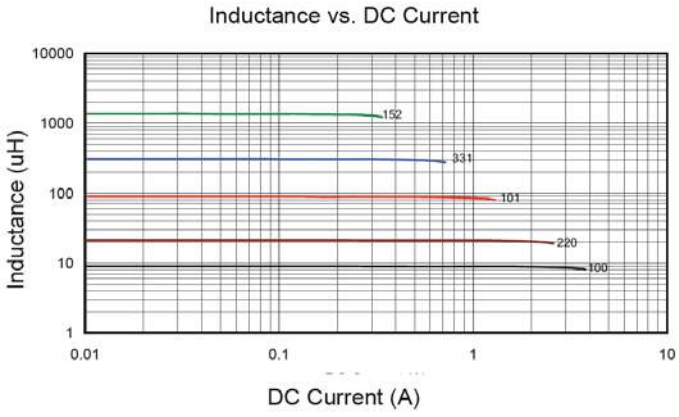






C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS1355F-SERIES

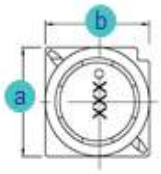
A. Electrical Specifications:

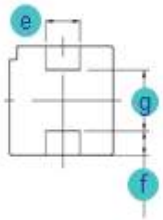
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)	I sat (A)
CSS1355F-6R0N	6R0	6.0	1	0.020	4.90	3.60
CSS1355F-100M	100	10	1	0.028	4.30	3.40
CSS1355F-150M	150	15	1	0.033	3.90	2.80
CSS1355F-220M	220	22	1	0.043	3.40	2.30
CSS1355F-330M	330	33	1	0.055	3.10	1.90
CSS1355F-470M	470	47	1	0.079	2.50	1.60
CSS1355F-680M	680	68	1	0.115	2.20	1.30
CSS1355F-101M	101	100	1	0.153	1.80	1.10
CSS1355F-151M	151	150	1	0.242	1.40	0.88
CSS1355F-221M	221	220	1	0.330	1.20	0.72
CSS1355F-331M	331	330	1	0.500	1.00	0.59
CSS1355F-471M	471	470	1	0.640	0.88	0.49
CSS1355F-681M	681	680	1	0.940	0.73	0.43
CSS1355F-102M	102	1000	1	1.400	0.60	0.34
CSS1355F-152M	152	1500	1	2.200	0.48	0.29

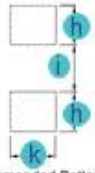
Note: 1. CSS1355F-xxx_, "CSS1355F" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 10% of initial value at rated current, temperature rise Δt < 40°C.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k
CSS1355F	12.5 (0.492)	12.5 (0.492)	5.5 (0.217)	0.15 (0.006)	3.0 (0.118)	2.0 (0.079)	8.6 (0.339)	2.5 (0.098)	8.6 (0.339)	3.2 (0.126)
Tol.	±0.3 (0.012)	±0.3 (0.012)	±0.35 (0.014)	Typ.	±0.1 (0.004)	±0.15 (0.006)	±0.3 (0.012)	Typ.	Typ.	Typ.

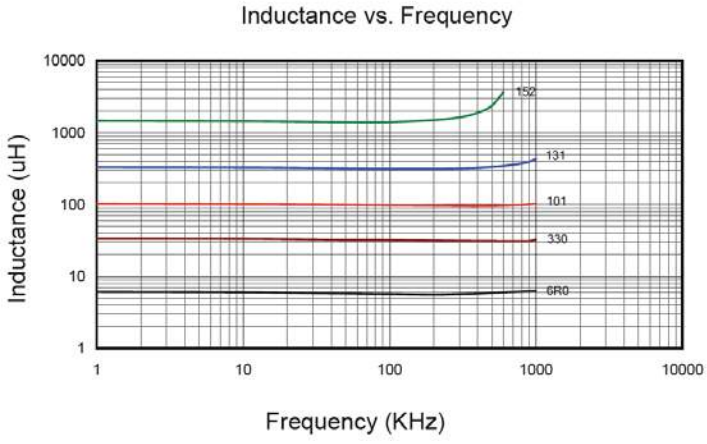


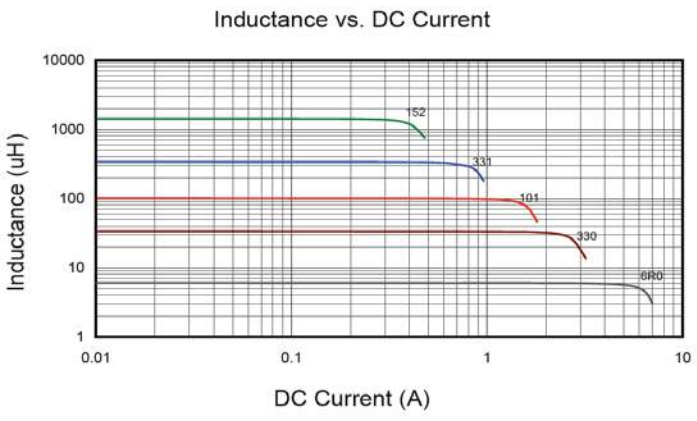




Recommended Patterns

C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS1365F-SERIES

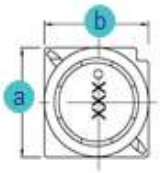
A. Electrical Specifications:

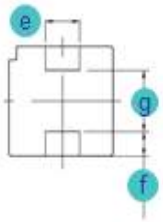
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)	I sat (A)
CSS1365F-2R0N	2R0	2.0	1	0.015	6.2	10.0
CSS1365F-4R2N	4R2	4.2	1	0.019	5.5	7.3
CSS1365F-7R0N	7R0	7.0	1	0.023	5.0	5.7
CSS1365F-100M	100	10	1	0.026	4.8	5.0
CSS1365F-150M	150	15	1	0.031	4.4	4.2
CSS1365F-220M	220	22	1	0.040	3.8	3.5
CSS1365F-330M	330	33	1	0.058	3.4	2.8
CSS1365F-470M	470	47	1	0.076	2.8	2.4
CSS1365F-680M	680	68	1	0.104	2.4	2.0
CSS1365F-101M	101	100	1	0.163	1.9	1.6
CSS1365F-221M	221	220	1	0.328	1.2	1.0

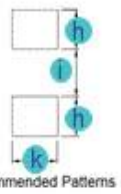
Note: 1. CSS1365F-xxx_, "CSS1365F" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 10% of initial value at rated current, temperature rise Δt < 40°C.

B. Dimensions: mm (Inch)

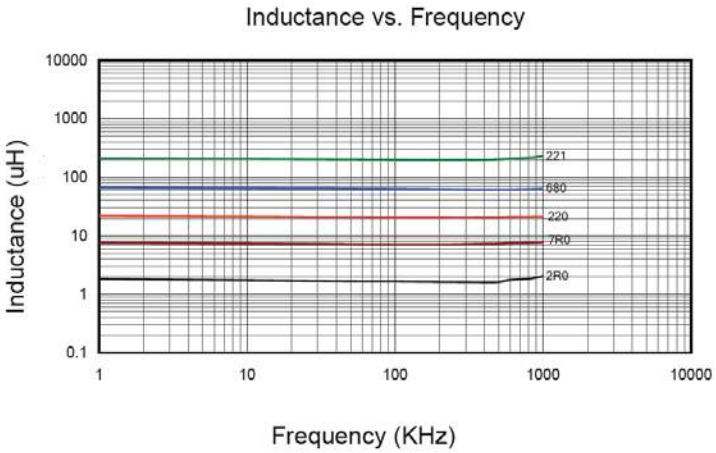
Series	a	b	c	d	e	f	g	h	i	k
CSS1365F	12.5 (0.492)	12.5 (0.492)	6.5 (0.256)	0.1 (0.004)	3.0 (0.118)	2.0 (0.079)	8.6 (0.339)	2.5 (0.098)	8.6 (0.339)	3.2 (0.126)
Tol.	±0.3 (0.012)	±0.3 (0.012)	±0.35 (0.014)	Typ.	±0.1 (0.004)	±0.15 (0.006)	±0.3 (0.012)	Typ.	Typ.	Typ.

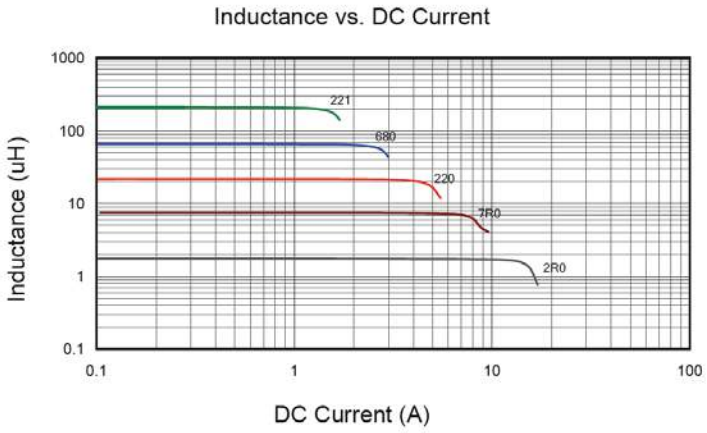






C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (SHIELDED)
CSS1375F-SERIES

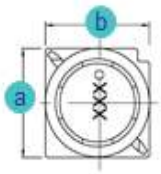
A. Electrical Specifications:

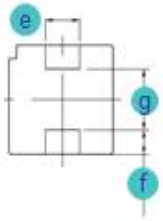
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)	I sat (A)
CSS1375F-1R2N	1R2	1.2	1	0.010	8.2	13.0
CSS1375F-2R7N	2R7	2.7	1	0.013	7.0	10.0
CSS1375F-3R9N	3R9	3.9	1	0.014	6.7	9.0
CSS1375F-5R6N	5R6	5.6	1	0.015	6.3	7.8
CSS1375F-6R8N	6R8	6.8	1	0.017	5.9	7.2
CSS1375F-100M	100	10	1	0.020	5.4	5.5
CSS1375F-150M	150	15	1	0.030	5.0	4.7
CSS1375F-220M	220	22	1	0.038	4.0	4.0
CSS1375F-330M	330	33	1	0.057	3.4	3.2
CSS1375F-470M	470	47	1	0.068	3.0	2.7
CSS1375F-680M	680	68	1	0.099	2.4	2.0
CSS1375F-101M	101	100	1	0.158	1.9	1.9
CSS1375F-151M	151	150	1	0.220	1.6	1.5
CSS1375F-221M	221	220	1	0.310	1.3	1.3

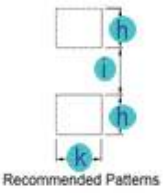
Note: 1. CSS1375F-xxx_, "CSS1375F" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Inductance drop no more than 10% of initial value at rated current, temperature rise Δt < 40°C.

B. Dimensions: mm (Inch)

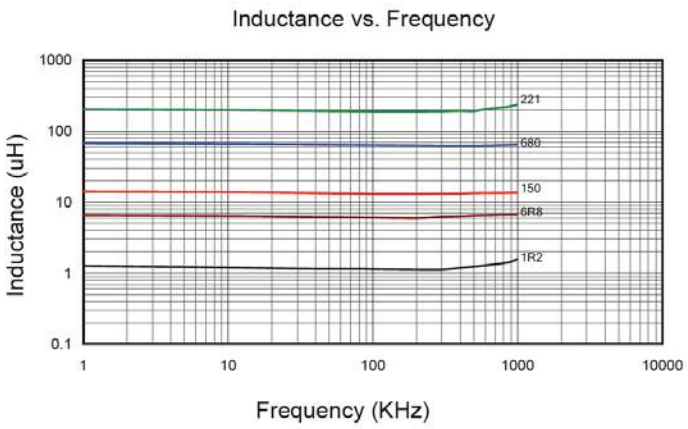
Series	a	b	c	d	e	f	g	h	i	k
CSS1375F	12.5 (0.492)	12.5 (0.492)	7.5 (0.295)	0.15 (0.006)	3.0 (0.118)	2.0 (0.079)	8.6 (0.339)	2.5 (0.098)	8.6 (0.339)	3.2 (0.126)
Tol.	±0.3 (0.012)	±0.3 (0.012)	±0.35 (0.014)	Typ.	±0.1 (0.004)	±0.15 (0.006)	±0.3 (0.012)	Typ.	Typ.	Typ.

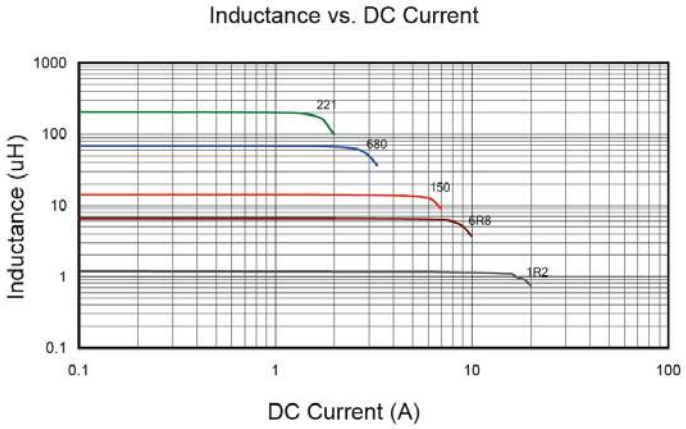






C. Characteristics Curve:





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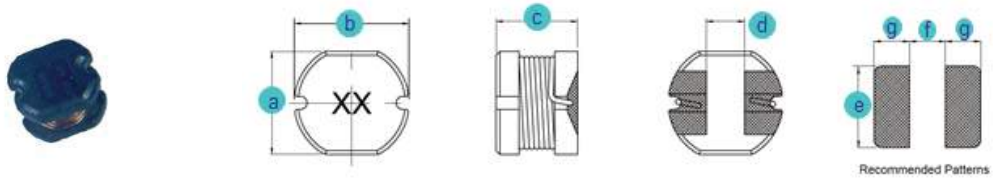
SMD POWER INDUCTORS (UNSHIELDED)
CSN***D-SERIES

A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
CSN032D	3.0(0.118)	3.3(0.130)	2.1(0.083)	1.0(0.039)	3.2(0.126)	1.2(0.047)	1.2(0.047)
Tol.	±0.3(0.012)	±0.3(0.012)	±0.3(0.012)	Typ.	Typ.	Typ.	Typ.
CSN043D	4.0(0.157)	4.5(0.177)	3.2(0.126)	1.2(0.047)	4.5(0.177)	1.5(0.059)	1.75(0.069)
Tol.	±0.3(0.012)	±0.3(0.012)	±0.3(0.012)	Typ.	Typ.	Typ.	Typ.
CSN054D	5.2(0.205)	5.8(0.228)	4.5(0.177)	1.5(0.059)	5.5(0.217)	1.7(0.067)	2.15(0.085)
Tol.	±0.3(0.012)	±0.3(0.012)	±0.35(0.014)	Typ.	Typ.	Typ.	Typ.
CSN073D	7.0(0.276)	7.8(0.307)	3.5(0.138)	1.6(0.063)	7.5(0.295)	2.0(0.079)	3.0(0.118)
Tol.	±0.3(0.012)	±0.3(0.012)	±0.5(0.020)	Typ.	Typ.	Typ.	Typ.
CSN075D	7.0(0.276)	7.8(0.307)	5.0(0.197)	1.6(0.063)	7.5(0.295)	2.0(0.079)	3.0(0.118)
Tol.	±0.3(0.012)	±0.3(0.012)	±0.5(0.020)	Typ.	Typ.	Typ.	Typ.
CSN104D	9.0(0.354)	10.0(0.394)	4.0(0.157)	2.2(0.087)	9.5(0.374)	2.5(0.098)	3.75(0.148)
Tol.	±0.3(0.012)	±0.3(0.012)	±0.5(0.020)	Typ.	Typ.	Typ.	Typ.
CSN105D	9.0(0.354)	10.0(0.394)	5.4(0.213)	2.2(0.087)	9.5(0.374)	2.5(0.098)	3.75(0.148)
Tol.	±0.4(0.016)	±0.4(0.016)	±0.4(0.016)	Typ.	Typ.	Typ.	Typ.

B. Mechanical Drawing:



CSN***D

C. General Information:

1. P/N: CSN***D-xxx_, "CSN***D" = Series, "xxx" = Inductance, "_" = Tolerance.
2. Tolerance "_": M: ± 20%, L= ± 15%, K = ±10%.
3. Operating temperature range: -30ºC to +100ºC (Including self-heating).
4. Storage temperature: -40ºC to +85ºC.
5. Inductance measured using the HP4284A and Chroma1320 & 3302.
6. DCR measured using Chroma 16502 milliohm meter.
7. Inductance drop no more than 10% of initial value at rated current, temperature rise $\Delta t < 40$ºC.
8. MSL: Level 1.
9. Inductance and Current range:
   a. CSN032D: From 1.0 µH (2.080A) to 470.0 µH (0.090A).
   b. CSN043D: From 1.0 µH (2.56A) to 330.0 µH (0.10A).
   c. CSN054D: From 1.0 µH (4.00A) to 270.0 µH (0.30A).
   d. CSN073D: From 10.0 µH (1.44A) to 330.0 µH (0.28A).
   e. CSN075D: From 6.80 µH (3.00A) to 3000.0 µH (0.12A).
   f. CSN104D: From 10.0 µH (2.38A) to 1000.0 µH (0.16A).
   g. CSN105D: From 10.0 µH (2.60A) to 820.0 µH (0.24A).

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. PDA, LCD, DVD, BRP, HD

E. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

SMD WIRE WOUND POWER INDUCTORS (UNSHIELDED)
CSN032D-SERIES

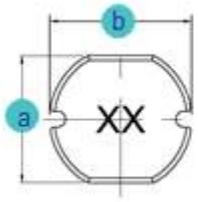
A. Electrical Specifications:

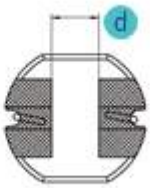
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSN032D-1R0M	BA	1.0	100	0.07	2.080
CSN032D-1R4M	BE	1.4	100	0.09	1.860
CSN032D-1R8M	BI	1.8	100	0.11	1.800
CSN032D-2R2M	CC	2.2	100	0.13	1.390
CSN032D-2R7M	CH	2.7	100	0.14	1.320
CSN032D-3R3M	DD	3.3	100	0.20	1.250
CSN032D-3R9M	DJ	3.9	100	0.21	1.200
CSN032D-4R7M	EH	4.7	100	0.33	1.030
CSN032D-5R6M	FG	5.6	100	0.35	0.910
CSN032D-6R8M	GI	6.8	100	0.38	0.850
CSN032D-8R2M	IC	8.2	100	0.43	0.820
CSN032D-100M	KA	10	100	0.50	0.740
CSN032D-120M	QA	12	100	0.65	0.640
CSN032D-150M	MA	15	100	0.82	0.600
CSN032D-180M	RA	18	100	0.90	0.540
CSN032D-220M	LA	22	100	1.14	0.500
CSN032D-270M	SA	27	100	1.39	0.430
CSN032D-330M	NA	33	100	1.55	0.400
CSN032D-390M	PA	39	100	2.15	0.370
CSN032D-470M	OA	47	100	2.44	0.360
CSN032D-560M	UA	56	100	2.68	0.310
CSN032D-680M	VA	68	100	3.05	0.300
CSN032D-820M	XA	82	100	3.48	0.280
CSN032D-221M	LB	220	100	6.30	0.200
CSN032D-471M	OB	470	100	14.00	0.090

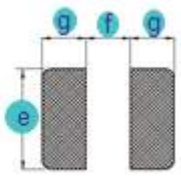
Note: CSN032D-xxx_, "CSN032D" = P/N, "xxx" = Inductance, "_" = Tolerance.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
CSN032D	3.0 (0.118)	3.3 (0.130)	2.1 (0.083)	1.0 (0.039)	3.2 (0.126)	1.2 (0.047)	1.2 (0.047)
Tol.	±0.3 (0.012)	±0.3 (0.012)	±0.3 (0.012)	Typ.	Typ.	Typ.	Typ.



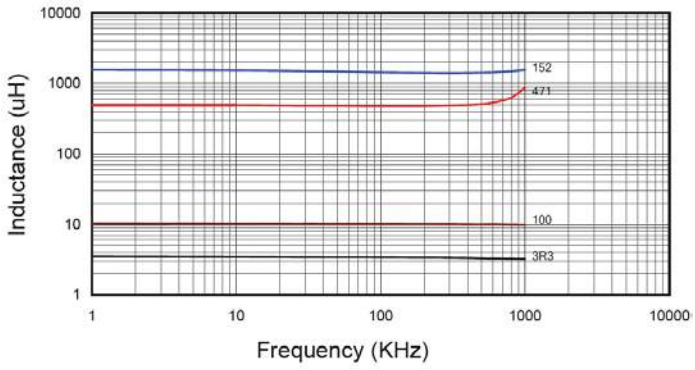




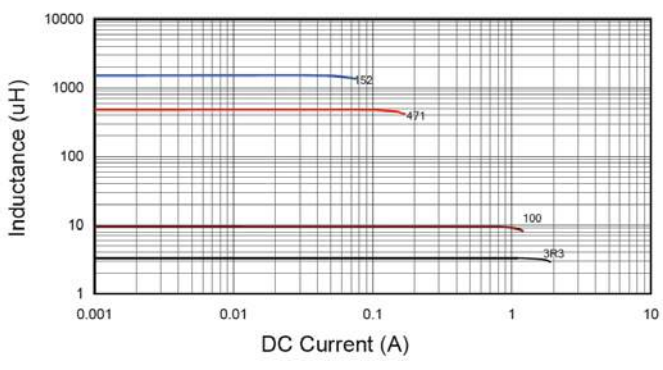
Recommended Patterns

C. Characteristics Curve:

Inductance vs. Frequency



Inductance vs. DC Current



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SMD WIRE WOUND POWER INDUCTORS (UNSHIELDED)
CSN043D-SERIES

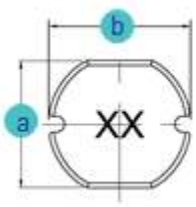
A. Electrical Specifications:

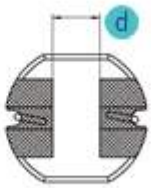
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSN043D-1R0M	1R0	1.0	100	0.0487	2.56
CSN043D-1R4M	1R4	1.4	100	0.0562	2.52
CSN043D-1R8M	1R8	1.8	100	0.0637	1.95
CSN043D-2R2M	2R2	2.2	100	0.0712	1.75
CSN043D-2R7M	2R7	2.7	100	0.0787	1.58
CSN043D-3R3M	3R3	3.3	100	0.0862	1.44
CSN043D-3R9M	3R9	3.9	100	0.0937	1.33
CSN043D-4R7M	4R7	4.7	100	0.1087	1.15
CSN043D-5R6M	5R6	5.6	100	0.1257	0.99
CSN043D-6R8M	6R8	6.8	100	0.1312	0.95
CSN043D-8R2M	8R2	8.2	100	0.1462	0.84
CSN043D-100M	100	10	100	0.182	1.04
CSN043D-120M	120	12	100	0.210	0.97
CSN043D-150M	150	15	100	0.235	0.85
CSN043D-180M	180	18	100	0.338	0.74
CSN043D-220M	220	22	100	0.378	0.68
CSN043D-270M	270	27	100	0.522	0.62
CSN043D-330K	330	33	100	0.540	0.56
CSN043D-390K	390	39	100	0.587	0.52
CSN043D-470K	470	47	100	0.844	0.44
CSN043D-560K	560	56	100	0.937	0.42
CSN043D-680K	680	68	100	1.117	0.37
CSN043D-331K	331	330	10	3.350	0.10

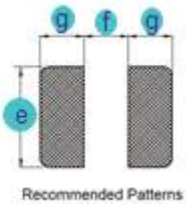
Note: CSN043D-xxx_, "CSN043D" = P/N, "xxx" = Inductance, "_" = Tolerance.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
CSN043D	4.0 (0.157)	4.5 (0.177)	3.2 (0.126)	1.2 (0.047)	4.5 (0.177)	1.5 (0.059)	1.75 (0.069)
Tol.	±0.3 (0.012)	±0.3 (0.012)	±0.3 (0.012)	Typ.	Typ.	Typ.	Typ.

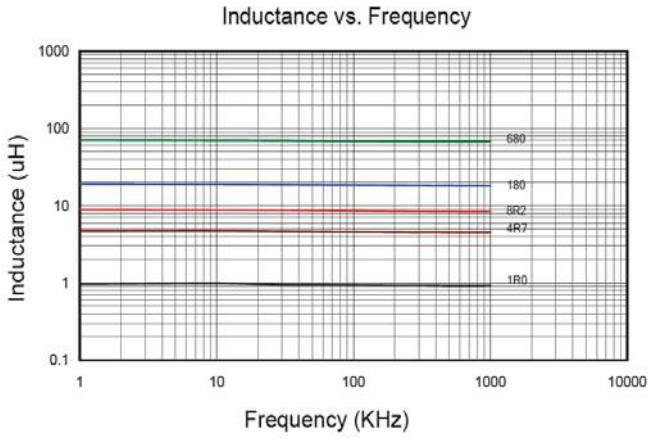


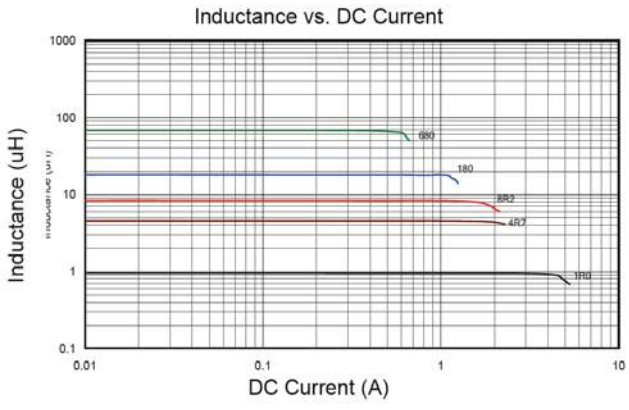




Recommended Patterns

C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (UNSHIELDED)
CSN054D-SERIES

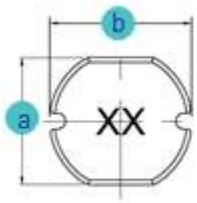
A. Electrical Specifications:

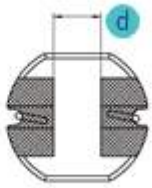
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSN054D-1R0M	1R0	1.0	100	0.015	4.00
CSN054D-1R9M	1R9	1.9	100	0.039	3.00
CSN054D-2R2M	2R2	2.2	100	0.020	4.00
CSN054D-3R3M	3R3	3.3	100	0.021	3.00
CSN054D-4R7M	4R7	4.7	100	0.028	2.00
CSN054D-6R8M	6R8	6.8	100	0.042	2.00
CSN054D-100M	100	10	100	0.10	1.44
CSN054D-120M	120	12	100	0.12	1.40
CSN054D-150M	150	15	100	0.14	1.30
CSN054D-180M	180	18	100	0.15	1.23
CSN054D-220M	220	22	100	0.18	1.11
CSN054D-270M	270	27	100	0.20	0.97
CSN054D-330L	330	33	100	0.23	0.88
CSN054D-390L	390	39	100	0.32	0.80
CSN054D-470L	470	47	100	0.37	0.72
CSN054D-560K	560	56	100	0.42	0.68
CSN054D-680K	680	68	100	0.46	0.61
CSN054D-820K	820	82	100	0.60	0.58
CSN054D-101K	101	100	10	0.70	0.52
CSN054D-121K	121	120	10	0.93	0.48
CSN054D-151K	151	150	10	1.10	0.40
CSN054D-181K	181	180	10	1.38	0.38
CSN054D-221K	221	220	10	1.57	0.35
CSN054D-271K	271	270	10	1.85	0.30

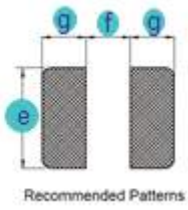
Note: CSN054D-xxx_, "CSN054D" = P/N, "xxx" = Inductance, "_" = Tolerance.

B. Dimensions: mm (Inch)

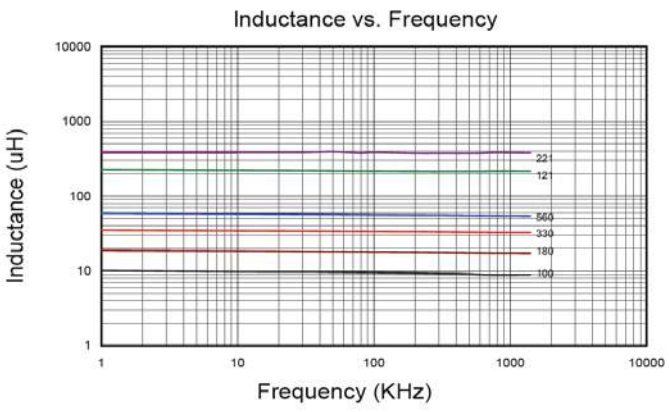
Series	a	b	c	d	e	f	g
CSN054D	5.2 (0.205)	5.8 (0.228)	4.5 (0.177)	1.5 (0.059)	5.5 (0.217)	1.7 (0.067)	2.15 (0.085)
Tol.	±0.3 (0.012)	±0.3 (0.012)	±0.35 (0.014)	Typ.	Typ.	Typ.	Typ.

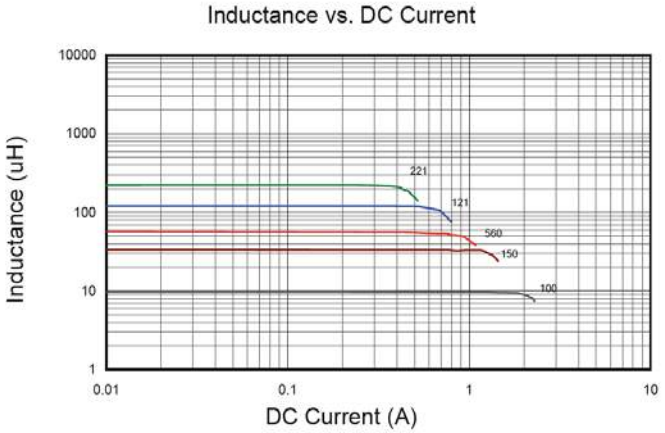






C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (UNSHIELDED)
CSN073D-SERIES

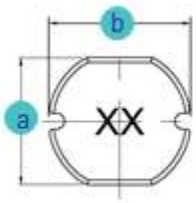
A. Electrical Specifications:

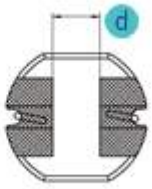
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSN073D-100M	100	10	100	0.0803	1.44
CSN073D-120M	120	12	100	0.0897	1.39
CSN073D-150M	150	15	100	0.104	1.24
CSN073D-180M	180	18	100	0.111	1.12
CSN073D-220M	220	22	100	0.129	1.07
CSN073D-270M	270	27	100	0.153	0.94
CSN073D-330M	330	33	100	0.170	0.85
CSN073D-390M	390	39	100	0.217	0.74
CSN073D-470M	470	47	100	0.252	0.68
CSN073D-560K	560	56	100	0.282	0.64
CSN073D-680K	680	68	100	0.332	0.59
CSN073D-820K	820	82	100	0.406	0.54
CSN073D-101K	101	100	10	0.481	0.51
CSN073D-121K	121	120	10	0.536	0.49
CSN073D-151K	151	150	10	0.755	0.40
CSN073D-181K	181	180	10	1.022	0.36
CSN073D-221K	221	220	10	1.200	0.31
CSN073D-271K	271	270	10	1.306	0.29
CSN073D-331K	331	330	10	1.495	0.28

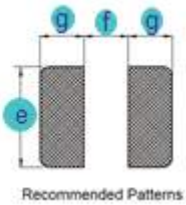
Note: CSN073D-xxx_, "CSN073D" = P/N, "xxx" = Inductance, "_" = Tolerance.

B. Dimensions: mm (Inch)

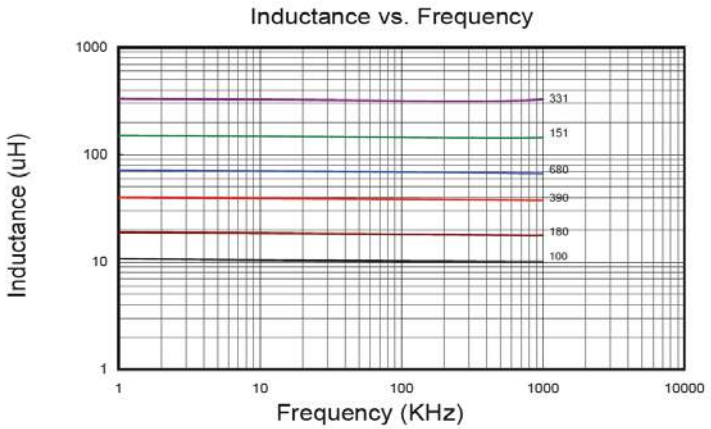
Series	a	b	c	d	e	f	g
CSN073D	7.0 (0.276)	7.8 (0.307)	3.5 (0.138)	1.6 (0.063)	7.5 (0.295)	2.0 (0.079)	3.0 (0.118)
Tol.	±0.3 (0.012)	±0.3 (0.012)	±0.5 (0.020)	Typ.	Typ.	Typ.	Typ.

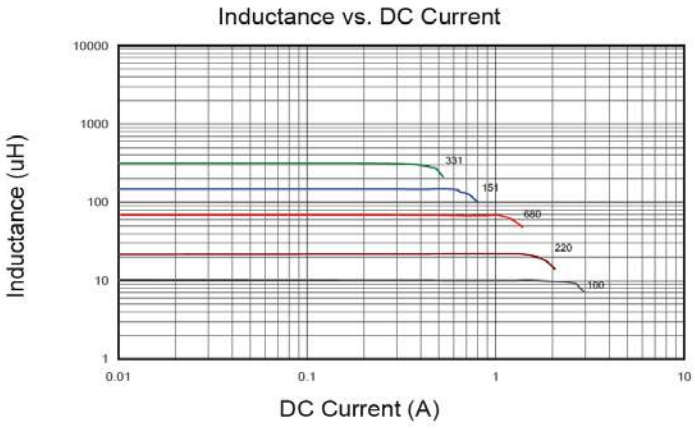






C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (UNSHIELDED)
CSN075D-SERIES

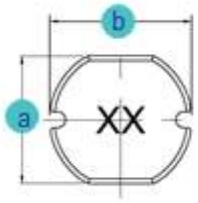
A. Electrical Specifications:

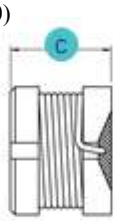
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSN075D-6R8K	6R8	6.8	100	0.058	3.00
CSN075D-8R2K	8R2	8.2	100	0.06	2.40
CSN075D-100K	100	10	100	0.07	2.30
CSN075D-120K	120	12	100	0.08	2.00
CSN075D-150K	150	15	100	0.09	1.80
CSN075D-180K	180	18	100	0.10	1.60
CSN075D-220K	220	22	100	0.11	1.50
CSN075D-270K	270	27	100	0.12	1.30
CSN075D-330K	330	33	100	0.13	1.20
CSN075D-390K	390	39	100	0.16	1.10
CSN075D-470K	470	47	100	0.18	1.10
CSN075D-560K	560	56	100	0.24	0.94
CSN075D-680K	680	68	100	0.28	0.85
CSN075D-820K	820	82	100	0.37	0.78
CSN075D-101K	101	100	10	0.43	0.72
CSN075D-121K	121	120	10	0.47	0.66
CSN075D-151K	151	150	10	0.64	0.58
CSN075D-181K	181	180	10	0.71	0.51
CSN075D-221K	221	220	10	0.96	0.49
CSN075D-271K	271	270	10	1.11	0.42
CSN075D-331K	331	330	10	1.26	0.40
CSN075D-391K	391	390	10	1.77	0.36
CSN075D-471K	471	470	10	1.96	0.34
CSN075D-302K	302	3000	1	10.0	0.12

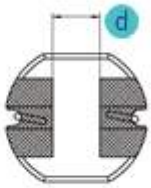
Note: CSN075D-xxx_, "CSN075D" = P/N, "xxx" = Inductance, "_" = Tolerance.

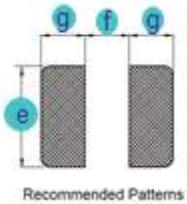
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
CSN075D	7.0 (0.276)	7.8 (0.307)	5.0 (0.197)	1.6 (0.063)	7.5 (0.295)	2.0 (0.079)	3.0 (0.118)
Tol.	±0.3 (0.012)	±0.3 (0.012)	±0.5 (0.020)	Typ.	Typ.	Typ.	Typ.

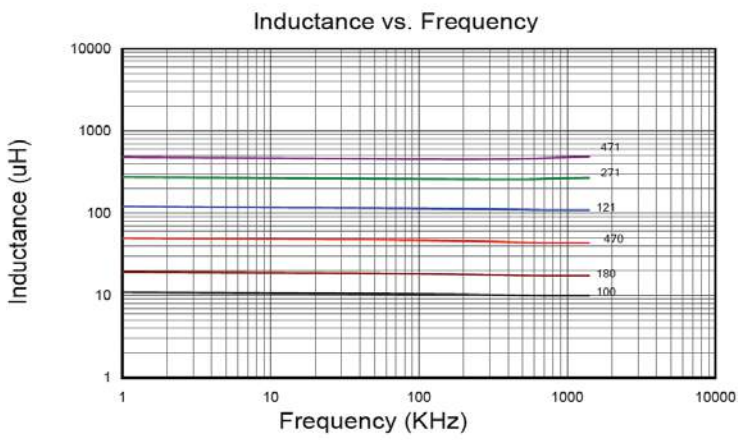


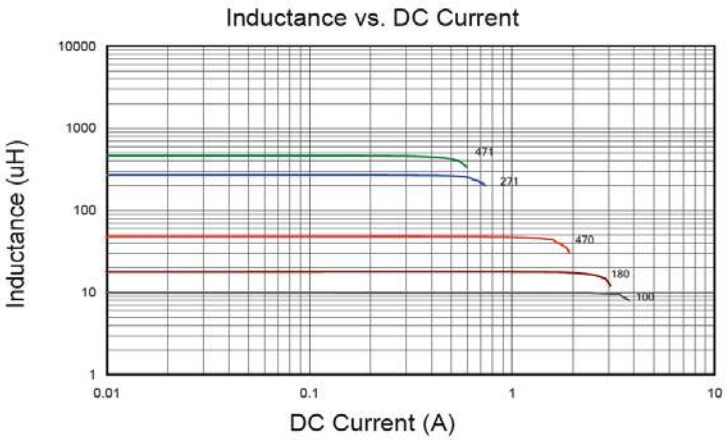






C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (UNSHIELDED)
CSN104D-SERIES

A. Electrical Specifications:

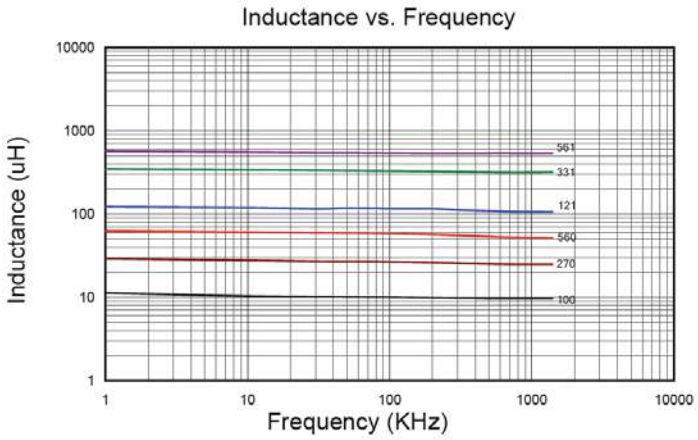
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSN104D-100M	100	10	100	0.053	2.38
CSN104D-120M	120	12	100	0.061	2.13
CSN104D-150M	150	15	100	0.070	1.87
CSN104D-180M	180	18	100	0.081	1.73
CSN104D-220M	220	22	100	0.088	1.60
CSN104D-270M	270	27	100	0.100	1.44
CSN104D-330M	330	33	100	0.120	1.26
CSN104D-390M	390	39	100	0.151	1.20
CSN104D-470M	470	47	100	0.170	1.10
CSN104D-560K	560	56	100	0.199	1.01
CSN104D-680K	680	68	100	0.223	0.91
CSN104D-820K	820	82	100	0.252	0.85
CSN104D-101K	101	100	10	0.344	0.74
CSN104D-121K	121	120	10	0.396	0.69
CSN104D-151K	151	150	10	0.544	0.61
CSN104D-181K	181	180	10	0.621	0.56
CSN104D-221K	221	220	10	0.721	0.53
CSN104D-271K	271	270	10	0.949	0.45
CSN104D-331K	331	330	10	1.100	0.42
CSN104D-391K	391	390	10	1.245	0.38
CSN104D-471K	471	470	10	1.526	0.35
CSN104D-561K	561	560	10	1.904	0.32
CSN104D-102K	102	1000	1	3.800	0.16

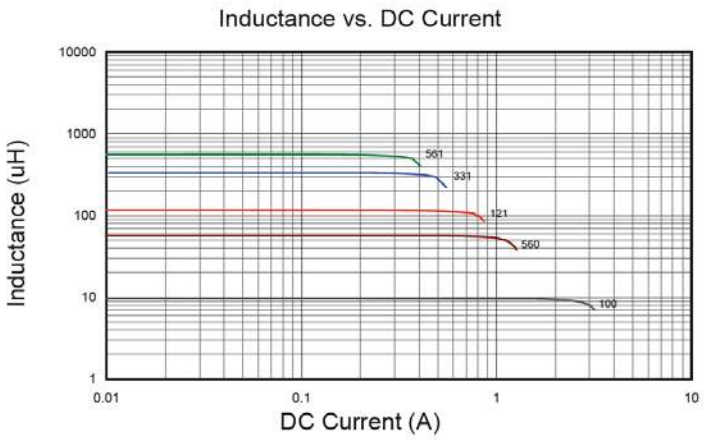
Note: CSN104D-xxx_, "CSN104D" = P/N, "xxx" = Inductance, "_" = Tolerance.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
CSN104D	9.0 (0.354)	10.0 (0.394)	4.0 (0.157)	2.2 (0.087)	9.5 (0.374)	2.5 (0.098)	3.75 (0.148)
Tol.	±0.3 (0.012)	±0.3 (0.012)	±0.5 (0.020)	Typ.	Typ.	Typ.	Typ.

C. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (UNSHIELDED)
CSN105D-SERIES

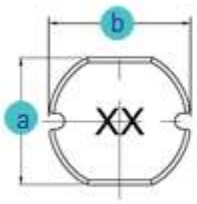
A. Electrical Specifications:

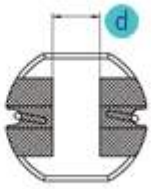
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSN105D-100M	100	10	100	0.06	2.60
CSN105D-120M	120	12	100	0.07	2.45
CSN105D-150M	150	15	100	0.08	2.27
CSN105D-180M	180	18	100	0.09	2.15
CSN105D-220M	220	22	100	0.10	1.95
CSN105D-270M	270	27	100	0.11	1.76
CSN105D-330M	330	33	100	0.12	1.50
CSN105D-390M	390	39	100	0.14	1.37
CSN105D-470K	470	47	100	0.17	1.28
CSN105D-560K	560	56	100	0.19	1.17
CSN105D-680K	680	68	100	0.22	1.11
CSN105D-820K	820	82	100	0.25	1.00
CSN105D-101K	101	100	10	0.35	0.97
CSN105D-121K	121	120	10	0.40	0.89
CSN105D-151K	151	150	10	0.47	0.78
CSN105D-181K	181	180	10	0.63	0.72
CSN105D-221K	221	220	10	0.73	0.66
CSN105D-271K	271	270	10	0.97	0.57
CSN105D-331K	331	330	10	1.15	0.52
CSN105D-391K	391	390	10	1.30	0.48
CSN105D-471K	471	470	10	1.48	0.42
CSN105D-561K	561	560	10	1.90	0.33
CSN105D-681K	681	680	10	2.25	0.28
CSN105D-821K	821	820	10	2.55	0.24

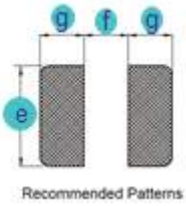
Note: CSN105D-xxx_, "CSN105D" = P/N, "xxx" = Inductance, "_" = Tolerance.

B. Dimensions: mm (Inch)

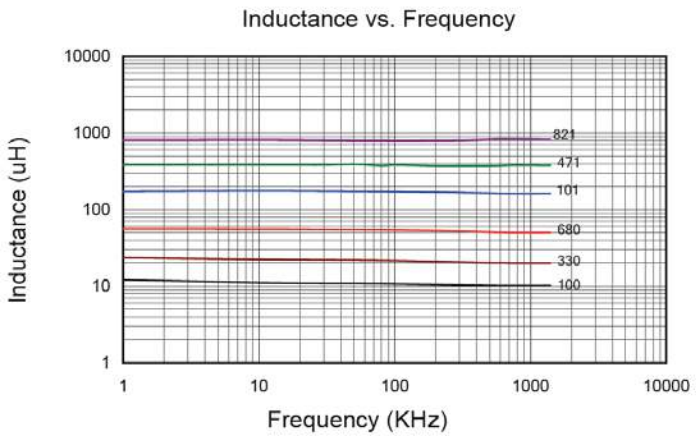
Series	a	b	c	d	e	f	g
CSN105D	9.0 (0.354)	10.0 (0.394)	5.4 (0.213)	2.2 (0.087)	9.5 (0.374)	2.5 (0.098)	3.75 (0.148)
Tol.	±0.4 (0.016)	±0.4 (0.016)	±0.4 (0.016)	Typ.	Typ.	Typ.	Typ.

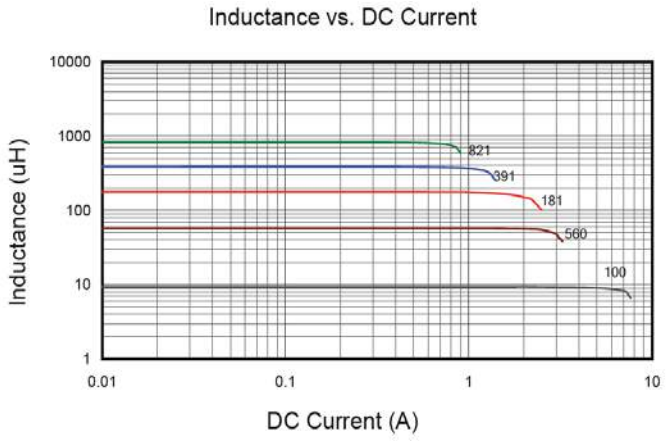






C. Characteristics Curve:





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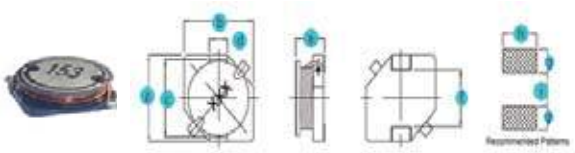
SMD POWER INDUCTORS (UNSHIELDED)
CSN***F-SERIES

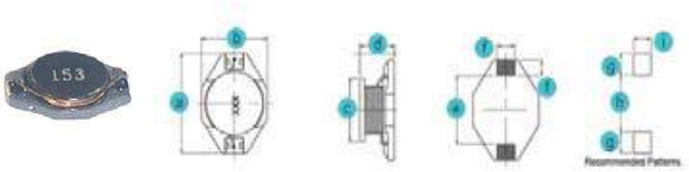
A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k	Type
CSN073F	7.6(0.299)	7.6(0.299)	6.8(0.268)	2.0(0.079)	3.5(0.138)	3.9(0.154)	2.5(0.098)	3.0(0.118)	3.5(0.138)	N/A	1
Tol.	Max.	Max.	Typ.	Typ.	Max.	Typ.	Typ.	Typ.	Typ.	N/A	
CSN075F	7.6(0.299)	7.6(0.299)	6.8(0.268)	2.0(0.079)	5.1(0.201)	5.4(0.213)	2.0(0.079)	3.0(0.118)	4.4(0.173)	N/A	1
Tol.	Max.	Max.	Typ.	Typ.	Max.	Typ.	Typ.	Typ.	Typ.	N/A	
CSN082F	12.95(0.510)	9.4(0.370)	Ø8.5(0.335)	3.0(0.118)	7.6(0.299)	2.5(0.098)	2.92(0.115)	7.37(0.290)	2.79(0.110)	N/A	2
Tol.	Max.	Max.	Typ.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	N/A	
CSN084F	12.95(0.510)	9.4(0.370)	Ø8.5(0.335)	5.21(0.205)	7.6(0.299)	2.5(0.098)	2.92(0.115)	7.37(0.290)	2.79(0.110)	N/A	2
Tol.	Max.	Max.	Typ.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	N/A	

B. Mechanical Drawing:



Type-1 CSN***F



Type-2 CSN***F

C. General Information:

1. P/N: CSN***F-xxx_, "CSN***F" = Series, "xxx" = Inductance, "_" = Tolerance.
2. Tolerance "_" : N = ±30%, M: ± 20%, L= ± 15%, K = ±10%.
3. Operating temperature range: -30ºC to +100ºC (Including self-heating).
4. Storage temperature: -40ºC to +85ºC.
5. Inductance measured using the HP4284A and Chroma1320 & 3302.
6. DCR measured using Chroma 16502 milliohm meter.
7. Inductance drop no more than 10% of initial value at rated current, temperature rise $\Delta t < 40$ºC.
8. MSL: Level 1.
9. Inductance and Current range:
   a. CSN073F: From 1.0 µH (2.88A) to 100.0 µH (0.38A).
   b. CSN075F: From 1.0 µH (2.88A) to 470.0 µH (0.195A).
   c. CSN082F: From 10.0 µH (2.00A) to 1000.0 µH (0.05A).
   d. CSN084F: From 1.0 µH (6.80A) to 1000.0 µH (0.30A).

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. PDA, LCD, DVD, BRP, HD

E. Supplementary Information:

1. Packaging Information (See Appendix A)
2. Solder Profile (See Appendix B)

SMD WIRE WOUND POWER INDUCTORS (UNSHIELDED)
CSN073F-SERIES

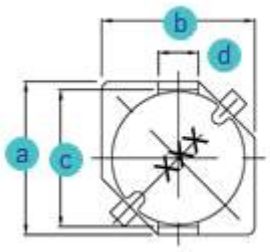
A. Electrical Specifications:

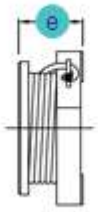
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSN073F-1R0M	102	1.0	100	0.022	2.88
CSN073F-1R5M	152	1.5	100	0.026	2.67
CSN073F-1R8M	182	1.8	100	0.056	2.50
CSN073F-2R2M	222	2.2	100	0.032	2.40
CSN073F-3R3M	332	3.3	100	0.041	2.08
CSN073F-4R7M	472	4.7	100	0.049	1.92
CSN073F-6R8M	682	6.8	100	0.067	1.60
CSN073F-100M	103	10.0	100	0.085	1.41
CSN073F-120M	123	12.0	100	0.100	1.28
CSN073F-150M	153	15.0	100	0.130	1.12
CSN073F-180M	183	18.0	100	0.160	1.00
CSN073F-220M	223	22.0	100	0.180	0.93
CSN073F-270M	273	27.0	100	0.240	0.80
CSN073F-330M	333	33.0	100	0.290	0.72
CSN073F-390M	393	39.0	100	0.340	0.66
CSN073F-470M	473	47.0	100	0.410	0.59
CSN073F-560M	563	56.0	100	0.480	0.55
CSN073F-680M	683	68.0	100	0.600	0.49
CSN073F-820M	823	82.0	100	0.710	0.44
CSN073F-101M	104	100.0	100	0.950	0.38

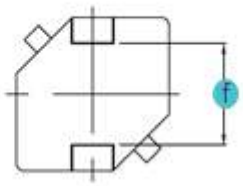
Note: CSN073F-xxx_, "CSN073F" = P/N, "xxx" = Inductance, "_" = Tolerance.

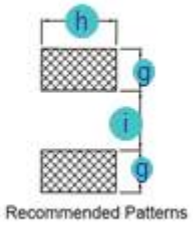
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i
CSN073F	7.6 (0.299)	7.6 (0.299)	6.8 (0.268)	2.0 (0.079)	3.5 (0.138)	3.9 (0.154)	2.5 (0.098)	3.0 (0.118)	3.5 (0.138)
Tol.	Max.	Max.	Typ.	Typ.	Max.	Typ.	Typ.	Typ.	Typ.

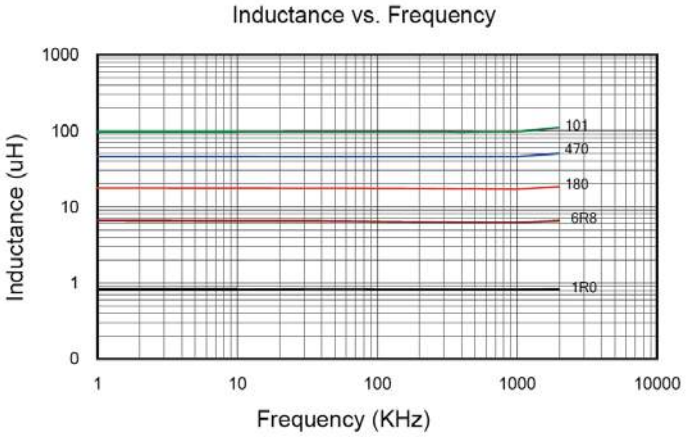


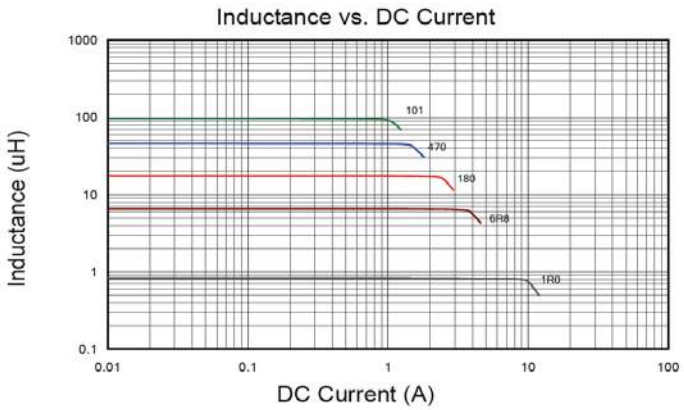






C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (UNSHIELDED)
CSN075F-SERIES

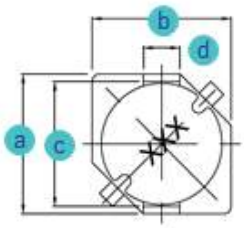
A. Electrical Specifications:

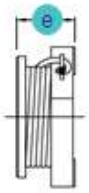
P/N	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)
CSN075F-1R0M	102	1.0	100	0.023	2.88
CSN075F-1R5M	152	1.5	100	0.028	2.56
CSN075F-2R2M	222	2.2	100	0.032	2.36
CSN075F-3R3M	332	3.3	100	0.038	2.16
CSN075F-4R7M	472	4.7	100	0.049	1.88
CSN075F-6R8M	682	6.8	100	0.060	1.68
CSN075F-100M	103	10	100	0.070	1.56
CSN075F-120M	123	12	100	0.080	1.44
CSN075F-150M	153	15	100	0.090	1.36
CSN075F-180M	183	18	100	0.100	1.28
CSN075F-220M	223	22	100	0.120	1.17
CSN075F-270M	273	27	100	0.140	1.07
CSN075F-330M	333	33	100	0.160	1.00
CSN075F-390M	393	39	100	0.190	0.91
CSN075F-470M	473	47	100	0.220	0.84
CSN075F-560M	563	56	100	0.290	0.72
CSN075F-680M	683	68	100	0.340	0.66
CSN075F-820M	823	82	100	0.460	0.58
CSN075F-101M	104	100	100	0.550	0.51
CSN075F-121K	124	120	100	0.670	0.42
CSN075F-151K	154	150	100	0.900	0.37
CSN075F-181K	184	180	100	1.050	0.35
CSN075F-221K	224	220	100	1.350	0.29
CSN075F-271K	274	270	100	1.550	0.28
CSN075F-331K	334	330	100	2.050	0.23
CSN075F-391K	394	390	100	2.300	0.215
CSN075F-471K	474	470	100	2.600	0.195

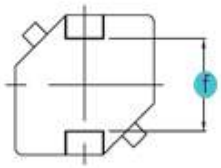
Note: CSN075F-xxx_, "CSN075F" = P/N, "xxx" = Inductance, "_" = Tolerance.

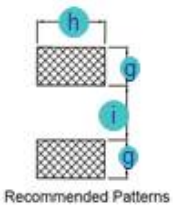
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i
CSN075F	7.6 (0.299)	7.6 (0.299)	6.8 (0.268)	2.0 (0.079)	5.1 (0.201)	5.4 (0.213)	2.0 (0.079)	3.0 (0.118)	4.4 (0.173)
Tol.	Max.	Max.	Typ.	Typ.	Max.	Typ.	Typ.	Typ.	Typ.



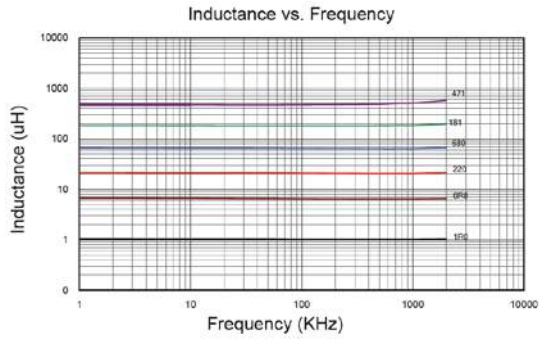


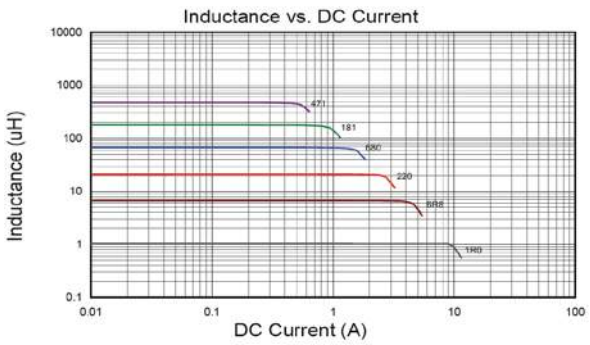




Recommended Patterns

F. Characteristics Curve:





SMD WIRE WOUND POWER INDUCTORS (UNSHIELDED)
CSN082F-SERIES

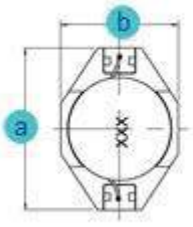
A. Electrical Specifications:

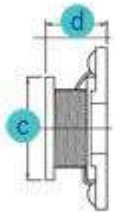
PART NO.	Marking	Inductance (µH)	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current(A)	I sat (A)
CSN082F-100M	103	10	100	0.11	2.0	2.4
CSN082F-150M	153	15	100	0.15	1.5	2.0
CSN082F-220M	223	22	100	0.23	1.3	1.6
CSN082F-330M	333	33	100	0.30	1.1	1.4
CSN082F-470M	473	47	100	0.39	0.8	1.0
CSN082F-680M	683	68	100	0.66	0.7	0.9
CSN082F-101M	104	100	100	0.84	0.6	0.7
CSN082F-151M	154	150	100	1.20	0.5	0.6
CSN082F-221M	224	220	100	1.90	0.4	0.5
CSN082F-331M	334	330	100	2.70	0.3	0.4
CSN082F-471M	474	470	100	4.00	0.2	0.3
CSN082F-681M	684	680	100	5.30	0.1	0.2
CSN082F-102M	105	1000	100	8.40	0.05	0.1

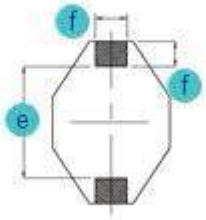
Note: CSN082F-xxx_, "CSN082F" = P/N, "xxx" = Inductance, "_" = Tolerance.

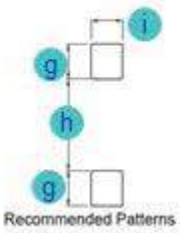
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i
CSN082F	12.95 (0.510)	9.4 (0.370)	Ø8.5 (0.335)	3.0 (0.118)	7.6 (0.299)	2.5 (0.098)	2.92 (0.115)	7.37 (0.290)	2.79 (0.110)
Tol.	Max.	Max.	Typ.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.

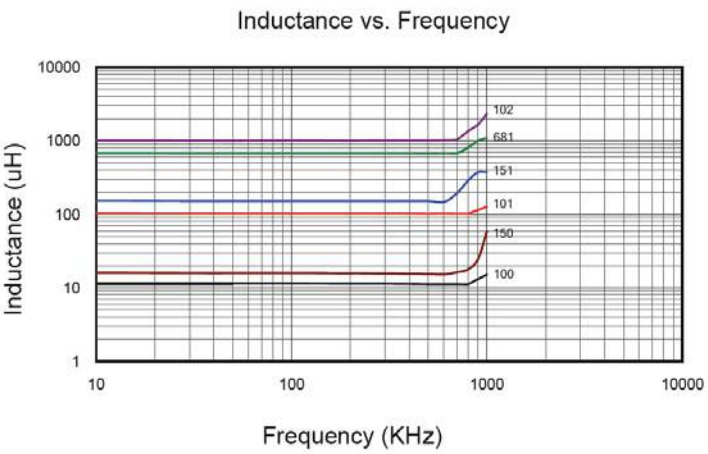


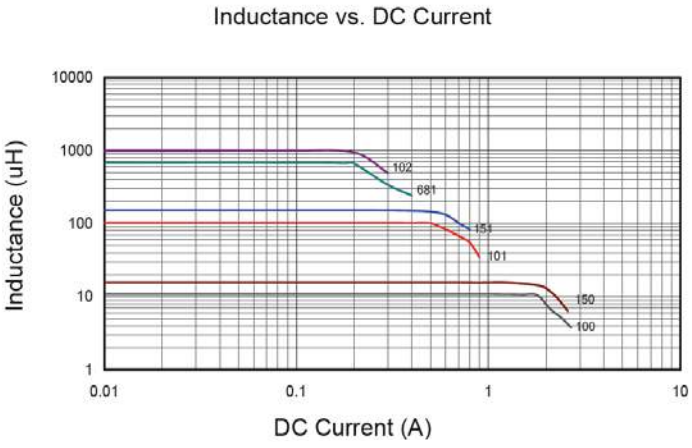






C. Characteristics Curve:





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SMD WIRE WOUND POWER INDUCTORS (UNSHIELDED)
CSN084F-SERIES

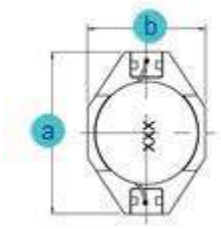
A. Electrical Specifications:

PART NO.	Marking	Inductance (µH)	Tolerance	Test Freq. (KHz)	DCR Max. (Ω)	Rated Current (A)	I sat (A)
CSN084F-1R0M	1R0	1.0	M	100	0.009	6.80	9.00
CSN084F-1R5M	1R5	1.5	M	100	0.010	6.40	8.00
CSN084F-2R2M	2R2	2.2	M	100	0.012	6.10	7.00
CSN084F-3R3M	3R3	3.3	M	100	0.015	5.40	6.40
CSN084F-4R7M	4R7	4.7	M	100	0.018	4.80	5.40
CSN084F-6R8M	6R8	6.8	M	100	0.027	4.40	4.60
CSN084F-100M	100	10	M	100	0.038	3.90	3.80
CSN084F-150M	150	15	M	100	0.046	3.10	3.00
CSN084F-220M	220	22	M	100	0.085	2.70	2.60
CSN084F-330M	330	33	M	100	0.100	2.10	2.00
CSN084F-470M	470	47	M	100	0.140	1.80	1.60
CSN084F-680M	680	68	M	100	0.200	1.50	1.40
CSN084F-101M	101	100	M	100	0.280	1.30	1.20
CSN084F-151M	151	150	M	100	0.400	1.00	1.00
CSN084F-221M	221	220	M	100	0.610	0.80	0.80
CSN084F-331M	331	330	M	100	1.020	0.60	0.60
CSN084F-471M	471	470	M	100	1.270	0.50	0.50
CSN084F-681M	681	680	M	100	2.020	0.40	0.40
CSN084F-102M	102	1000	M	100	3.000	0.30	0.30

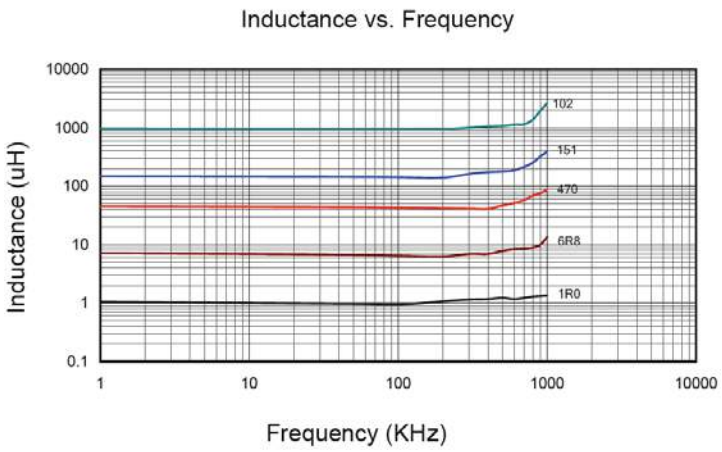
Note: CSN084F-xxx_, "CSN084F" = P/N, "xxx" = Inductance, "_" = Tolerance.

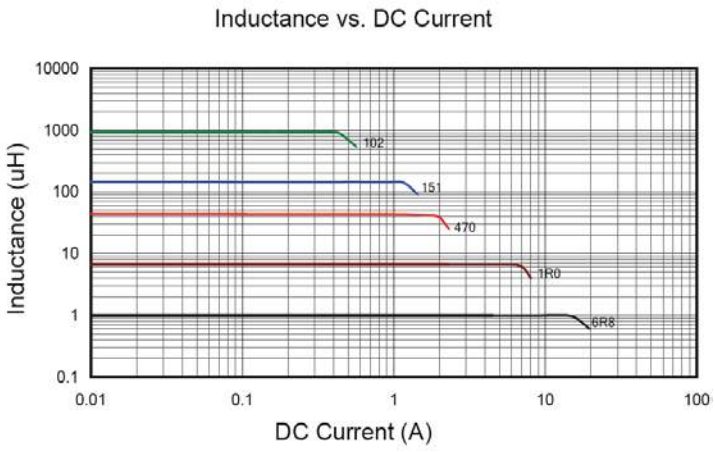
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i
CSN084F	12.95 (0.510)	9.4 (0.370)	Ø8.5 (0.335)	5.21 (0.205)	7.6 (0.299)	2.5 (0.098)	2.92 (0.115)	7.37 (0.290)	2.79 (0.110)
Tol.	Max.	Max.	Typ.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.



C. Characteristics Curve:





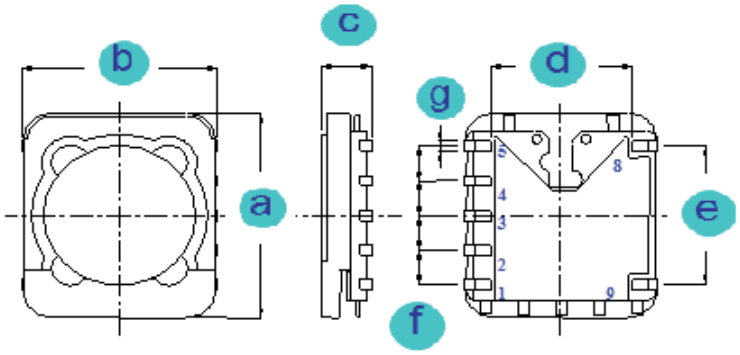
CCFL INVERTER TRANSFORMERS
TSS1230F-01

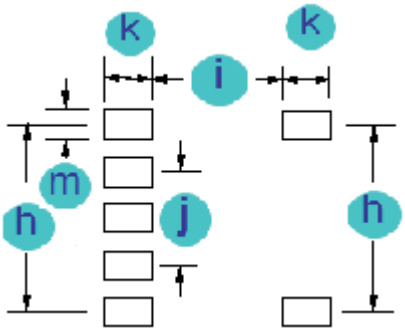
A. Specifications:

P/N	Suitable Frequency (KHz)	Mark	Max. Open Voltage (V rms)	Max. Lamp Watt. (W)	Efficiency
TSS1230F-01	90 ~ 140	TSS1230-01	750	1.2	75%

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	j	k	m
TSS1230F-01	12.3 (0.484)	10.6 (0.417)	3.0 (0.118)	7.5 (0.295)	8.0 (0.315)	2.0 ×4 (0.079)	0.6 (0.024)	8.0 (0.315)	6.8 (0.268)	4.0 (0.157)	2.5 (0.098)	1.4 ×7 (0.055)
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.

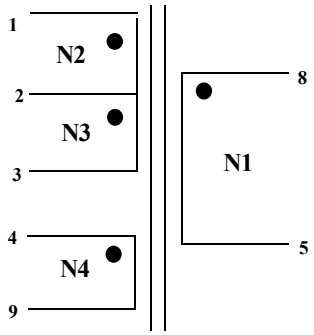




Recommended Foot Patterns

C. Electrical Data:

Winding	Start	Finish	L (@ 100KHz,1.0V)	DCR Ω (@ 25°C)
N1	8	5	60.0 mH ± 15 %	270 ± 20 %
N2	1	2	11.0 uH ± 15 %	0.550 ± 20 %
N3	2	3	11.0 uH ± 15 %	0.550 ± 20 %
N4	4	9	0.67 uH ± 15 %	0.170 ± 20 %



Turn ratio: N2: N1 = N3: N1 = 1: 67.5

D. Insulation:

Term	Item	Spec.	Condition
Hi-Pot	Coil to Coil	500 VAC / 1 Minute	@Cut off current=3mA
Hi-Pot	Coil to Core	500 VAC / 1 Minute	
Isolation	Coil to Coil	100 MOHM Min.	@ 100 VDC

E. Features:

1. Low profile height: Maximum 3.0mm.
2. Drum / Ring type: Ferrite core (Ni – Zn).
3. High efficiency.
4. Surface mount.
5. Suitable for standard IR re-flows soldering.

F. Uses:

1. Black Light power supplies transformer available.
2. FL Inverter.
3. PDA Inverter

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E-mail: frontiersales@frontierusa.com

AIR WOUND COIL
LSP TYPE

A. Features:

1. Fully automated production process to enhance our commitment to quality.
2. Custom specifications available.
3. Lead tinning available.
4. Packaging: 1000 pcs/bag

B. Customizable Coil Specifications:

Please provide below information for custom air coil quote (frontiersales@frontierusa.com):

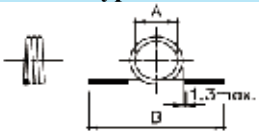
Part no.	
Wdg direction	
Wire gage	
Wire type	
Turns	
Pitch (T/inch)	
Color	
Wdg type	

Dimension		Tolerance
A		
B		
C		
D		
E		
F		
G		

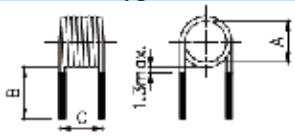
Wire Type	Color Code
Bare wire----------0	Green----------G
Polyurethane wire----1	Red----------R
Tinned copper wire--2	Natural----------N

C. Drawing:

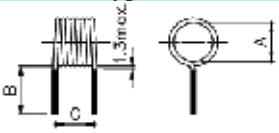
Type 01



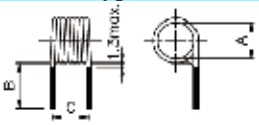
Type 02



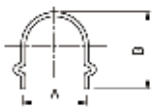
Type 03



Type 04



Type 05



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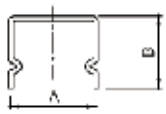

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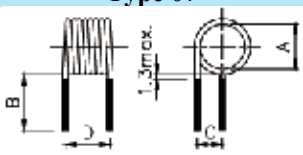
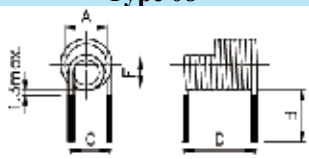


Type 08



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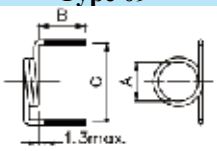

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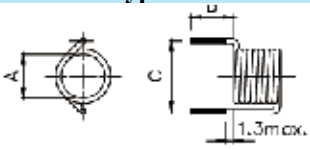

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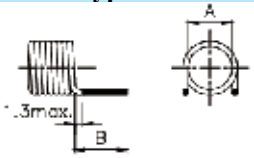
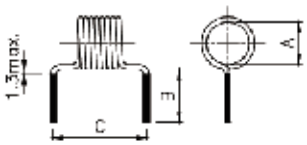
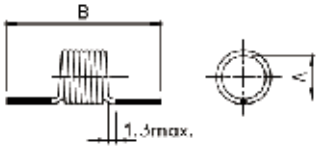


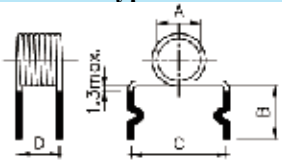
Type 12



Type 13



Type 14



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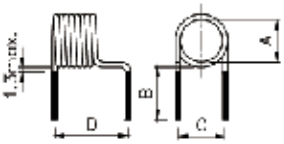
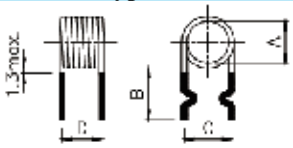
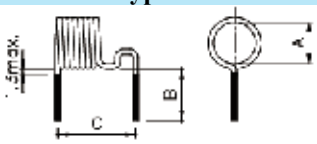


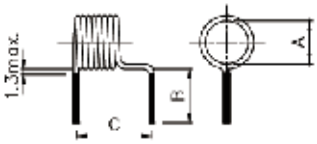
Type 16



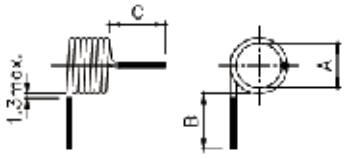
Type 17



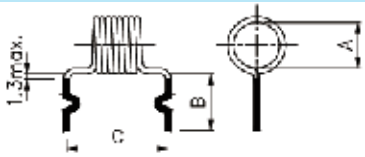
Type 18



Type 19



Type 20

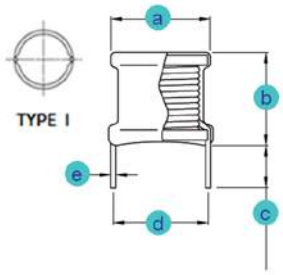


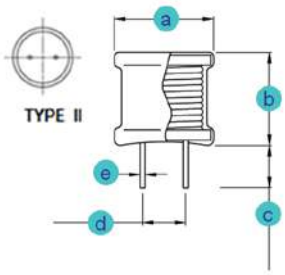
RADIAL LEADS INDUCTORS (CHOKE COILS)
1840*-SERIES

A. Dimensions: mm (Inch)

Series	a	b	c	d	e
18401 TYPE I	Ø7.5(0.295)	8.0(0.315)	5.0(0.197)	7.0(0.276)	Ø0.5~0.7(0.020~0.028)
Tol.	Max.	Max.	±1.0(0.039)	±1.5(0.059)	Typ.
18401 TYPE II	Ø7.5(0.295)	8.0(0.315)	5.0(0.197)	5.0(0.197)	Ø0.65(0.026)
Tol.	Max.	Max.	±1.0(0.039)	±0.5(0.020)	Typ.
18402 TYPE I	Ø8.5(0.335)	8.0(0.315)	5.0(0.197)	8.0(0.315)	Ø0.5~0.7(0.020~0.028)
Tol.	Max.	Max.	±1.0(0.039)	±1.5(0.059)	Typ.
18402 TYPE II	Ø8.5(0.335)	8.0(0.315)	5.0(0.197)	5.0(0.197)	Ø0.65(0.026)
Tol.	Max.	Max.	±1.0(0.039)	±0.5(0.020)	Typ.
18403 TYPE I	Ø11.5(0.453)	11.5(0.453)	5.0(0.197)	11.0(0.433)	Ø0.5~0.8(0.020~0.031)
Tol.	Max.	Max.	±1.0(0.039)	±1.5(0.059)	Typ.
18403 TYPE II	Ø11.5(0.453)	11.5(0.453)	5.0(0.197)	5.0(0.197)	Ø0.65(0.026)
Tol.	Max.	Max.	±1.0(0.039)	±0.5(0.020)	Typ.

B. Mechanical Drawing:





C. General Information:

1. 1840*xxx_H, "1840*" = P/N, "xxx" = Inductance, "_": Tolerance K=±10%, L = 15%, M = ±20%, "H"=Internal control code.
2. Operating temperature: -40°C to +85°C. (Including self-temperature rise)
3. Temperature rise: 25°C Max.
4. Ambient temperature: 60°C Max.
5. Test equipment:
   L: HP4285A LCR Meter or equivalent.
   Q: HP4285A at specified frequency or equivalent.
   DCR: CHROMA-16502 or equivalent.
   SRF: HP4291B or equivalent.
6. MSL: Level 1.
7. Inductance and Current range:
   a. 18401: From 1.0uH (6.6A) - 1000uH (200mA)
   b. 18402: From 1.0uH (7.5A) - 1500uH, (180mA)
   c. 18403: From 1.0uH (10A) - 15000uH (80mA)
8. DCR:
   a. 18401: From 0.007 - 4.5 Ohms.
   b. 18402: From 0.005 - 3.5 Ohms.
   c. 18403: From 0.004 - 15.0 Ohms.

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Radios, etc.)
6. LCD, DVD, BRP

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RADIAL LEADS INDUCTORS (CHOKE COILS)
18401-SERIES

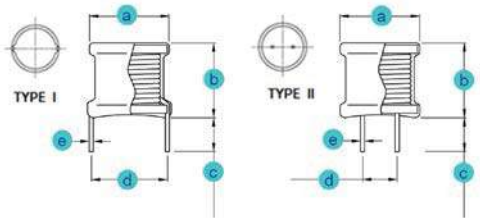
A. Electrical Specifications:

Part Number	L (uH) @ 1KHz	Q Min.	Test Freq. (MHz)	SRF Min. (MHz)	DCR (Ω) Max.	Rated Current (A) Max.	Type
184011R0MH	1.0	20	7.9	70	0.007	6.60	I
184011R5MH	1.5	20	7.9	60	0.010	5.40	I
184012R2MH	2.2	20	7.9	45	0.015	4.50	I
184013R3MH	3.3	20	7.9	35	0.020	3.60	I
184014R7MH	4.7	20	7.9	30	0.025	3.10	I
184016R8MH	6.8	20	7.9	25	0.030	2.50	I
18401100KH	10	20	2.5	20	0.045	2.10	I I
18401120KH	12	20	2.5	17	0.050	1.90	I I
18401150KH	15	20	2.5	15	0.065	1.70	I I
18401180KH	18	20	2.5	13	0.080	1.50	I I
18401220KH	22	20	2.5	12	0.10	1.40	I I
18401270KH	27	20	2.5	10	0.12	1.20	I I
18401330KH	33	20	2.5	9.2	0.14	1.10	I I
18401390KH	39	20	2.5	8.5	0.17	1.00	I I
18401470KH	47	20	2.5	7.5	0.21	0.95	I I
18401560KH	56	20	2.5	7.0	0.24	0.80	I I
18401680KH	68	20	2.5	6.5	0.28	0.75	I I
18401820KH	82	20	2.5	5.5	0.31	0.70	I I
18401101KH	100	20	0.79	5.0	0.35	0.65	I I
18401121KH	120	20	0.79	4.5	0.45	0.60	I I
18401151KH	150	20	0.79	4.0	0.56	0.53	I I
18401181KH	180	20	0.79	3.5	0.65	0.48	I I
18401221KH	220	20	0.79	3.2	0.72	0.44	I I
18401271KH	270	20	0.79	2.8	0.86	0.40	I I
18401331KH	330	20	0.79	2.5	1.10	0.36	I I
18401391KH	390	20	0.79	2.2	1.50	0.33	I I
18401471KH	470	20	0.79	2.0	1.70	0.30	I I
18401561KH	560	20	0.79	1.8	2.0	0.27	I I
18401681KH	680	20	0.79	1.7	2.5	0.25	I I
18401821KH	820	20	0.79	1.5	3.0	0.22	I I
18401102KH	1000	50	0.25	1.3	4.5	0.20	I I

NOTE: 18401xxx_H, "18401" = P/N, "xxx" = Inductance, "_": Tolerance K=±10%, L = 15%, M = ±20%, "H"=Internal control code.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e
18401 TYPE I	Ø7.5 (0.295)	8.0 (0.315)	5.0 (0.197)	7.0 (0.276)	Ø0.5~0.7 (0.020~0.028)
Tol.	Max.	Max.	±1.0 (0.039)	±1.5 (0.059)	Typ.
18401 TYPE II	Ø7.5 (0.295)	8.0 (0.315)	5.0 (0.197)	5.0 (0.197)	Ø0.65 (0.026)
Tol.	Max.	Max.	±1.0 (0.039)	±0.5 (0.020)	Typ.



RADIAL LEADS INDUCTORS (CHOKE COILS)
18402-SERIES

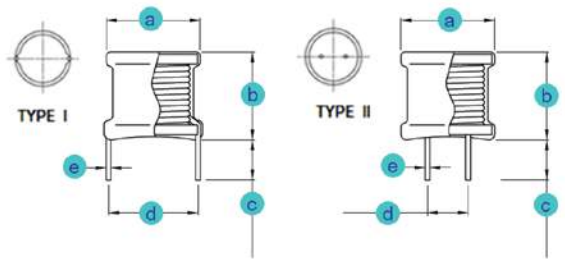
A. Electrical Specifications:

Part Number	L (uH) @ 1KHz	Q Min.	Test Freq. (MHz)	SRF Min. (MHz)	DCR (Ω) Max.	Rated Current (A) Max.	Type
184021R0MH	1	20	7.9	68	0.005	7.5	I
184021R5MH	1.5	20	7.9	56	0.008	6.6	I
184022R2MH	2.2	20	7.9	45	0.010	5.4	I
184023R3MH	3.3	20	7.9	38	0.013	4.5	I
184024R7MH	4.7	20	7.9	30	0.017	3.7	I
184026R8MH	6.8	20	7.9	24	0.022	3.1	I
18402100KH	10	20	2.5	19	0.03	2.5	I
18402120KH	12	20	2.5	17	0.04	2.2	I
18402150KH	15	20	2.5	15	0.05	2.0	I
18402180KH	18	20	2.5	13	0.06	1.8	I I
18402220KH	22	20	2.5	12	0.07	1.6	I I
18402270KH	27	20	2.5	11	0.08	1.4	I I
18402330KH	33	20	2.5	10	0.10	1.3	I I
18402390KH	39	20	2.5	9	0.12	1.2	I I
18402470KH	47	20	2.5	8	0.14	1.1	I I
18402560KH	56	20	2.5	7	0.16	0.96	I I
18402680KH	68	20	2.5	6.5	0.18	0.91	I I
18402820KH	82	20	2.5	6	0.20	0.83	I I
18402101KH	100	15	0.79	5.5	0.25	0.75	I I
18402121KH	120	15	0.79	5	0.33	0.68	I I
18402151KH	150	15	0.79	4.5	0.40	0.61	I I
18402181KH	180	15	0.79	4	0.50	0.55	I I
18402221KH	220	15	0.79	3.5	0.60	0.50	I I
18402271KH	270	15	0.79	3.2	0.70	0.45	I I
18402331KH	330	15	0.79	2.8	0.80	0.41	I I
18402391KH	390	15	0.79	2.5	0.90	0.37	I I
18402471KH	470	15	0.79	2.3	1.0	0.34	I I
18402561KH	560	15	0.79	2.1	1.3	0.31	I I
18402681KH	680	15	0.79	1.9	1.5	0.28	I I
18402821KH	820	15	0.79	1.7	2.0	0.25	I I
18402102KH	1000	30	0.25	1.5	2.5	0.23	I I
18402122KH	1200	30	0.25	1.3	3.0	0.2	I I
18402152KH	1500	30	0.25	1.2	3.5	0.18	I I

NOTE: 18402xxx_H, "18402" = P/N, "xxx" = Inductance, "_": Tolerance K=±10%, L = 15%, M = ±20%, "H"=Internal control code.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e
18402 TYPE I	Ø8.5 (0.335)	8.0 (0.315)	5.0 (0.197)	8.0 (0.315)	Ø0.5~0.7 (0.020~0.028)
Tol.	Max.	Max.	±1.0 (0.039)	±1.5 (0.059)	Typ.
18402 TYPE II	Ø8.5 (0.335)	8.0 (0.315)	5.0 (0.197)	5.0 (0.197)	Ø0.65 (0.026)
Tol.	Max.	Max.	±1.0 (0.039)	±0.5 (0.020)	Typ.



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RADIAL LEADS INDUCTORS (CHOKE COILS)
18403-SERIES

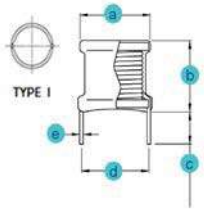
A. Electrical Specifications:

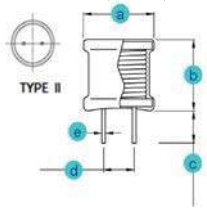
Part Number	L (uH) @ 1KHz	Q Min.	Test Freq. (MHz)	SRF Min. (MHz)	DCR (Ω) Max.	Rated Current (A) Max.	Type
184031R0MH	1.0	20	7.9	85	0.004	10.00	I
184031R5MH	1.5	20	7.9	64	0.005	8.30	I
184032R2MH	2.2	20	7.9	48	0.006	6.90	I
184033R3MH	3.3	20	7.9	36	0.008	5.60	I
184034R7MH	4.7	20	7.9	28	0.009	4.70	I
184036R8MH	6.8	20	7.9	22	0.012	3.90	I
18403100KH	10	20	2.5	16	0.016	3.20	I
18403120KH	12	20	2.5	14	0.018	2.90	I
18403150KH	15	20	2.5	12	0.020	2.60	I
18403180KH	18	20	2.5	11	0.025	2.40	I
18403220KH	22	20	2.5	10	0.030	2.20	I
18403270KH	27	20	2.5	9.0	0.040	2.00	I
18403330KH	33	20	2.5	8.0	0.050	1.80	I
18403390KH	39	20	2.5	7.0	0.060	1.65	I
18403470KH	47	20	2.5	6.0	0.070	1.50	I
18403560KH	56	20	2.5	5.5	0.080	1.35	I
18403680KH	68	20	2.5	5.0	0.10	1.20	I
18403820KH	82	20	2.5	4.5	0.12	1.10	I I
18403101KH	100	20	0.79	4.0	0.14	1.00	I I
18403121KH	120	20	0.79	3.5	0.18	0.90	I I
18403151KH	150	20	0.79	3.0	0.22	0.82	I I
18403181KH	180	20	0.79	2.8	0.25	0.75	I I
18403221KH	220	20	0.79	2.5	0.31	0.68	I I
18403271KH	270	20	0.79	2.2	0.36	0.61	I I
18403331KH	330	20	0.79	2.0	0.42	0.55	I I
18403391KH	390	20	0.79	1.8	0.48	0.50	I I
18403471KH	470	15	0.79	1.6	0.52	0.46	I I
18403561KH	560	15	0.79	1.4	0.65	0.42	I I
18403681KH	680	15	0.79	1.3	0.80	0.38	I I
18403821KH	820	15	0.79	1.2	1.0	0.34	I I
18403102KH	1000	20	0.25	1.00	1.5	0.31	I I
18403122KH	1200	20	0.25	0.90	1.8	0.28	I I
18403152KH	1500	20	0.25	0.85	2.0	0.25	I I
18403182KH	1800	20	0.25	0.80	2.5	0.23	I I
18403222KH	2200	20	0.25	0.75	3.0	0.21	I I
18403272KH	2700	20	0.25	0.70	3.5	0.19	I I
18403332KH	3300	20	0.25	0.65	4.0	0.17	I I
18403392KH	3900	20	0.25	0.60	5.0	0.15	I I
18403472KH	4700	20	0.25	0.55	6.0	0.14	I I
18403562KH	5600	20	0.25	0.50	7.5	0.13	I I
18403682KH	6800	20	0.25	0.45	9.5	0.12	I I
18403822KH	8200	20	0.25	0.40	11.0	0.11	I I
18403103KH	10000	50	0.079	0.35	12.0	0.10	I I
18403123KH	12000	50	0.079	0.30	13.5	0.09	I I
18403153KH	15000	50	0.079	0.25	15.0	0.08	I I

NOTE: 18403xxx_H, "18403" = P/N, "xxx" = Inductance, "_": Tolerance K=±10%, L = 15%, M = ±20%, "H"=Internal control code.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e
18403 TYPE I	Ø11.5(0.453)	11.5(0.453)	5.0(0.197)	11.0(0.433)	Ø0.5~0.8(0.020~0.031)
Tol.	Max.	Max.	±1.0(0.039)	±1.5(0.059)	Typ.
18403 TYPE II	Ø11.5(0.453)	11.5(0.453)	5.0(0.197)	5.0(0.197)	Ø0.65(0.026)
Tol.	Max.	Max.	±1.0(0.039)	±0.5(0.020)	Typ.



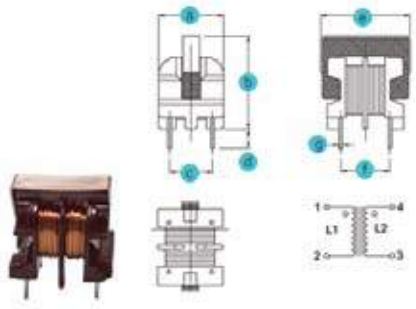


WIRE WOUND COMMON MODE FILTERS
CFU****-SERIES

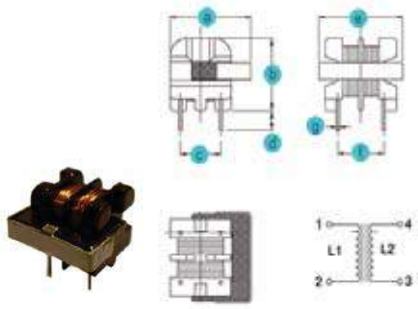
A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	Type
CFU1001V Series	11.0(0.433)	17.0(0.669)	7.0(0.276)	4.0(0.157)	16.5(0.650)	8.0(0.315)	0.6(0.024)	N/A	1
Tol.	Max.	Max.	±0.5(0.020)	±0.5(0.020)	Max.	±0.5(0.020)	±0.1(0.004)	N/A	
CFU1001H Series	16.0(0.630)	17.0(0.669)	7.0(0.276)	4.0(0.157)	17.5(0.689)	8.0(0.315)	0.6(0.024)	N/A	1
Tol.	Max.	Max.	±0.5(0.020)	±0.5(0.020)	Max.	±0.5(0.020)	±0.1(0.004)	N/A	
CFU1101 Series	19.0(0.748)	17.0(0.669)	22.0(0.866)	0.7(0.028)	12.9(0.508)	10.0(0.394)	4.5(0.177)	N/A	2
Tol.	Max.	Max.	Max.	Typ.	±0.3(0.012)	±0.5(0.020)	±1.0(0.039)	N/A	
CFU1602 Series	23.0(0.906)	13.0(0.512)	5.0(0.197)	10.0(0.394)	19.0(0.748)	27.5(1.083)	5.0(0.197)	0.7(0.028)	3
Tol.	Max.	±0.3(0.012)	±0.15(0.006)	±0.3(0.012)	Max.	Max.	±1.0(0.039)	Typ.	

B. Mechanical Drawing:

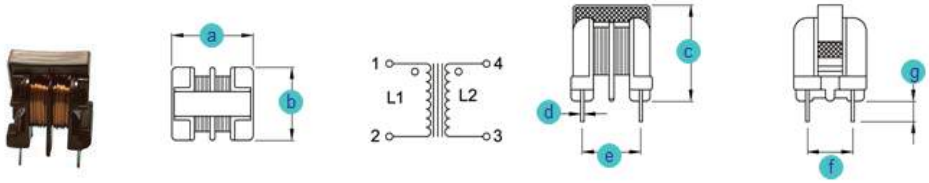


CFU1001V Series



CFU1001H Series

Type-1



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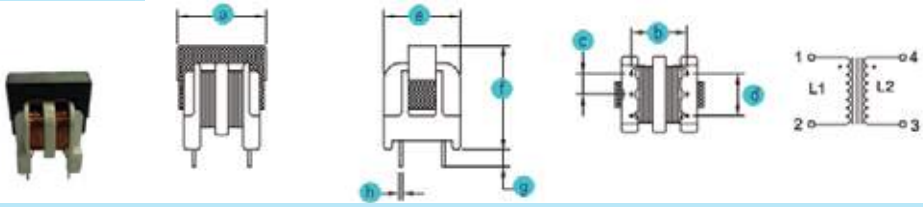

Type-3

C. General Information:

1. Test Condition: 1.0 KHz / 1V.
2. Electrical specifications at 25ºC.
3. Maximum Temperature Rise: 40°C (when measured at 25°C ambient).
4. Operating temperature: -20ºC to +105ºC.
5. Insulation Resistance: 100MΩ at 500VDC.
6. Rated Voltage: 100V to 270V / 50-60 Hz.
7. Hi-Pot Voltage: 1500VAC for one minute.
8. MSL: Level 1.

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Radios, etc.)
6. LCD, DVD, BRP

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WIRE WOUND COMMON MODE FILTERS
CFU1001-SERIES

A. Electrical Specifications:

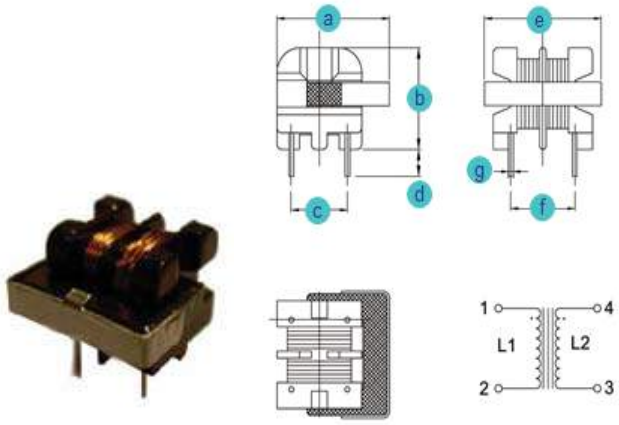
Part Number	Inductance Min. (mH)	DCR Max. (Ω)	Rated Current (A) rms.
CFU1001_-01	2 x 0.20	0.10	2.00
CFU1001_-02	2 x 0.47	0.18	1.70
CFU1001_-03	2 x 0.70	0.30	1.20
CFU1001_-04	2 x 1.00	0.50	1.00
CFU1001_-05	2 x 2.00	1.00	0.50
CFU1001_-06	2 x 5.60	2.80	0.30
CFU1001_-07	2 x 10.0	3.50	0.25
CFU1001_-08	2 x 22.0	6.30	0.20
CFU1001_-09	2 x 40.0	8.00	0.10

Note: "_": H: Horizontal mounting type.
V: Vertical mounting type.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
CFU1001V Series	11.0 (0.433)	17.0 (0.669)	7.0 (0.276)	4.0 (0.157)	16.5 (0.650)	8.0 (0.315)	0.6 (0.024)
Tol.	Max.	Max.	±0.5 (0.020)	±0.5 (0.020)	Max.	±0.5 (0.020)	±0.1 (0.004)
CFU1001H Series	16.0 (0.630)	13.0 (0.669)	7.0 (0.276)	4.0 (0.157)	16.5 (0.689)	8.0 (0.315)	0.6 (0.024)
Tol.	Max.	Max.	±0.5 (0.020)	±0.5 (0.020)	Max.	±0.5 (0.020)	±0.1 (0.004)

CFU1001V Series



CFU1001H Series

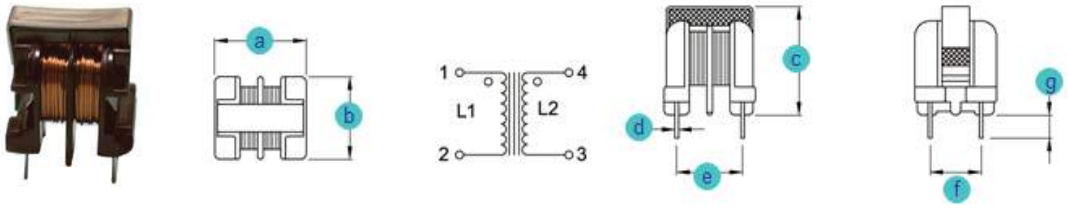
CFU1101

A. Electrical Specifications:

Part Number	Inductance Min. (mH)	DCR Max. (Ω)	Rated Current (A) rms.
CFU1101-01	2 x 3.0	0.35	0.9
CFU1101-02	2 x 1.5	0.15	1
CFU1101-03	2 x 8.0	0.65	0.8
CFU1101-04	2 x 8.0	1.2	0.7
CFU1101-05	2 x 20	1.8	0.5
CFU1101-06	2 x 1.0	0.1	2.9

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
CFU1101 Series	19.0(0.748)	17.0(0.669)	22.0(0.866)	0.7(0.028)	12.9(0.508)	10.0(0.394)	4.5(0.177)
Tol.	Max.	Max.	Max.	Typ.	±0.3(0.012)	±0.5(0.020)	±1.0(0.039)



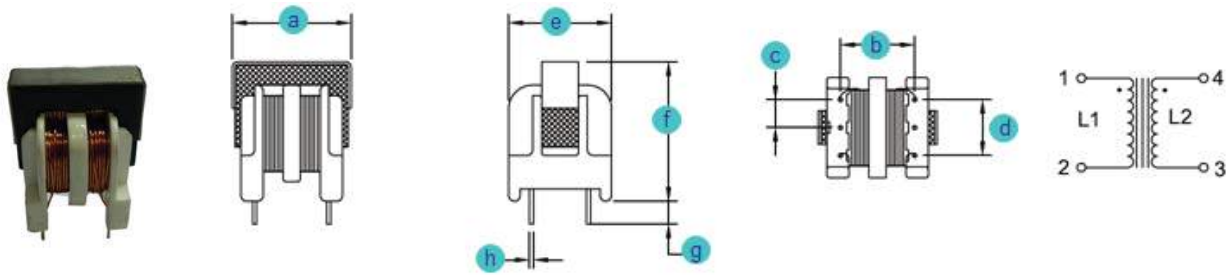
CFU1602

A. Electrical Specifications:

Part Number	Inductance (mH) Min.	DCR (OHMS) Max.	Rated Current (A) rms.
CFU1602-01	2 x 10	0.5	1.0
CFU1602-02	2 x 8.0	0.4	1.2
CFU1602-03	2 x 8.0	0.3	1.5
CFU1602-04	2 x 25	1.2	0.5

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CFU1602 Series	23.0(0.906)	13.0(0.512)	5.0(0.197)	10.0(0.394)	19.0(0.748)	27.5(1.083)	5.0(0.197)	0.7(0.028)
Tol.	Max.	±0.3(0.012)	±0.15(0.006)	±0.3(0.012)	Max.	Max.	±1.0(0.039)	Typ.



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WIRE WOUND COMMON MODE FILTERS
CFS****-SERIES

A. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	Fig.
CFS2001Series	18.0(0.709)	Ø0.8(0.031)	10.0(0.394)	22.0(0.866)	23.0(0.906)	4.0(0.157)	13.0(0.512)	10.0(0.394)	13.0(0.512)	1
Tol.	Max.	Typ.	±0.5(0.020)	Max.	Max.	±1.0(0.039)	±0.5(0.020)	Typ.	Typ.	
CFS2401 Series TYPE I	18.0(0.709)	10.0(0.394)	26.0(1.024)	30.0(1.181)	4.5(0.177)	13.0(0.512)	Ø0.8(0.031)	13.0(0.512)	10.0(0.394)	2
Tol.	Max.	±0.5(0.020)	Max.	Max.	Typ.	±0.5(0.020)	Typ.	Typ.	Typ.	
CFS2402 Series TYPE II	26.0(1.024)	15.0(0.591)	26.0(1.024)	21.0(0.827)	4.0(0.157)	21.0(0.827)	Ø0.8(0.031)	21.0(0.827)	15.0(0.591)	2
Tol.	Max.	±0.5(0.020)	Max.	Max.	±1.0(0.039)	±0.5(0.020)	Typ.	Typ.	Typ.	
CFS2801 Series TYPE I	22.0(0.866)	10.0(0.394)	31.0(1.220)	35.5(1.398)	5.0(0.197)	13.0(0.512)	Ø0.8(0.031)	13.0(0.512)	10.0(0.394)	2
Tol.	Max.	±0.5(0.020)	Max.	Max.	Typ.	±0.5(0.020)	Typ.	Typ.	Typ.	
CFS2802 Series TYPE II	29.5(1.161)	20.0(0.787)	29.5(1.161)	24.5(0.965)	4.0(0.157)	24.0(0.945)	Ø0.8(0.031)	24.0(0.945)	20.0(0.787)	2
Tol.	Max.	±0.5(0.020)	Max.	Max.	±1.0(0.039)	±0.5(0.020)	Typ.	Typ.	Typ.	
CFS3501 Series	25.0(0.984)	15.0(0.591)	37.5(1.476)	43.5(1.713)	4.0(0.157)	21.0(0.827)	Ø1.2(0.047)	21.0(0.827)	15.0(0.591)	3
Tol.	Max.	±0.5(0.020)	Max.	Max.	±1.0(0.039)	±0.5(0.020)	Typ.	Typ.	Typ.	

B. Mechanical Drawing:

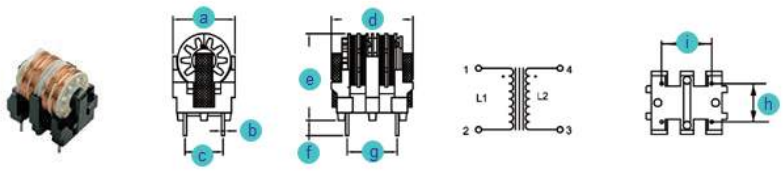


Fig-1

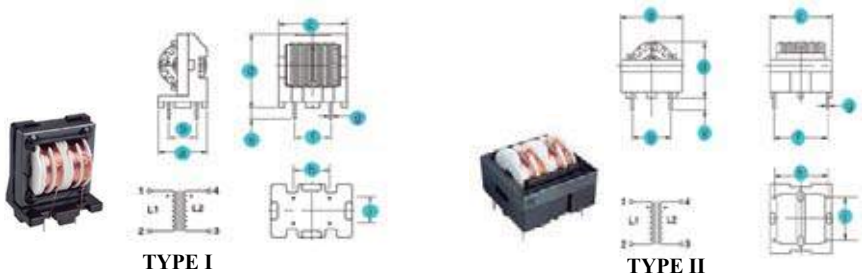


Fig-2

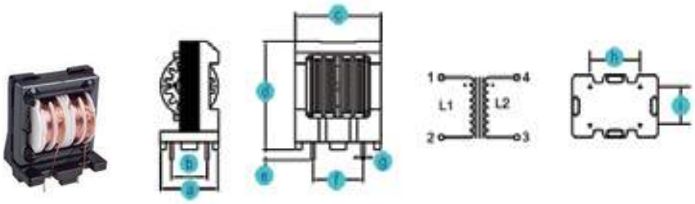


Fig-3

C. General Information:

1. P/N: CFS****-xx, "CFS****" = Size & Type, "xx" = Dash number.
2. Inductance measurement condition: 1.0 KHz, at 25ºC.
3. Temperature Rise: 45ºC Max.
4. Withstanding Voltage: 1500VAC for one minute between each winding.
5. MSL: Level 1.

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Radios, etc.)
6. LCD, DVD, BRP

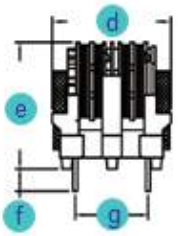
A. Electrical Specifications:

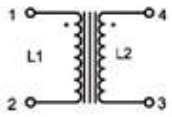
Part Number	Inductance Min. (mH)	DCR Max. (Ω)	Rated Current (A)
CFS2001-01	1.0	0.10	2.0
CFS2001-02	1.5	0.17	1.7
CFS2001-03	2.0	0.20	1.5
CFS2001-04	2.5	0.30	1.3
CFS2001-05	4.0	0.50	1.0
CFS2001-06	6.8	0.90	0.8
CFS2001-07	10	1.10	0.7
CFS2001-08	12	1.50	0.6
CFS2001-09	18	1.70	0.5
CFS2001-10	22	2.00	0.4
CFS2001-11	33	3.20	0.3

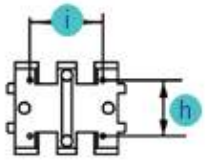
Note: CFS2001-xx: "CFS2001" = P/N, "20"= Size, "01"= Type, "xx" = Dash number.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i
CFS2001 Series	18.0 (0.709)	Ø0.8 (0.031)	10.0 (0.394)	22.0 (0.866)	23.0 (0.906)	4.0 (0.157)	13.0 (0.512)	10.0 (0.394)	13.0 (0.512)
Tol.	Max.	Typ.	±0.5 (0.020)	Max.	Max.	±1.0 (0.039)	±0.5 (0.020)	Typ.	Typ.







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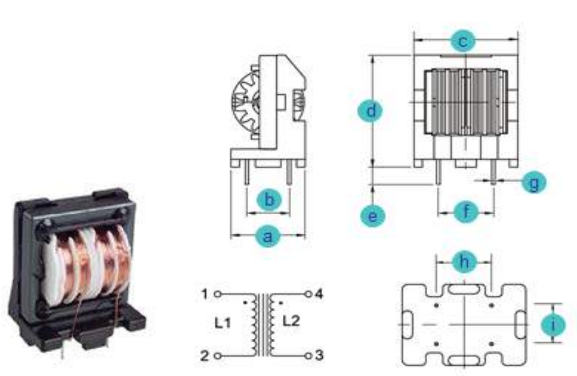
A. Electrical Specifications:

Part Number	Inductance Min. (mH)	DCR Max. (Ω)	Rated Current (A)
CFS24-01**	2.7	0.15	2.0
CFS24 -02**	3.9	0.22	1.7
CFS24 -03**	6.8	0.40	1.3
CFS24-04**	10	0.50	1.0
CFS24-05**	20	0.90	0.8
CFS24-06**	25	1.50	0.7
CFS24-07**	33	1.60	0.6
CFS24-08**	60	3.00	0.5
CFS24-09**	80	3.80	0.4
CFS24-10**	120	6.50	0.3

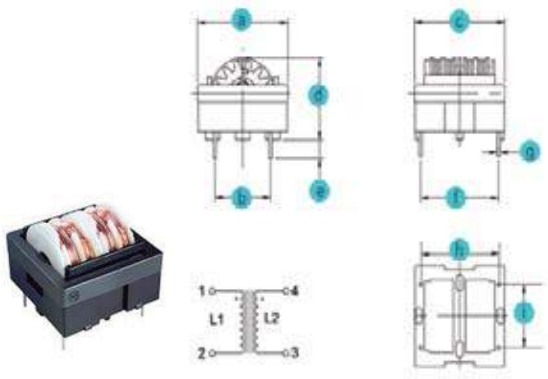
Note: CFS24-xx: "CFS24**" = P/N, "24"= Size, "**"= Type, "xx" = Dash number.**

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i
CFS2401 Series TYPE 01	18.0 (0.709)	10.0 (0.394)	26.0 (1.024)	30.0 (1.181)	4.5 (0.177)	13.0 (0.512)	Ø0.8 (0.031)	13.0 (0.512)	10.0 (0.394)
Tol.	Max.	±0.5 (0.020)	Max.	Max.	Typ.	±0.5 (0.020)	Typ.	Typ.	Typ.
CFS2402 Series TYPE 02	26.0 (1.024)	15.0 (0.591)	26.0 (1.024)	21.0 (0.827)	4.0 (0.157)	21.0 (0.827)	Ø0.8 (0.031)	21.0 (0.827)	15.0 (0.591)
Tol.	Max.	±0.5 (0.020)	Max.	Max.	±1.0 (0.039)	±0.5 (0.020)	Typ.	Typ.	Typ.



TYPE 01



TYPE 02

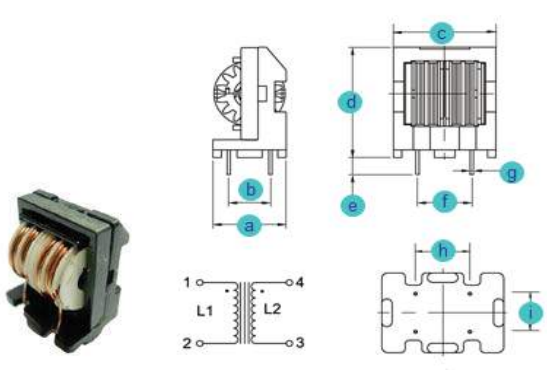
A. Electrical Specifications:

Part Number	Inductance Min. (mH)	DCR Max. (Ω)	Rated Current (A)
CFS28-01**	3.3	0.12	3.0
CFS28-02**	5.6	0.16	2.5
CFS28-03**	8.0	0.16	2.0
CFS28-04**	16	0.40	1.5
CFS28-05**	39	0.65	1.0
CFS28-06**	45	0.80	0.9
CFS28-07**	60	1.00	0.8
CFS28-08**	68	1.50	0.7
CFS28-09**	96	2.00	0.6
CFS28-10**	120	2.50	0.5

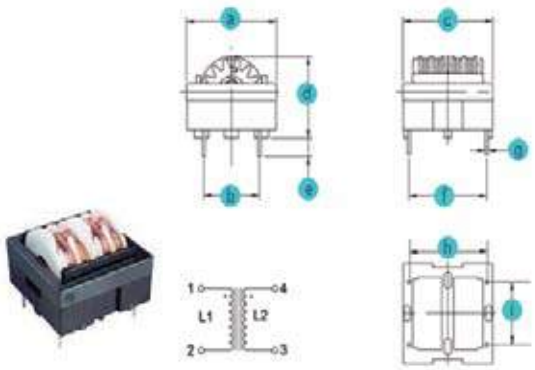
Note: CFS28-xx: "CFS28**" = P/N, "28"= Size, "**"= Type, "xx" = Dash number.**

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i
CFS2801 Series TYPE 01	22.0 (0.866)	10.0 (0.394)	31.0 (1.220)	35.5 (1.398)	5.0 (0.197)	13.0 (0.512)	Ø0.8 (0.031)	13.0 (0.512)	10.0 (0.394)
Tol.	Max.	±0.5 (0.020)	Max.	Max.	Typ.	±0.5 (0.020)	Typ.	Typ.	Typ.
CFS2802 Series TYPE 02	29.5 (1.161)	20.0 (0.787)	29.5 (1.161)	24.5 (0.965)	4.0 (0.157)	24.0 (0.945)	Ø0.8 (0.031)	24.0 (0.945)	20.0 (0.787)
Tol.	Max.	±0.5 (0.020)	Max.	Max.	±1.0 (0.039)	±0.5 (0.020)	Typ.	Typ.	Typ.



TYPE 01



TYPE 02

667 E. Cochran Street, Simi Valley, CA 93065
www.frontierusa.com
Tel: (805) 522-9998 Fax: (805) 522-9989
E-mail: frontiersales@frontierusa.com

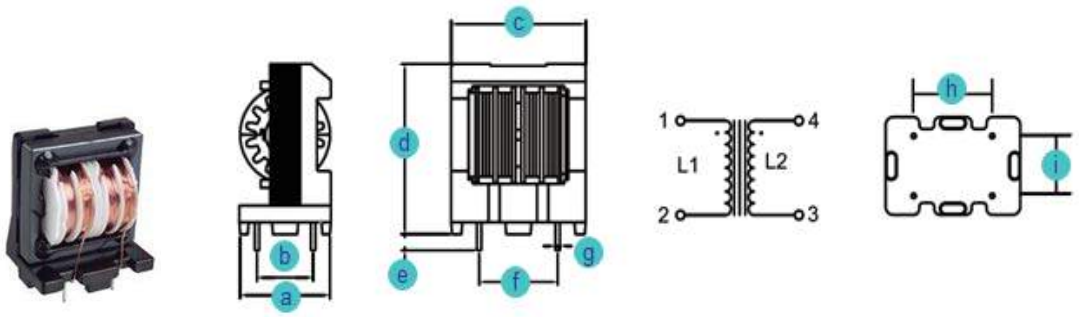
A. Electrical Specifications:

Part Number	Inductance Min. (mH)	DCR Max. (Ω)	Rated Current (A)
CFS3501-01	2.2	0.06	4.5
CFS3501-02	3.3	0.08	4.0
CFS3501-03	5.6	0.10	3.5
CFS3501-04	8.2	0.12	3.0
CFS3501-05	10	0.15	2.7
CFS3501-06	12	0.20	2.5
CFS3501-07	17	0.28	2.0
CFS3501-08	22	0.40	1.8
CFS3501-09	30	0.48	1.5

Note: CFS3501-xx: "CFS3501" = P/N, "35"= Size, "01"= Type, "xx" = Dash number.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i
CFS3501 Series	25.0 (0.984)	15.0 (0.591)	37.5 (1.476)	43.5 (1.713)	4.0 (0.157)	21.0 (0.827)	Ø1.2 (0.047)	21.0 (0.827)	15.0 (0.591)
Tol.	Max.	±0.5 (0.020)	Max.	Max.	±1.0 (0.039)	±0.5 (0.020)	Typ.	Typ.	Typ.



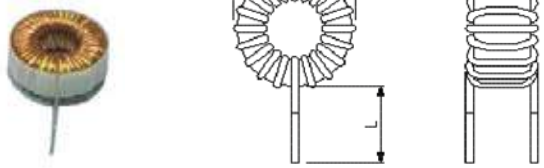
A. Electrical Specifications:

Part Number	L (uH)	DCR Max. (Ω)	Rated Current (A rms.)
3011I101	10 ± 15%	0.02	5.0
3011I102	15± 15%	0.03	3.0
3011I103	18± 15%	0.05	1.0
3011I104	40± 15%	0.09	1.0

B. Dimensions: mm (Inch)

Series	D	T	L	Wire Size
3011I101	16.0 (0.630)	10 (0.394)	12.7 (0.5)	1.0 (0.039)
3011I102	15.0 (0.591)	10 (0.394)	9.7 (0.382)	0.8 (0.031)
3011I103	15.5 (0.610)	8.5 (0.335)	12.7 (0.5)	0.5 (0.020)
3011I104	15.5 (0.610)	8.5 (0.335)	12.7 (0.5)	0.5 (0.020)

C. Mechanical Dimensions: (Unit: mm / Inch)



C. General Information:

1. Test Condition: 1.0 KHz / 0.25V.
2. Electrical specifications at 25ºC.
3. Maximum Temperature Rise 40ºC (when measured at 25ºC ambient).
4. Operating temperature: -20ºC TO +105ºC.
5. Insulation Resistance: 100M OHMS at 500VDC.
6. Rated Voltage: 100V to 270V / 50-60 Hz.
7. Hi-Pot Voltage: 1500VAC for one minute.
8. Unspecified values available on request.
9. MSL: Level 1.

E. Supplementary Information:

1. Solder Profile (See Appendix B)

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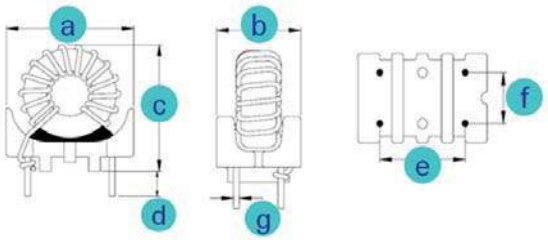
A. Electrical Specifications:

Part Number	Inductance (uH)	DCR (Ω) Max.	Rated Current (A) rms.
3051-01_H	80	0.050	0.50
3051-02_H	100	0.500	0.50
3051-03_H	440	0.080	0.80
3051-04_H	1000	0.100	0.80
3051-05_H	3000	1.000	0.50
3051-06_H	3300	0.250	0.50
3051-07_H	6800	0.350	0.50

Note: "_": Tolerance, H – Internal control code.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
3051 Series	20.0 (0.787)	12.0 (0.472)	22.0 (0.866)	4.0 (0.157)	15.0 (0.591)	6.0 (0.236)	1.0 (0.039)
Tol.	Max.	Max.	Max.	±1.0 (0.039)	±0.5 (0.020)	±0.5 (0.020)	±0.1 (0.004)



C. General Information:

1. Tolerance "_": N: ±30%, M: ± 20%.
2. Test Condition: 1.0 KHz / 1V.
3. Electrical specifications at 25ºC
4. Maximum Temperature Rise 40°C (when measured at 25°C ambient).
5. Rated Voltage: 100 to 270V / 50-60 Hz.
6. Withstanding Voltage: 1500VAC for one minute.
7. Insulation Resistance: 100 MΩ at 500VDC.
8. Operating temperature: -20ºC to +105ºC
9. MSL: Level 1.

D. Applications:

1. Computers & Game Consoles
2. Set Top Boxes & Cables Modems
3. Mobile Communication Devices (Radios, etc.)
4. LCD, DVD, BRP

E. Supplementary Information:

1. Solder Profile (See Appendix B)

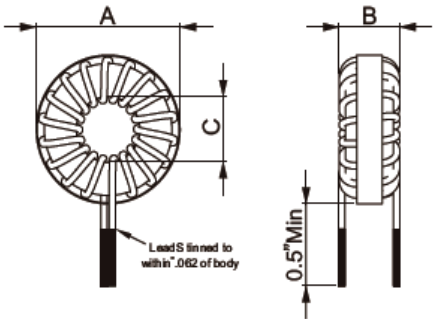
HIGH CURRENT TOROID INDUCTORS
3261I-SERIES

A. Electrical Specifications:

Part Number	L(uH) ±15% @1KHz	I dc (Amps) Max.	L (uH) Min. @ I dc	DCR Max. (Ω)	Dim Max. (In) A	B	C	Lead Dia. Nom.
3261I01LH	25	2.50	16	0.050	0.550	0.240	0.150	0.020
3261I02LH	35	2.50	29	0.035	0.700	0.320	0.150	0.025
3261I03LH	50	2.50	35	0.060	0.750	0.320	0.150	0.020
3261I04LH	100	2.50	70	0.080	0.850	0.360	0.200	0.020
3261I05LH	70	3.00	50	0.050	0.850	0.360	0.200	0.025
3261I06LH	40	4.00	30	0.025	0.850	0.360	0.200	0.032
3261I07LH	10	11.00	5	0.008	0.875	0.437	0.187	0.064
3261I08LH	25	5.50	12	0.014	0.875	0.437	0.187	0.040
3261I09LH	125	2.75	70	0.120	0.875	0.437	0.187	0.020
3261I10LH	275	2.00	150	0.240	0.875	0.437	0.187	0.016
3261I11LH	450	1.50	250	0.490	0.875	0.437	0.187	0.012
3261I12LH	25	9.00	15	0.012	1.125	0.562	0.312	0.064
3261I13LH	75	5.00	40	0.040	1.125	0.562	0.312	0.036
3261I14LH	400	2.25	225	0.330	1.125	0.562	0.312	0.018
3261I15LH	800	1.75	475	0.640	1.125	0.562	0.312	0.015
3261I16LH	1000	1.50	575	0.980	1.125	0.562	0.312	0.012
3261I17LH	50	9.50	25	0.012	1.350	0.635	0.375	0.064
3261I18LH	150	4.75	85	0.046	1.250	0.625	0.375	0.036
3261I19LH	700	2.25	400	0.420	1.250	0.625	0.375	0.018
3261I20LH	1250	1.75	750	0.850	1.250	0.625	0.375	0.015
3261I21LH	1600	1.50	950	1.270	1.250	0.625	0.375	0.012
3261I22LH	125	7.75	65	0.032	1.822	0.850	0.750	0.064
3261I23LH	500	4.00	275	0.150	1.822	0.850	0.750	0.032
3261I24LH	1100	2.50	650	0.330	1.822	0.850	0.750	0.025
3261I25LH	2250	1.75	1350	0.920	1.822	0.850	0.750	0.018
3261I26LH	4500	1.25	2700	2.640	1.822	0.850	0.750	0.012
3261I27LH	250	8.00	125	0.041	2.225	0.987	0.625	0.062
3261I28LH	900	3.75	500	0.175	2.225	0.987	0.625	0.032
3261I29LH	1800	2.50	1000	0.550	2.225	0.987	0.625	0.023
3261I30LH	4000	1.75	2100	1.160	2.225	0.987	0.625	0.018
3261I31LH	8000	1.00	4500	3.340	2.225	0.987	0.625	0.012

Note: LH – Internal control code.

B. Mechanical Dimensions: (Unit: Inch)



C. Applications:

1. Computers & Game Consoles
2. Set Top Boxes & Cables Modems
3. Mobile Communication Devices (Radios etc.)
4. LCD, DVD, BRP

D. Supplementary Information:

1. Solder Profile (See Appendix B)

667 E. Cochran Street, Simi Valley, CA 93065
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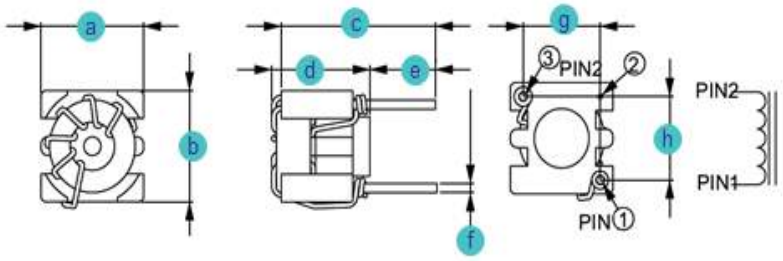
A. Electrical Specifications:

Part Number	Color Dots 1	2	3	Inductance (nH) ± 5%	Q (Min.)	Test Freq. (MHz)	DCR (Ω) Max.	Rated Current (mA)
3361I-90NJH	BLK	WHT	BLK	90	80	100	0.035	600
3361I-R10JH	BRN	BLK	BLK	100	80	100	0.035	600
3361I-R11JH	BRN	BRN	BLK	110	80	100	0.035	600
3361I-R12JH	BRN	RED	BLK	120	80	100	0.035	600
3361I-R13JH	BRN	ORG	BLK	130	80	100	0.035	600
3361I-R14JH	BRN	YEL	BLK	140	80	100	0.045	600
3361I-R15JH	BRN	GRN	BLK	150	80	100	0.045	600
3361I-R17JH	BRN	BLU	GRN	165	80	100	0.045	600
3361I-R18JH	BRN	GRY	BLK	180	80	100	0.045	600
3361I-R20JH	RED	BLK	BLK	200	80	100	0.045	600
3361I-R22JH	RED	RED	BLK	220	80	100	0.058	600
3361I-R24JH	RED	YEL	BLK	240	70	100	0.058	600
3361I-R28JH	RED	GRY	BLK	280	70	100	0.058	600
3361I-R31JH	ORG	BRN	BLK	310	70	100	0.058	600
3361I-R35JH	ORG	GRN	BLK	350	70	100	0.058	600

Note: "J": Tolerance ±5%, H – Internal control code.

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
3361I Series	6.0 (0.236)	6.0 (0.236)	9.0 (0.354)	6.5 (0.256)	3.0 (0.118)	0.5 (0.020)	4.5 (0.177)	4.5 (0.177)
Tol.	±0.5 (0.020)	±0.5 (0.020)	+1.0 (0.039) -0.5 (0.020)	Max.	+1.0 (0.039) -0.5 (0.020)	±0.05 (0.002)	±0.5 (0.020)	±0.5 (0.020)



C. General Information:

1. For high frequency up to 1.0GHz.
2. High Q up to 150MHz.
3. Electrical specifications at 25°C.
4. Temperature stability: 150ppm/°C.
5. Operating temperature: -30°C to +85°C
6. Unspecified values and stricter tolerance less than 1% are available upon request.
7. MSL: Level 1.

D. Applications:

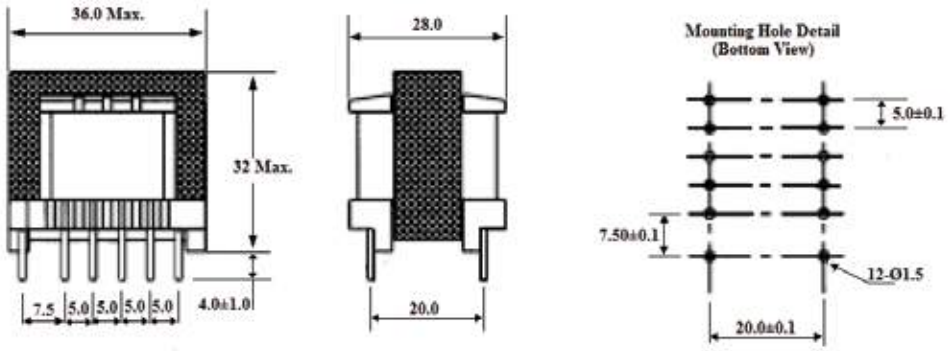
1. Computers & Game Consoles
2. Set Top Boxes & Cables Modems
3. Mobile Communication Devices (Radios, etc.)
4. LCD, DVD, BRP
5. For LC filters, CATV diplex filters.

E. Supplementary Information:

1. Solder Profile (See Appendix B)

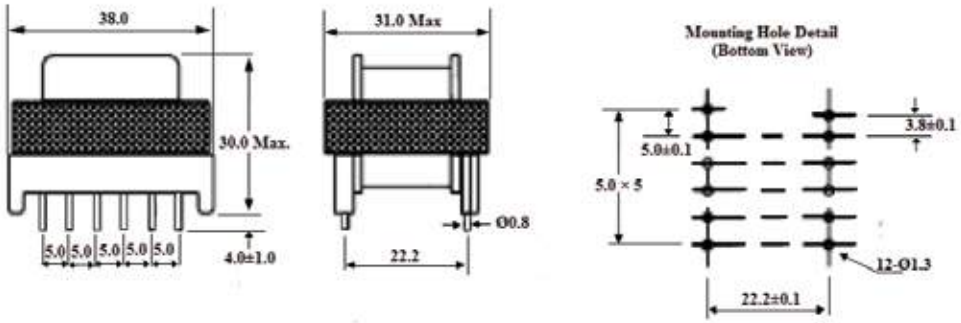
SMV3501 SERIES

CORE SIZE	EI 35×12
A_e (mm^2)	120.0
L_e (mm)	67.3
V_e (mm^3)	8090
A_w (mm^2)	85.7
Power (w)	97/25 kHz



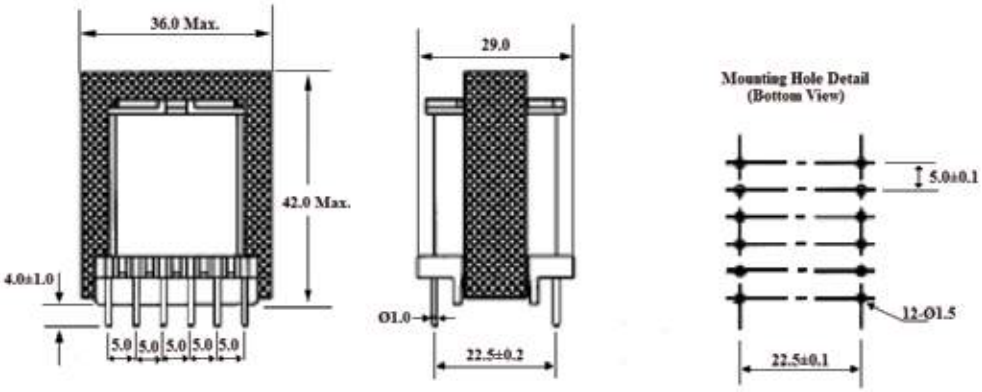
SMH3502 SERIES

CORE SIZE	EE 35×10
A_e (mm^2)	100.0
L_e (mm)	67.3
V_e (mm^3)	6700
A_w (mm^2)	82.0
Power (w)	95/25 kHz



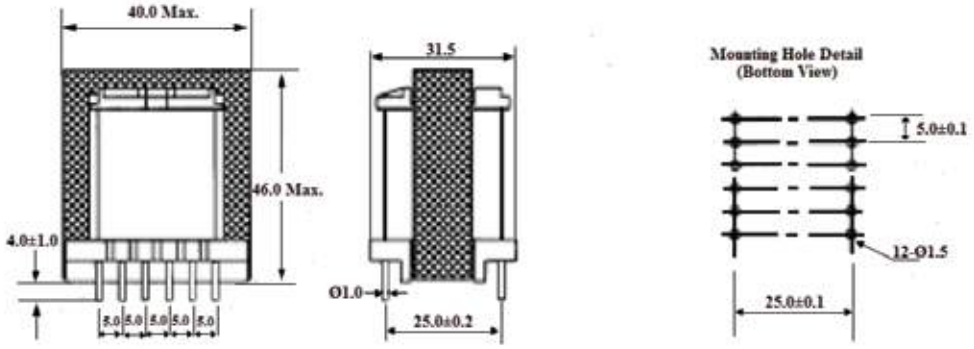
SRV3503 SERIES

CORE SIZE	EER 35
A_e (mm^2)	107.0
L_e (mm)	90.8
V_e (mm^3)	9682
A_w (mm^2)	152.7
Power (w)	175/25 kHz



SRV3901 SERIES

CORE SIZE	EER 39
A_e (mm^2)	130.0
L_e (mm)	103.0
V_e (mm^3)	13380
A_w (mm^2)	201.0
Power (w)	195/25 kHz



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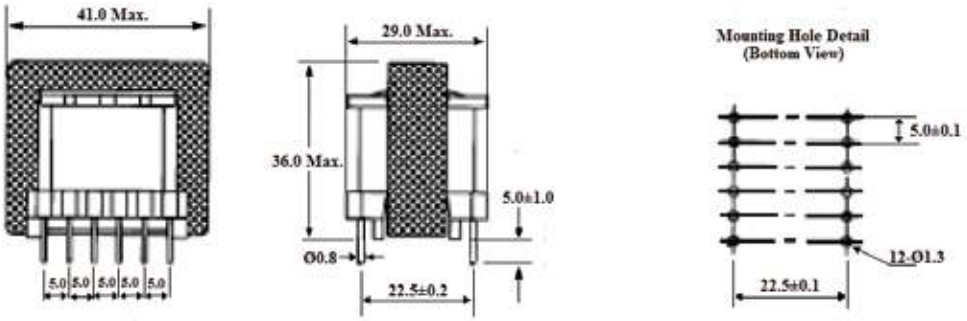
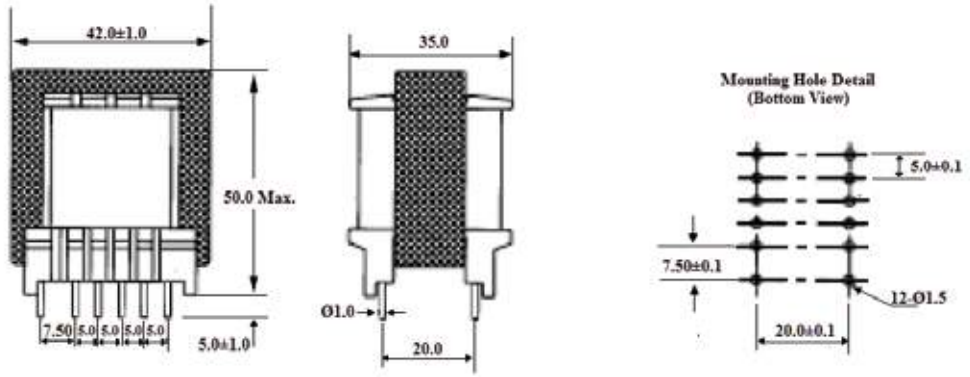
SMV4001 SERIES

CORE SIZE	EI 40×35×12
A_e (mm^2)	148.0
L_e (mm)	77.0
V_e (mm^3)	11300
A_w (mm^2)	120.2
Power (w)	130/25 kHz



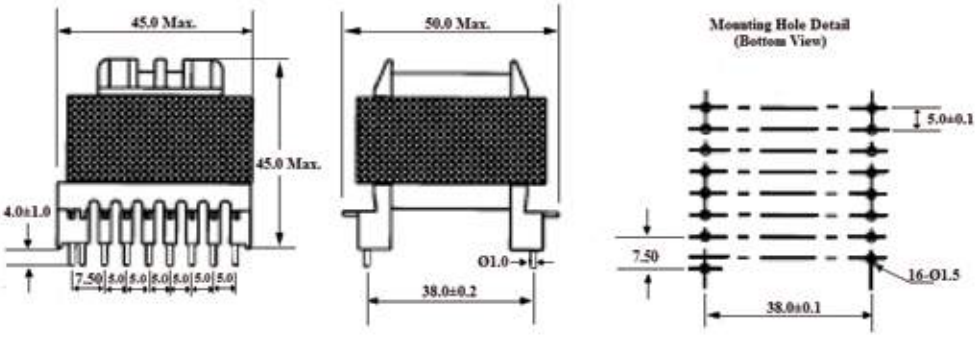
SMV4201 SERIES

CORE SIZE	EE 42×15
A_e (mm^2)	182.0
L_e (mm)	97.0
V_e (mm^3)	17600
A_w (mm^2)	197.4
Power (w)	215/25 kHz



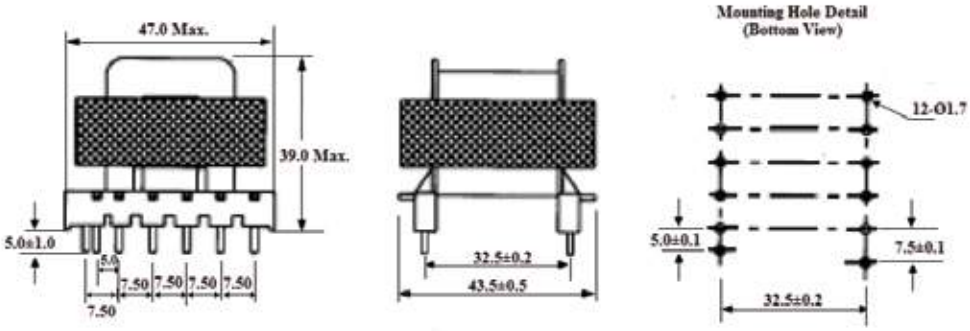
SMH4202 SERIES

CORE SIZE	EI 42×20
A_e (mm^2)	235.0
L_e (mm)	97.4
V_e (mm^3)	22900
A_w (mm^2)	197.4
Power (w)	265/25 kHz



SMH4203 SERIES

CORE SIZE	EI 42×15
A_e (mm^2)	182.0
L_e (mm)	97.0
V_e (mm^3)	17600
A_w (mm^2)	197.4
Power (w)	215/25 kHz



PLANAR TRANSFORMER

A. Features:

1. High efficiency, low EMI, excellent repeatability.
2. Low profile and weight.
3. RoHs compliant and halogen free.

B. Application:

1. Telecommunications, Electronics, Industrial, Power Appliances, Transportation, Lighting/LED, and others where planar transformers provide efficient power distribution and high frequency switching.

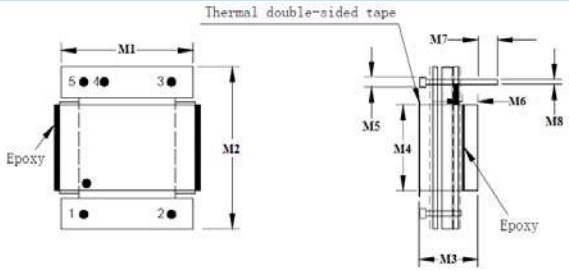
C. Electrical Specifications:

Model NO	Output Power (W)	Inductance (uH)	Height (mm) Max.
PER22163XXXX	150	≥90	9.3
PER18174XXXX	200	60 ±10%	6.8
PER30172XXXX	300	80 ± 20%	9.9
PFE18210XXXX	300	10 ± 10%	9.0

Note: Frequency (KHz): 100

D. Drawing:

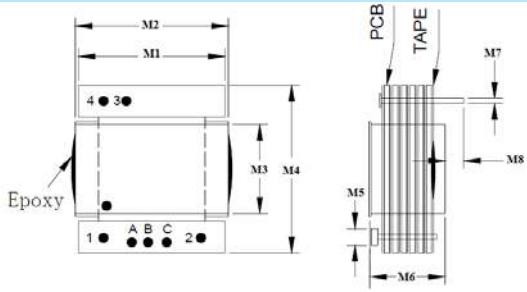
PER22163XXXX SERIES



UNIT : mm

	DIM.	TOL.
M1	21.5	±0.5
M2	27.0	MAX.
M3	9.3	MAX.
M4	14.0	±0.5
M5	Φ1.8	±0.2
M6	2.8	±0.3
M7	3.7	±0.5
M8	0.85	±0.1

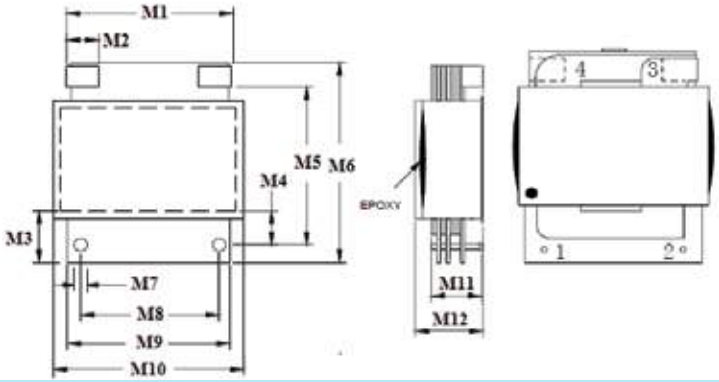
PER18174XXXX SERIES



UNIT : mm

	DIM.	TOL.
M1	17.1	±0.3
M2	18.0	±0.5
M3	13.0	±0.2
M4	24.4	MAX.
M5	Φ1.8	±0.2
M6	6.8	MAX.
M7	Φ0.85	±0.1
M8	3.70	±0.5

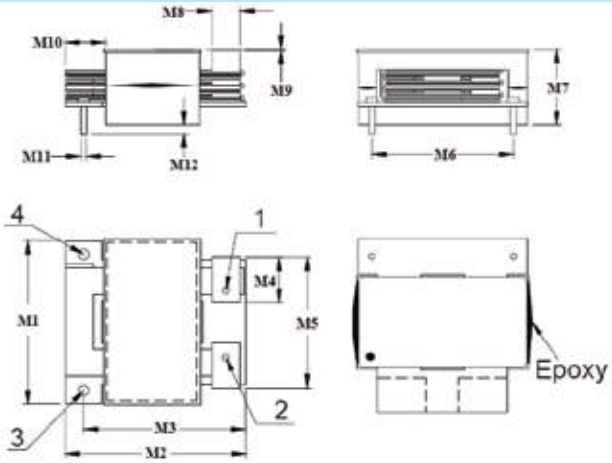
PER30172XXXX SERIES



UNIT : mm

	DIM.	TOL.
M1	17.5	±0.5
M2	4.0	±0.5
M3	9.0	MAX.
M4	7.5	±0.5
M5	24.5	±0.5
M6	31.0	MAX.
M7	Φ2.0	MAX.
M8	13.0	±0.5
M9	18.5	±0.5
M10	23.5	MAX.
M11	7.2	MAX.
M12	9.9	MAX.

PFE18210XXXX SERIES



UNIT : mm

	DIM.	TOL.
M1	18.0	±0.2
M2	20.0	MAX.
M3	17.0	±0.5
M4	4.0	±0.5
M5	15.5	±0.5
M6	15.0	±0.5
M7	9.0	MAX.
M8	3.0	±0.3
M9	0.1	MAX.
M10	4.8	MAX.
M11	Φ0.6	TYP.
M12	1.0	±0.5

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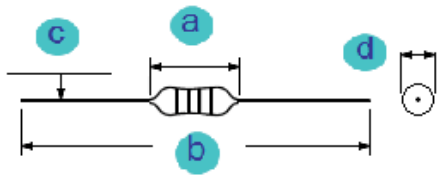
A. Dimensions: mm (Inch)

Series	a	b	c	d
1205	7.37(0.290)	64.0(2.52)	0.508(0.02)	2.79(0.110)
Tol.	Max	±2.0(0.078)	0.05(0.002)	Max
1206	10.41(0.410)	64.0(2.52)	0.635(0.025)	4.44(0.175)
Tol.	Max	±2.0(0.079)	0.05(0.002)	Max



B. General Information:

1. Coil Form Material: Ferrite
2. Inductance Tolerance: M:±20%, K: ±10%, J:±5%.
3. Other information:

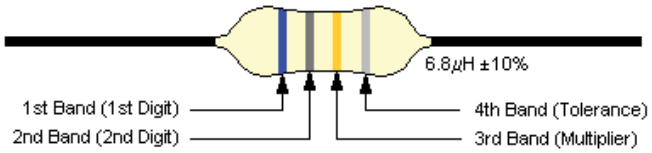
Spec. / Series	1205/1206-Series
Operating Temperature:	- 20°X to + 80°X
Temp. Rise:	20°X
Ambient Temperature:	90°X Max.
Terminal Strength:	3 lb.
Marking:	Color Code in accordance with EIA
Moisture & Heat Resist.:	Δ L/L ≤ ±5% Δ Q/Q ≤ ±10%
Dielectric Strength:	1KV rms.
Test Equipment:	L & Q = HP4342A at specified frequency DCR = Milli-Ohm meter, SRF = HP4191A

4. Color Code for RF Coated Chokes:

Color	Black	Brown	Red	Orange	Yellow	Green	Blue	Violet	Gray	White	Gold	Silver	None
Digit	0	1	2	3	4	5	6	7	8	9	- -	- -	- -
Multiplier	1	10	100	1000	10,000	- -	- -	- -	- -	- -	0.1	0.01	- -
Tolerance	- -	- -	- -	3%	- -	- -	- -	- -	- -	- -	5%	10%	20%

Example color code on Molded Inductor:

Inductance (µH)	1st Band	2nd Band	3rd Band	4th Band
0.68 ± 10%	Blue	Gray	Silver	Silver
6.8 ± 10%	Blue	Gray	Gold	Silver
68 ± 10%	Blue	Gray	Black	Silver



Color Code

C. Supplementary Information:

1. Solder Profile (See Appendix B)

RF COATED CHOKES (AXIAL LEADS)
1205-SERIES

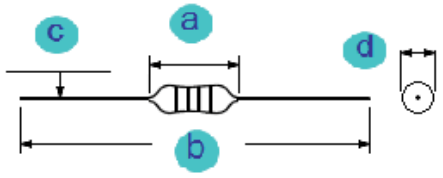
A. Electrical Specifications:

Part Number	Inductance(µH)	Q Min.	Test Freq. (MHz)	SRF Min. (MHz)	DCR (OHM) Max.	Rated Current (mA) Max.
1205R10M	0.10	35	25	380	0.075	1150
1205R12M	0.12	35	25	380	0.075	1150
1205R15M	0.15	35	25	380	0.075	1150
1205R18M	0.18	35	25	380	0.075	1150
1205R22M	0.22	35	25	380	0.075	1150
1205R27M	0.27	35	25	360	0.08	1110
1205R33M	0.33	35	25	350	0.08	1110
1205R39M	0.39	35	25	320	0.09	1000
1205R47M	0.47	40	25	300	0.10	1000
1205R56M	0.56	40	25	280	0.11	950
1205R68M	0.68	40	25	250	0.12	900
1205R82M	0.82	40	25	200	0.12	900
12051R0K	1.0	50	25	180	0.15	815
12051R2K	1.2	50	7.9	165	0.18	740
12051R5K	1.5	50	7.9	150	0.20	700
12051R8K	1.8	50	7.9	125	0.23	655
12052R2K	2.2	50	7.9	110	0.25	630
12052R7K	2.7	50	7.9	95	0.28	595
12053R3K	3.3	50	7.9	70	0.30	575
12053R9K	3.9	50	7.9	65	0.32	555
12054R7K	4.7	50	7.9	50	0.35	530
12055R6K	5.6	50	7.9	40	0.40	500
12056R8K	6.8	50	7.9	30	0.45	470
12058R2K	8.2	50	7.9	28	0.55	425
1205100K	10	50	7.9	22	0.72	370
1205120K	12	50	2.5	20	0.80	350
1205150K	15	50	2.5	16	0.88	335
1205180K	18	50	2.5	15	1.0	315
1205220K	22	50	2.5	13	1.2	285
1205270K	27	50	2.5	11	1.35	270
1205330K	33	50	2.5	10	1.5	255
1205390K	39	50	2.5	9.5	1.7	240
1205470K	47	50	2.5	8.5	2.3	205
1205560K	56	50	2.5	7.5	2.6	195
1205680K	68	50	2.5	6.5	2.9	185
1205820K	82	50	2.5	6.0	3.2	175
1205101K	100	50	2.5	5.5	3.5	165
1205121K	120	50	0.79	5.4	3.8	160
1205151K	150	50	0.79	4.75	4.4	150
1205181K	180	50	0.79	4.35	5.0	140
1205221K	220	50	0.79	4.0	5.7	130
1205271K	270	50	0.79	3.7	6.5	120
1205331K	330	50	0.79	3.4	9.5	100
1205391K	390	50	0.79	2.8	10.5	95
1205471K	470	50	0.79	2.55	11.6	90
1205561K	560	50	0.79	2.35	13	85
1205681K	680	50	0.79	2.0	18	75
1205821K	820	50	0.79	1.5	23	65
1205102K	1000	50	0.79	1.2	26	60

Note: 1. Inductance (Current) ranges: 0.10uH (1.15A) - 1000uH (60mA)
2. DCR: from 0.075 - 26.0 Ohms.
3. Body Size: 7.37 x 2.79 mm

B. Dimensions: mm (Inch)

Series	a	b	c	d
1205	7.37(0.290)	64.0(2.52)	0.508(0.02)	2.79(0.110)
Tol.	Max	±2.0(0.078)	0.05(0.002)	Max



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RF COATED CHOKES (AXIAL LEADS)
1206-SERIES

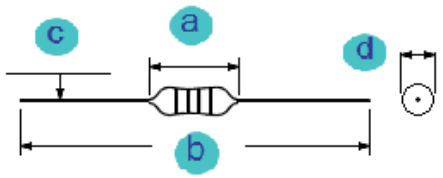
A. Electrical Specifications:

Part Number	Inductance(µH)	Q Min.	Test Freq. (MHz)	SRF Min. (MHz)	DCR (OHM) Max.	Rated Current (mA) Max.
1206R10M	0.10	45	25	300	0.10	1400
1206R12M	0.12	45	25	300	0.10	1400
1206R15M	0.15	45	25	300	0.10	1400
1206R18M	0.18	45	25	300	0.10	1400
1206R22M	0.22	45	25	300	0.10	1400
1206R27M	0.27	45	25	270	0.11	1320
1206R33M	0.33	45	25	250	0.12	1280
1206R39M	0.39	45	25	230	0.13	1200
1206R47M	0.47	45	25	220	0.14	1150
1206R56M	0.56	45	25	200	0.15	1100
1206R68M	0.68	45	25	190	0.16	1030
1206R82M	0.82	45	25	172	0.17	980
12061R0K	1.0	45	25	157	0.19	920
12061R2K	1.2	50	7.9	144	0.21	880
12061R5K	1.5	50	7.9	131	0.23	830
12061R8K	1.8	50	7.9	121	0.25	790
12062R2K	2.2	50	7.9	110	0.28	750
12062R7K	2.7	60	7.9	100	0.30	720
12063R3K	3.3	65	7.9	94	0.34	670
12063R9K	3.9	65	7.9	65	0.37	640
12064R7K	4.7	70	7.9	56	0.39	620
12065R6K	5.6	70	7.9	48	0.43	590
12066R8K	6.8	75	7.9	37	0.48	550
12068R2K	8.2	80	7.9	25	0.52	530
1206100K	10	65	7.9	21	0.58	500
1206120K	12	50	2.5	19	0.63	480
1206150K	15	50	2.5	17	0.72	460
1206180K	18	50	2.5	13	0.77	430
1206220K	22	50	2.5	9.6	0.84	410
1206270K	27	50	2.5	7.2	0.94	390
1206330K	33	50	2.5	6.3	1.03	370
1206390K	39	50	2.5	6.3	1.12	350
1206470K	47	45	2.5	6.3	1.22	340
1206560K	56	40	2.5	6.2	1.34	320
1206680K	68	40	2.5	5.7	1.47	305
1206820K	82	35	2.5	5.3	1.62	290
1206101K	100	30	2.5	4.8	1.80	275
1206121K	120	55	0.79	3.8	3.7	185
1206151K	150	45	0.79	3.5	4.2	175
1206181K	180	50	0.79	3.3	4.6	165
1206221K	220	55	0.79	3.0	5.1	155
1206271K	270	65	0.79	2.8	5.8	145
1206331K	330	65	0.79	2.6	6.4	137
1206391K	390	65	0.79	2.4	7.0	133
1206471K	470	60	0.79	2.25	7.7	126
1206561K	560	60	0.79	2.10	8.5	120
1206681K	680	55	0.79	1.95	9.4	113
1206821K	820	55	0.79	1.85	10.5	105
1206102K	1000	50	0.79	1.40	14.0	100

Note: 1. Inductance (Current) ranges: 0.10uH (1.4A) - 1000uH (100mA)
2. DCR: from 0.10 - 14.0 Ohms.
3. Body Size: 10.41 x 4.44 mm

B. Dimensions: mm (Inch)

Series	a	b	c	d
1206	10.41(0.410)	64.0(2.52)	0.635(0.025)	4.44(0.175)
Tol.	Max	±2.0(0.079)	0.05(0.002)	Max



HIGH CURRENT RF CHOKES (AXIAL LEADS)
11407-SERIES

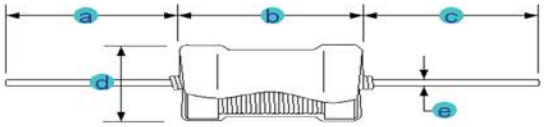
A. Electrical Specifications:

Part No.	L (uH)	DCR (Ω max.)	I sat. (DC Amps)	I rms. (AC Amps)
114073R9_	3.9	.019	7.3	1.280
114074R7_	4.7	.022	6.3	1.280
114075R6_	5.6	.024	5.6	1.280
114076R8_	6.8	.026	5.3	1.280
114078R2_	8.2	.028	4.5	1.280
11407100_	10	.033	4.1	1.280
11407120_	12	.037	3.6	1.280
11407150_	15	.040	3.3	1.280
11407180_	18	.044	3.0	1.280
11407220_	22	.050	2.7	1.280
11407270_	27	.058	2.5	1.280
11407330_	33	.075	2.2	1.008
11407390_	39	.094	2.0	0.804
11407470_	47	.109	1.8	0.804
11407560_	56	.140	1.7	0.804
11407680_	68	.145	1.5	0.804
11407820_	82	.152	1.4	0.804
11407101_	100	.208	1.2	0.632
11407121_	120	.283	1.1	0.508
11407151_	150	.340	1.00	0.508
11407181_	180	.362	0.95	0.508
11407221_	220	.430	0.86	0.508
11407271_	270	.557	0.77	0.400
11407331_	330	.665	0.70	0.400
11407391_	390	.772	0.64	0.400
11407471_	470	1.15	0.59	0.315
11407561_	560	1.27	0.54	0.315
11407681_	680	1.61	0.49	0.250
11407821_	820	1.96	0.44	0.200
11407102_	1000	2.30	0.40	0.200
11407122_	1200	2.65	0.35	0.200
11407152_	1500	3.45	0.33	0.158
11407182_	1800	4.03	0.29	0.158
11407222_	2200	4.48	0.27	0.158
11407272_	2700	5.90	0.24	0.125
11407332_	3300	6.56	0.22	0.125
11407392_	3900	8.63	0.200	0.100
11407472_	4700	10.5	0.180	0.100
11407562_	5600	13.9	0.166	0.082
11407682_	6800	16.3	0.151	0.082
11407822_	8200	20.8	0.136	0.065
11407103_	10000	26.4	0.125	0.050
11407123_	12000	29.9	0.114	0.050
11407153_	15000	42.5	0.098	0.039
11407183_	18000	48.3	0.091	0.039

See defined tolerances below.

B. Dimensions: mm (Inch)

SERIES	a (Min.)	b (Max.)	c (Min.)	d (Max.)	e ±0.10 / (0.004)
11407	25.4 (1.000)	17.78 (0.700)	25.4 (1.000)	7.04 (0.277)	0.81 (0.032)



C. General Information:

1. Tolerance "_" : L: ±15%, K: ±10% and J: ±5%.
2. Low DCR & High current capacity.
3. Ferrite core inductors, inductance measured at 1.0 KHz.
4. Saturation current to cause 10% maximum inductance drop.
5. Ambient Temperature -55°C to +125°C, rated current to cause 35°C max. temperature rise
6. Coil finished with varnish and covered with VW1 rated shrink tubing. Dielectric strength 2500Vrms
7. Packaging for bulk: 200 pcs/box and 32000 pcs/carton.
8. MSL: Level 1.

D. Supplementary Information:

1. Solder Profile (See Appendix B)

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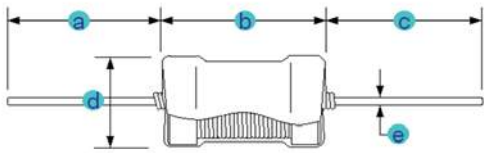
HIGH CURRENT RF CHOKES (AXIAL LEADS)
11411-SERIES

A. Electrical Specifications:

Part No.	L (uH)	DCR Max (Ω)	I sat. (DC Amps)	I rms. (AC Amps)
114113R9_	3.9	.007	15.5	4.00
114114R7_	4.7	.008	13.9	4.00
114115R6_	5.6	.011	12.6	4.00
114116R8_	6.8	.011	11.6	4.00
114118R2_	8.2	.013	9.89	4.00
11411100_	10	.017	8.70	4.00
11411120_	12	.019	8.21	4.00
11411150_	15	.022	7.34	4.00
11411180_	18	.023	6.64	4.00
11411220	22	.026	6.07	4.00
11411270_	27	.027	5.36	4.00
11411330_	33	.032	4.82	4.00
11411390_	39	.033	4.36	4.00
11411470_	47	.035	3.98	4.00
11411560_	56	.037	3.66	3.20
11411680_	68	.047	3.31	2.50
11411820_	82	.060	3.10	2.00
11411101_	100	.090	2.79	1.60
11411121_	120	.113	2.54	1.60
11411151_	150	.129	2.22	1.60
11411181_	180	.150	1.98	1.60
11411221_	220	.162	1.89	1.60
11411271_	270	.208	1.63	1.60
11411331_	330	.212	1.51	1.60
11411391_	390	.281	1.39	1.60
11411471_	470	.380	1.24	1.20
11411561_	560	.420	1.17	1.00
11411681_	680	.548	1.05	1.00
11411821_	820	.655	0.97	0.800
11411102_	1000	.844	0.87	0.800
11411122_	1200	1.04	0.79	0.600
11411152_	1500	1.16	0.70	0.600
11411182_	1800	1.56	0.64	0.600
11411222_	2200	2.00	0.58	0.500
11411272_	2700	2.06	0.53	0.400
11411332	3300	2.53	0.47	0.400
11411392_	3900	2.75	0.43	0.400
11411472_	4700	3.19	0.39	0.400
11411562_	5600	3.92	0.359	0.315
11411682_	6800	5.69	0.322	0.250
11411822_	8200	6.32	0.293	0.250
11411103	10000	7.30	0.266	0.250
11411123_	12000	9.21	0.241	0.200
11411153_	15000	10.5	0.214	0.200
11411183_	18000	14.8	0.198	0.158
11411223_	22000	21.8	0.180	0.125
11411273_	27000	22.7	0.162	0.125
11411333_	33000	25.7	0.146	0.125
11411393_	39000	31.8	0.135	0.100
11411473_	47000	36.1	0.122	0.100
11411563_	56000	40.9	0.112	0.100
11411683_	68000	57.3	0.101	0.082
11411823_	82000	79.3	0.090	0.065
11411104_	100000	89.7	0.810	0.065

B. Dimensions: mm (Inch)

SERIES	a (Min.)	b (Max.)	c (Min.)	d (Max.)	e ± 0.05/ (0.002)
11411	25.4 / (1.000)	22.86 / (0.900)	25.4 / (1.000)	11.94 / (0.470)	0.81 / (0.032)



C. General Information:

1. Inductance measured at 1.0KHz.
2. Tolerance " _ ": L: ±15%, K: ±10% and J: ±5%.
3. Core: Ferrite bobbin core
4. Low DCR & High current capacity.
5. Saturation current to cause 10% maximum inductance drop.
6. Ambient Temperature -55°C to +125°C.
7. Rated current to cause 35°C max. temperature rise
8. Dielectric strength 2500Vrms
9. Coil finished with varnish and covered with VW1 rated shrink tubing.
10. Packaging for bulk: 200 pcs/box and 32000 pcs/carton.

D. Supplementary Information:

1. Solder Profile (See Appendix B)

A. Features:

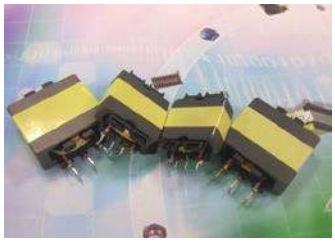
1. Low Profile to achieve Low Core Loss and High Efficiency.
2. RoHs Compliant and Halogen Free.

B. Application:

1. AV equipment, digital consumer electronics, and many other applications.

C. Electrical Specifications:

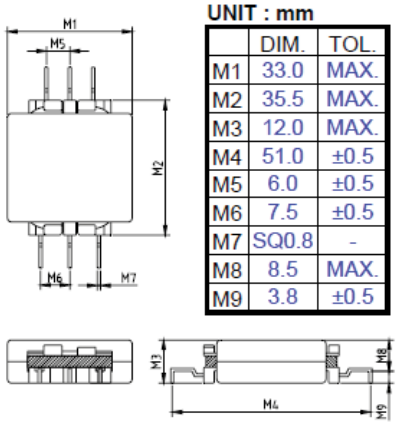
Model NO	Output Power (W)	Mount Method	Height (mm) Max.
TRQ3212HXXXS	170	Drop-in	12
TRQ3213HXXXS	170	Drop-in	14
TRQ2508HXXXS	130	Drop-in	10.5
TRQ2510HXXXS	130	Drop-in	11.0



Note: 1. Input Voltage E_{AC} (V): 85~264
2. Frequency (KHz) Min.: 65

D. Drawing:

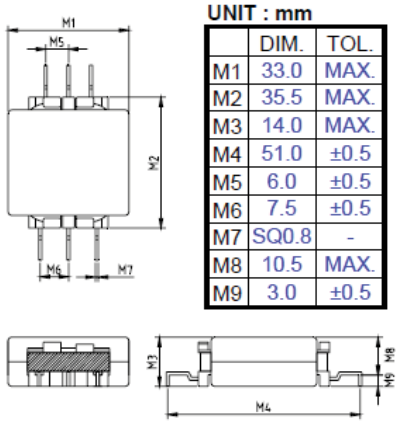
TRQ3212HXXXS



UNIT : mm

	DIM.	TOL.
M1	33.0	MAX.
M2	35.5	MAX.
M3	12.0	MAX.
M4	51.0	±0.5
M5	6.0	±0.5
M6	7.5	±0.5
M7	SQ0.8	-
M8	8.5	MAX.
M9	3.8	±0.5

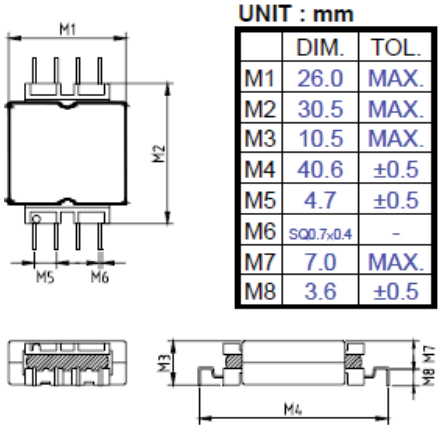
TRQ3213HXXXS



UNIT : mm

	DIM.	TOL.
M1	33.0	MAX.
M2	35.5	MAX.
M3	14.0	MAX.
M4	51.0	±0.5
M5	6.0	±0.5
M6	7.5	±0.5
M7	SQ0.8	-
M8	10.5	MAX.
M9	3.0	±0.5

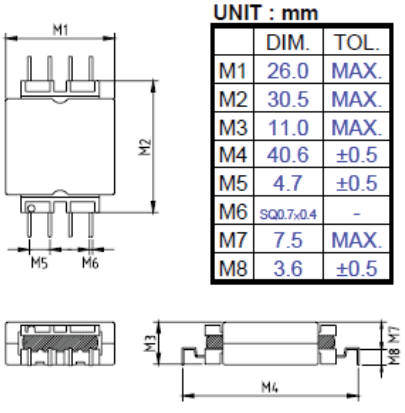
TRQ2508HXXXS



UNIT : mm

	DIM.	TOL.
M1	26.0	MAX.
M2	30.5	MAX.
M3	10.5	MAX.
M4	40.6	±0.5
M5	4.7	±0.5
M6	SQ0.7x0.4	-
M7	7.0	MAX.
M8	3.6	±0.5

TRQ2510HXXXS



UNIT : mm

	DIM.	TOL.
M1	26.0	MAX.
M2	30.5	MAX.
M3	11.0	MAX.
M4	40.6	±0.5
M5	4.7	±0.5
M6	SQ0.7x0.4	-
M7	7.5	MAX.
M8	3.6	±0.5

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A. Features:

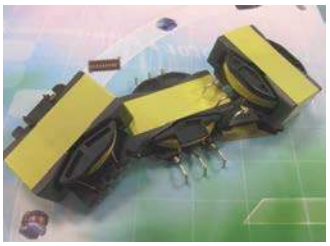
1. Low Profile to achieve Low Core Loss and High Efficiency.
2. RoHs Compliant and Halogen Free.

B. Application:

1. AV equipment, digital consumer electronics, and many other applications.

C. Electrical Specifications:

Model NO	Output Power (W)	Inductance (uH)	Rated Current (ADC)	Saturation Current (ADC)	Height (mm) Max.
TVP3814HXXXXS	160	400	3.5	5.0	14
TRP3813HXXXXS	160	400	3.5	5.0	13.5
TRP3812HXXXXS	125	220	4.6	6.4	12.5



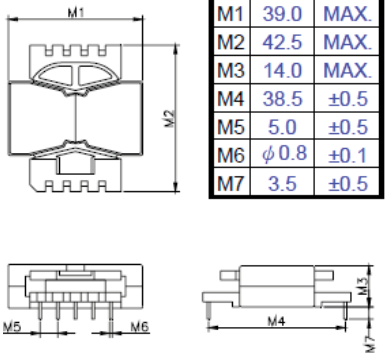
Note: 1. Input Voltage E_{AC} (V): 85~264
2. Frequency (KHz) Min.: 65

D. Drawing:

TVP3814HXXXXS

UNIT : mm

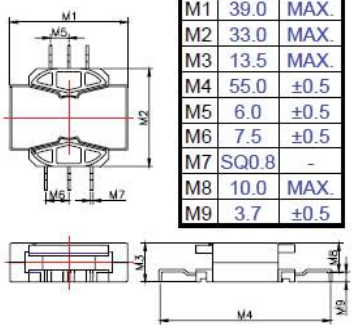
	DIM.	TOL.
M1	39.0	MAX.
M2	42.5	MAX.
M3	14.0	MAX.
M4	38.5	±0.5
M5	5.0	±0.5
M6	ϕ0.8	±0.1
M7	3.5	±0.5



TRP3813HXXXXS

UNIT : mm

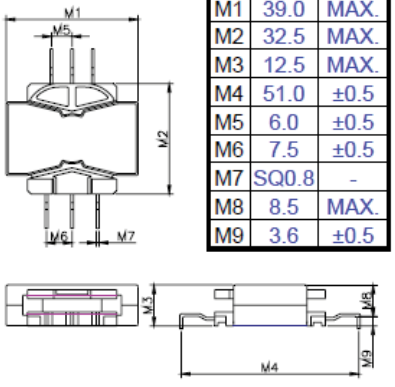
	DIM.	TOL.
M1	39.0	MAX.
M2	33.0	MAX.
M3	13.5	MAX.
M4	55.0	±0.5
M5	6.0	±0.5
M6	7.5	±0.5
M7	SQ0.8	-
M8	10.0	MAX.
M9	3.7	±0.5



TRP3812HXXXXS

UNIT : mm

	DIM.	TOL.
M1	39.0	MAX.
M2	32.5	MAX.
M3	12.5	MAX.
M4	51.0	±0.5
M5	6.0	±0.5
M6	7.5	±0.5
M7	SQ0.8	-
M8	8.5	MAX.
M9	3.6	±0.5



LLC-RESONANCE TRANSFORMERS
THD & TDD SERIES

A. Features:

1. Low Profile to achieve Low Core Loss and High Efficiency.
2. RoHs Compliant and Halogen Free.
3. Constructed with UL Approved Class B Insulation.

B. Application:

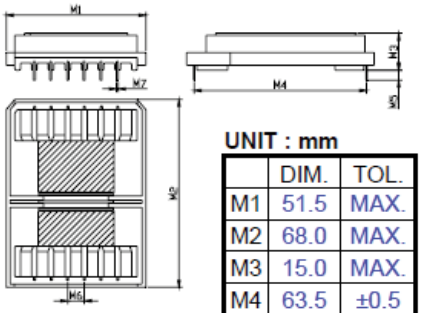
1. AV equipment, digital consumer electronics, and many other applications.

C. Electrical Specifications:

Model No	Input Voltage (VDC)	Frequency (KHz) Min.	Maximum Output Power (W)	A_e mm^2	Mount Method	Height (mm) Max.	Number of Pins Primary(Pin)	Secondary(Pin)
THD4344HXXXXS	390	120	200	83.2	THROUGH HOLE	15.0	6	6
THD4549HXXXXS	390	120	180	73	THROUGH HOLE	12.5	5	7
TDD4549HXXXXS	390	120	180	73	DROP-IN	11.0	5	7
TDD3528HXXXXS	390	120	70	63.2	DROP-IN	12.5	6	6

D. Drawing:

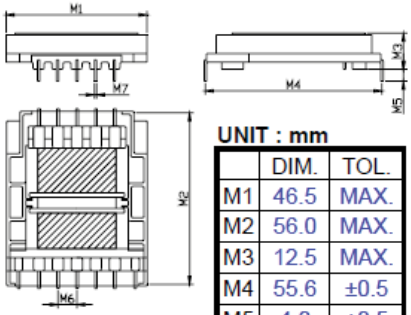
THD4344HXXXXS



UNIT : mm

	DIM.	TOL.
M1	51.5	MAX.
M2	68.0	MAX.
M3	15.0	MAX.
M4	63.5	±0.5
M5	3.6	±0.5
M6	6.0	±0.5
M7	SQ0.8x0.5	-

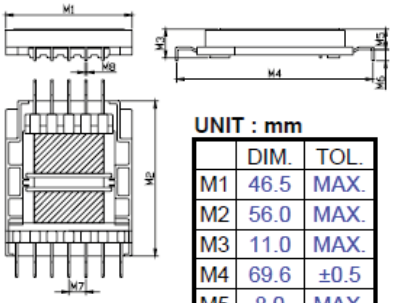
THD4549HXXXXS



UNIT : mm

	DIM.	TOL.
M1	46.5	MAX.
M2	56.0	MAX.
M3	12.5	MAX.
M4	55.6	±0.5
M5	4.0	±0.5
M6	6.0	±0.5
M7	SQ0.8	-

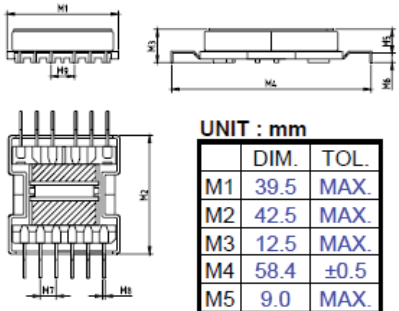
TDD4549HXXXXS



UNIT : mm

	DIM.	TOL.
M1	46.5	MAX.
M2	56.0	MAX.
M3	11.0	MAX.
M4	69.6	±0.5
M5	8.0	MAX.
M6	3.5	±0.5
M7	6.0	±0.5
M8	SQ0.8	-

TDD3528HXXXXS



UNIT : mm

	DIM.	TOL.
M1	39.5	MAX.
M2	42.5	MAX.
M3	12.5	MAX.
M4	58.4	±0.5
M5	9.0	MAX.
M6	3.4	±0.5
M7	5.5	±0.5
M8	SQ0.8x0.6	-
M9	8.0	±0.1

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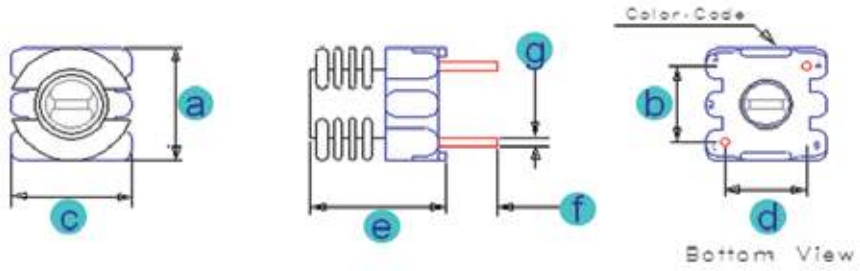
A. Electrical Specifications:

P/N	Pin (S—F)	Specification Test Frequency: 25.2 MHz L Min. (nH)	L Nom. (nH)	L Max. (nH)	Q (Min.) @L max.	SRF Min. (MHz)	DCR Max. (mΩ)	Color Code
5SQ-01A	Pin (1-4)	27.5	28.5	29.5	40	1450	30.0	**SILVER**
5SQ-02A	Pin (1-4)	51	56	61	50	1350	35.0	**GOLD**
5SQ-03A	Pin (1-4)	80	95	110	65	1000	35.0	**RED**
5SQ-03	Pin (1-4)	85	95	105	70	1000	35.0	**ORANGE**
5SQ-04	Pin (1-4)	120	140	160	80	900	45.5	**YELLOW**
5SQ-05	Pin (1-4)	150	175	200	90	740	50.0	**GREEN**
5SQ-06	Pin (1-4)	185	225	265	90	590	57.5	**BLUE**
5SQ-07	Pin (1-4)	270	317	365	90	540	72.5	**VIOLET**
5SQ-08	Pin (1-4)	320	383	445	100	500	75.0	**Black**
5SQ-09	Pin (1-4)	400	465	530	100	450	85.0	**WHITE**

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
5SQ	5.45 (0.215)	3.5 (0.138)	5.45 (0.215)	3.5 (0.138)	5.80 (0.228)	3.0 (0.118)	Ø0.4 (0.016)
Tol.	+0.3 (0.012) -0.1 (0.004)	±0.3 (0.012)	+0.3 (0.012) -0.1 (0.004)	±0.3 (0.012)	±0.3 (0.012)	±0.3 (0.012)	+0.15 (0.006) -0.05 (0.002)



5SQ-xx series

C. General Information:

1. Can be ***tunable***.
2. Excellent temperature coefficient.
3. For high frequency operation up to 1.0 GHz.
4. Unique winding configuration.
5. Special selected core for Hi-Q performance.
6. Inductance measured using HP4191A with HP16092A test fixture.
7. Q measured at L max value using HP4191A with HP16092A test fixture.
8. SRF measured without core using Scalar or network Analyzer.
9. MSL: Level 1.

D. Supplementary Information:

1. Solder Profile (See Appendix B)

Patent Pending

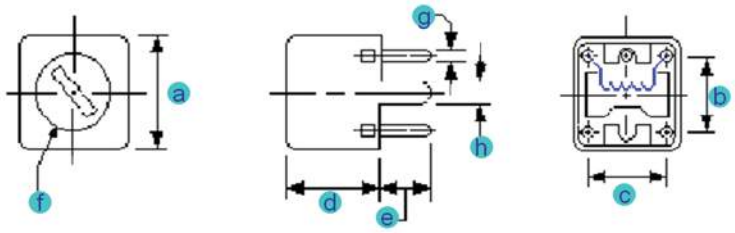
5MM ADJUSTABLE IFT COILS (SHIELDED)
KM57A/KM51A-SERIES

A. Electrical Specifications:

Part No.	L (uH) Nom.	Test Freq. (MHz)	Q Min.
KM57A1287N	1.0 ± 5%	7.96	55
KM57A1288N	1.2 ± 5%	7.96	55
KM57A1289N	1.5 ± 5%	7.96	55
KM57A1290N	1.8 ± 5%	7.96	55
KM57A1291N	2.2 ± 5%	7.96	55
KM57A1292N	2.7 ± 5%	7.96	55
KM57A1293N	3.3 ± 5%	7.96	55
KM57A1294N	3.9 ± 5%	7.96	55
KM57A1295N	4.7 ± 5%	7.96	55
KM57A1296N	5.6 ± 5%	7.96	55
KM57A1297N	6.8 ± 5%	7.96	55
KM57A1298N	8.2 ± 5%	7.96	55
KM57A1299N	10.0 ± 5%	2.52	55
KM57A1300N	12.0 ± 5%	2.52	55
KM57A1301N	15.0 ± 5%	2.52	55
KM57A1302N	18.0 ± 5%	2.52	55
KM57A1303N	22.0 ± 5%	2.52	55
KM57A1304N	27.0 ± 5%	2.52	55
KM51A1202N	33.0 ± 5%	2.52	40
KM51A1203N	39.0 ± 5%	2.52	40
KM51A1204N	47.0 ± 5%	2.52	40
KM51A1205N	56.0 ± 5%	2.52	40
KM51A1206N	68.0 ± 5%	2.52	40
KM51A1207N	82.0 ± 5%	2.52	40
KM51A1208N	100.0 ± 5%	0.796	40
KM51A1209N	120.0 ± 5%	0.796	40
KM51A1210N	150.0 ± 5%	0.796	40
KM51A1211N	180.0 ± 5%	0.796	40
KM51A1212N	220.0 ± 5%	0.796	40
KM51A1213N	270.0 ± 5%	0.796	40
KM51A1214N	330.0 ± 5%	0.796	40
KM51A1215N	390.0 ± 5%	0.796	40
KM51A1216N	470.0 ± 5%	0.796	40
KM51A1217N	560.0 ± 5%	0.796	40
KM51A1218N	680.0 ± 5%	0.796	40

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
KM57A/KM51A	5.7 (0.224)	3.5 (0.138)	3.5 (0.138)	6.5 (0.256)	2.5 (0.098)	Ø5.0 (0.20)	Ø0.4 (0.016)	0.9 (0.035)
Tol.	±0.3 (0.012)	±0.2 (0.008)	±0.2 (0.008)	Max.	+1.0 (0.039) -0.5 (0.020)	±0.5 (0.020)	±0.05 (0.002)	Typ.



C. Supplementary Information:

1. Solder Profile (See Appendix B)

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7MM ADJUSTABLE IFT COILS IFT COILS (SHIELDED)
KS1346N TO KS1382N- SERIES

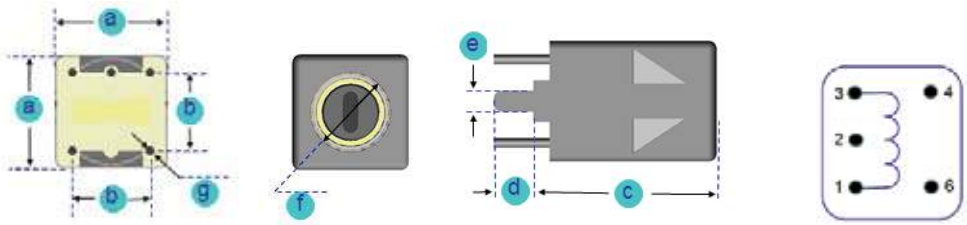
A. Electrical Specifications:

Part No.	L (uH) Min.	L (uH) Nom.	L (uH) Max	Test Freq. (MHz)	Q Min.	DCR Max. (Ω)
KS1346N	0.094	0.10	0.106	25	27	0.124
KS1347N	0.113	0.12	0.127	25	27	0.124
KS1348N	0.141	0.15	0.159	25	30	0.151
KS1349N	0.169	0.18	0.191	25	30	0.151
KS1350N	0.207	0.22	0.233	25	35	0.176
KS1351N	0.254	0.17	0.286	25	35	0.198
KS1352N	0.310	0.33	0.350	25	40	0.248
KS1353N	0.367	0.39	0.413	25	40	0.271
KS1354N	0.442	0.47	0.498	25	40	0.291
KS1355N	0.526	0.56	0.594	25	40	0.317
KS1356N	0.612	0.68	0.748	25	40	0.333
KS1357N	0.738	0.82	0.902	25	45	0.368
KS1358N	0.90	1.0	1.1	25	45	0.396
KS1359N	1.1	1.2	1.3	7.9	27	0.412
KS1360N	1.4	1.5	1.7	7.9	27	0.466
KS1361N	1.6	1.8	2.0	7.9	27	0.544
KS1362N	2.0	2.2	2.4	7.9	27	0.595
KS1363N	2.4	2.7	3.0	7.9	27	0.898
KS1364N	3.0	3.3	3.6	7.9	27	1.04
KS1365N	3.5	3.9	4.3	7.9	27	1.12
KS1366N	4.2	4.7	5.2	7.9	27	1.38
KS1367N	5.0	5.6	6.2	7.9	27	1.42
KS1368N	6.1	6.8	7.5	7.9	27	1.49
KS1369N	7.4	8.2	9.0	7.9	27	1.65
KS1370N	9.0	10	11	7.9	27	2.42
KS1371N	10	12	14	2.5	20	2.75
KS1372N	13	15	17	2.5	20	3.71
KS1373N	15	18	21	2.5	20	4.01
KS1374N	19	22	25	2.5	20	7.37
KS1375N	23	27	31	2.5	20	8.48
KS1376N	28	33	38	2.5	20	13.34
KS1377N	33	39	45	2.5	20	14.72
KS1378N	40	47	54	2.5	20	16.42
KS1379N	48	56	64	2.5	20	17.76
KS1380N	58	68	78	2.5	20	19.76
KS1381N	70	82	94	2.5	20	22.01
KS1382N	85	100	115	2.5	20	24.25

(With Plastic Sleeve)

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
KS1346N to KS1382N	7.5 (0.295)	4.5 (0.177)	11.6 (0.457)	3.5 (0.138)	1.0 (0.039)	5.2 (0.205)	0.5 (0.020)
Tol.	±0.5 (0.020)	±0.3 (0.012)	±0.8 (0.031)	+1.0 (0.039) -0.5 (0.020)	±0.2 (0.008)	+0 (0) -0.3 (0.012)	±0.05 (0.002)



C. Supplementary Information:

1. Solder Profile (See Appendix B)

7MM ADJUSTABLE IFT COILS (SHIELDED)
KS1383N TO KS1421N- SERIES

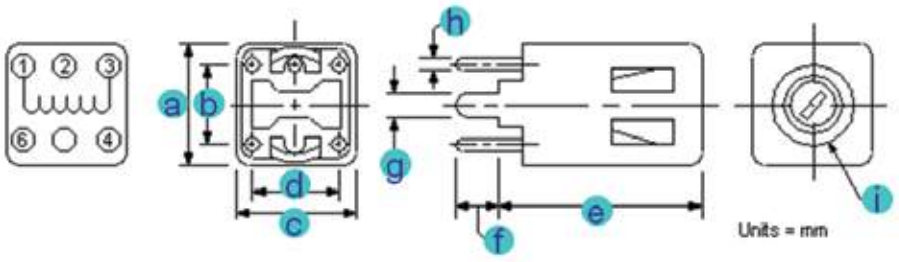
A. Electrical Specifications:

Part No.	L (uH) Min.	L (uH) Nom.	L (uH) Max.	Test Freq. (MHz)	Q Min.	DCR Max. (Ω)
KS1383N	0.128	0.15	0.173	25.0	40	0.124
KS1384N	0.153	0.18	0.207	25.0	45	0.124
KS1385N	0.187	0.22	0.253	25.0	45	0.151
KS1386N	0.230	0.27	0.311	25.0	50	0.151
KS1387N	0.281	0.33	0.380	25.0	50	0.151
KS1388N	0.332	0.39	0.449	25.0	55	0.176
KS1389N	0.400	0.47	0.541	25.0	55	0.198
KS1390N	0.476	0.56	0.644	25.0	60	0.198
KS1391N	0.544	0.68	0.816	25.0	60	0.248
KS1392N	0.656	0.82	0.984	25.0	60	0.271
KS1393N	0.800	1.00	1.20	25.0	60	0.317
KS1394N	1.00	1.20	1.40	7.9	45	0.333
KS1395N	1.20	1.50	1.80	7.9	45	0.368
KS1396N	1.40	1.80	2.20	7.9	45	0.396
KS1397N	1.80	2.20	2.60	7.9	45	0.412
KS1398N	2.20	2.70	3.20	7.9	45	0.466
KS1399N	2.60	3.30	4.00	7.9	40	0.544
KS1400N	3.10	3.90	4.70	7.9	40	0.595
KS1401N	3.80	4.70	5.60	7.9	40	0.898
KS1402N	4.50	5.60	6.70	7.9	40	1.04
KS1403N	5.40	6.80	8.20	7.9	35	1.04
KS1404N	6.60	8.20	9.80	7.9	35	1.12
KS1405N	8.00	10.00	12.00	7.9	35	1.38
KS1406N	9.00	12.00	15.00	2.5	35	1.49
KS1407N	11.00	15.00	19.00	2.5	35	1.65
KS1408N	14.00	18.00	23.00	2.5	35	2.42
KS1409N	17.00	22.00	28.00	2.5	35	2.75
KS1410N	20.00	27.00	34.00	2.5	40	3.71
KS1411N	25.00	33.00	41.00	2.5	40	3.71
KS1412N	29.00	39.00	49.00	2.5	40	4.01
KS1413N	35.00	47.00	59.00	2.5	40	7.37
KS1414N	42.00	56.00	70.00	2.5	40	8.48
KS1415N	51.00	68.00	85.00	2.5	40	13.34
KS1416N	65.00	82.00	103.00	2.5	40	14.72
KS1417N	75.00	100.00	125.00	2.5	40	16.42
KS1418N	90.00	120.00	150.00	2.5	40	17.76
KS1419N	113.00	150.00	188.00	2.5	40	19.76
KS1420N	135.00	180.00	225.00	2.5	40	22.01
KS1421N	165.00	220.00	275.00	2.5	40	24.25

(With Ferrite, Magnetically Shielded)

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i
KS1383N to KS1421N	7.5 (0.295)	4.5 (0.177)	7.5 (0.295)	4.5 (0.177)	11.6 (0.457)	3.5 (0.138)	1.0 (0.039)	Ø0.5 (0.020)	Ø5.2 (0.205)
Tol.	±0.5 (0.020)	±0.3 (0.012)	±0.5 (0.020)	±0.3 (0.012)	±0.5 (0.020)	+1.0 (0.039) -0.5 (0.020)	±0.2 (0.008)	+0.2 (0.008) -0.1 (0.004)	±0.5 (0.020)



C. Supplementary Information:

1. Solder Profile (See Appendix B)

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10MM ADJUSTABLE RF COILS (UNSHIELDED)
KM703N TO KM720N- SERIES

A. Electrical Specifications:

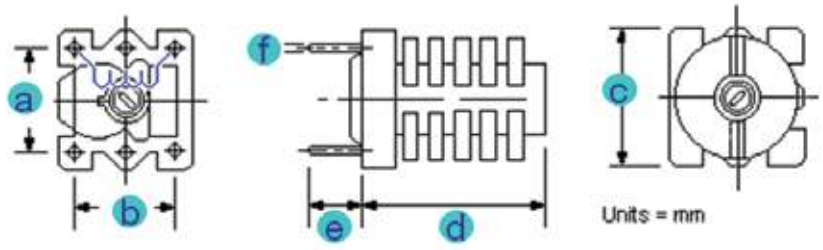
Part No.	Color	L (uH) Min.	L (uH) Nom.	L (uH) Max.	Test Freq. (MHz)	Q (Min.)
KM703N	Brown	0.80	1.2	1.70	7.9	47
KM704N	Red	1.25	2.0	2.75	7.9	48
KM705N	Orange	1.75	2.9	4.00	7.9	48
KM706N	Yellow	2.40	3.9	5.40	7.9	47
KM707N	Green	3.50	5.6	7.80	7.9	47
KM708N	Blue	4.70	7.8	10.6	7.9	46
KM709N	Violet	7.40	11.5	15.6	2.5	38
KM710N	Gray	11	18.2	25	2.5	40
KM711N	White	16	25.3	35	2.5	40
KM712N	Black	22	36.5	50	2.5	40
KM713N	Brown *	33	52.5	72	2.5	39
KM714N	Red *	46	74.8	103	2.5	51
KM715N	Orange *	66	100	136	0.79	40
KM716N	Yellow *	95	146	198	0.79	44
KM717N	Green *	136	216	297	0.79	40
KM718N	Blue *	198	312	426	0.79	45
KM719N	Violet *	286	530	630	0.79	33
KM720N	Gray *	418	790	927	0.79	38

*** - Denotes Color Dot**

(Unshielded With Ferrite TH Core)

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f
KM703N to KM720N	7.0 (0.276)	7.0 (0.276)	9.8 (0.386)	12.5 (0.492)	3.5 (0.138)	Ø0.7 (0.028)
Tol.	±0.3 (0.012)	±0.3 (0.012)	±0.5 (0.020)	±0.5 (0.020)	+1.0 (0.039) -0.5 (0.020)	+0.2 (0.008) -0.1 (0.004)



C. Supplementary Information:

1. Solder Profile (See Appendix B)

10MM ADJUSTABLE RF COILS (SHIELDED)
KM721N TO KM738N- SERIES

A. Electrical Specifications:

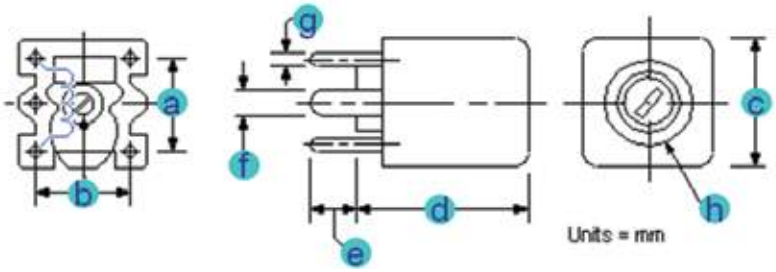
Part No.	Color	L (uH) Min.	L (uH) Nom.	L (uH) Max	Test Freq. (MHz)	Q (Min.)
KM721N	Brown	0.70	0.82	0.94	7.9	65
KM722N	Red	1.05	1.23	1.41	7.9	37
KM723N	Orange	1.50	1.75	2.00	7.9	40
KM724N	Yellow	2.04	2.4	2.76	7.9	40
KM725N	Green	2.90	3.4	3.90	7.9	39
KM726N	Blue	4.25	5.0	5.75	7.9	38
KM727N	Violet	6.00	7.1	8.20	7.9	35
KM728N	Gray	9.40	11	12.6	2.5	25
KM729N	White	12.8	15	17.2	2.5	25
KM730N	Black	18.7	22	25.3	2.5	25
KM731N	Brown *	26.4	31	35.6	2.5	25
KM732N	Red *	37.4	44	50.6	2.5	29
KM733N	Orange *	52.7	62	71.3	2.5	30
KM734N	Yellow *	79.0	92	105.0	2.5	28
KM735N	Green *	108.8	128	147.2	0.79	18
KM736N	Blue *	155	182	208	0.79	20
KM737N	Violet *	230	270	310	0.79	16
KM738N	Gray *	336	390	450	0.79	18

*** - Denotes Color Dot**

(With Ferrite TH Core and Plastic Sleeve)

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
KM721N to KM738N	7.0 (0.276)	7.0 (0.276)	10.2 (0.402)	12.6 0.496)	3.5 (0.138)	1.5 (0.059)	Ø0.7 (0.028)	Ø6.0 (0.236)
Tol.	±0.3 (0.012)	±0.3 (0.012)	±0.5 (0.020)	±0.5 (0.020)	+1.0 (0.039) -0.5 (0.020)	±0.2 (0.008)	+0.2 (0.008) -0.1 (0.004)	±0.5 (0.020)



C. Supplementary Information:

1. Solder Profile (See Appendix B)

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10MM ADJUSTABLE RF COILS (SHIELDED)
KM739N TO KM756N- SERIES

A. Electrical Specifications:

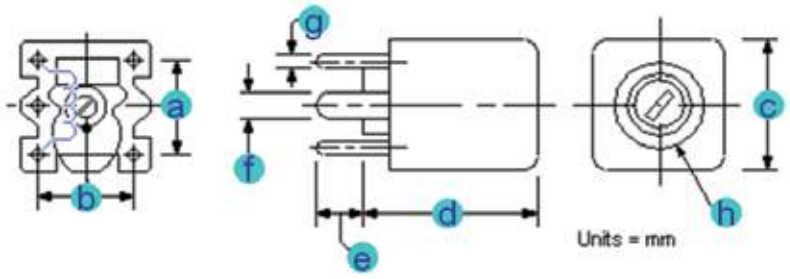
Part No.	Color	L (uH) Min.	L (uH) Nom.	L (uH) Max	Test Freq. (MHz)	Q (Min.)
KM739N	Brown	0.85	1.04	2.00	7.9	43
KM740N	Red	1.27	2.25	3.25	7.9	44
KM741N	Orange	1.83	3.25	4.60	7.9	41
KM742N	Yellow	2.48	4.50	6.40	7.9	40
KM743N	Green	3.58	6.50	9.30	7.9	40
KM744N	Blue	5.00	8.80	12.70	7.9	38
KM745N	Violet	7.70	13.0	18.40	2.5	30
KM746N	Gray	12	20.9	30	2.5	35
KM747N	White	16	29.4	42	2.5	34
KM748N	Black	25	42.3	60	2.5	32
KM749N	Brown *	36	62.8	90	2.5	30
KM750N	Red *	48	87.2	126	2.5	42
KM751N	Orange *	72	116	163	0.79	35
KM752N	Yellow *	102	168	238	0.79	36
KM753N	Green *	147	252	360	0.79	38
KM754N	Blue *	215	312	522	0.79	45
KM755N	Violet *	303	530	765	0.79	33
KM756N	Gray *	440	790	1143	0.79	38

*** - Denotes Color Dot**

(With Ferrite TH Core and Ferrite Sleeve)

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
KM739N to KM756N	7.0 (0.276)	7.0 (0.276)	10.2 (0.402)	12.6 0.496)	3.5 (0.138)	1.5 (0.059)	Ø0.7 (0.028)	Ø6.0 (0.236)
Tol.	±0.3 (0.012)	±0.3 (0.012)	±0.5 (0.020)	±0.5 (0.020)	+1.0 (0.039) -0.5 (0.020)	±0.2 (0.008)	+0.2 (0.008) -0.1 (0.004)	±0.5 (0.020)



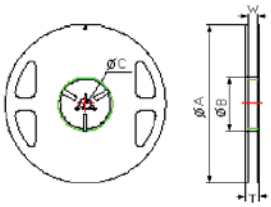
C. Supplementary Information:

1. Solder Profile (See Appendix B)

APPENDIX A
TAPE & REEL SPECIFICATION

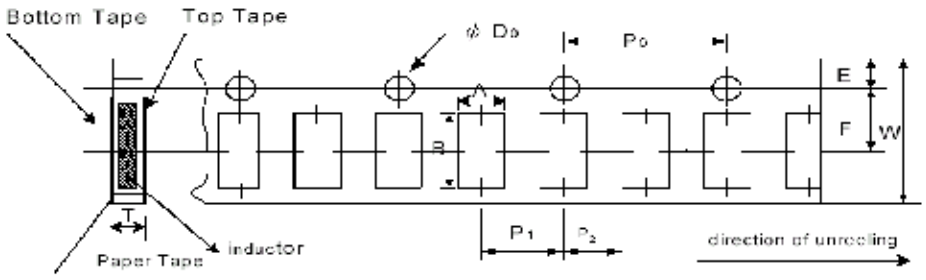
A. Reel Specification:

Series	ϕA	ϕB	ϕC	W	T	Quantity
0201TF	178±1 (7±0.040)	60±1.0 (0.236±0.040)	13.5±0.70 (0.531±0.028)	9.5±1.0 (0.374±0.040)	11.5±1.0 (0.453±0.040)	10,000 PCS
0402TF	178±1 (7±0.040)	60 ± 1.0 (0.236±0.040)	13.5 ± 0.70 (0.531±0.028)	9.5 ± 1.0 (0.374±0.040)	11.5 ± 1.0 (0.453±0.040)	10,000 PCS



B. Paper Tape Specification:

Series	A	B	W	E	F	Po	P1	P2	ϕDo	T
0201TF	0.40±0.05 (0.016±0.002)	0.70±0.05 (0.028±0.002)	8.00±0.10 (0.315±0.004)	1.75±0.05 (0.069±0.002)	3.50±0.05 (0.138±0.002)	4.00±0.10 (0.158±0.004)	2.00±0.05 (0.079±0.002)	2.00±0.05 (0.079±0.002)	1.55±0.05 (0.061±0.002)	0.42±0.02 (0.017±0.0008)
0402TF	0.70±0.05 (0.028±0.002)	1.16±0.05 (0.046±0.002)	8.00±0.10 (0.315±0.004)	1.75±0.05 (0.069±0.002)	3.50±0.05 (0.138±0.002)	4.00±0.10 (0.158±0.004)	2.00±0.05 (0.079±0.002)	2.00±0.05 (0.079±0.002)	1.55±0.05 (0.061±0.002)	0.40±0.03 (0.016±0.0012)



Tape & Reel Storage Temperature: 25ºC ± 3ºC, Humidity: < 80% RH.

C. Environmental Characteristics:

	ITEM	Specification	Test Method
1	Inductance	As SPEC.	Measuring equipment and fixture: HP4287 + Agilent 16196C
2	Insulation Resistance	>1000MΩ	**MIL-STD-202F Method 302** Apply 100V$_{dc}$ for 1 minute
3	Damp Heat with Load	ΔL ≤10%	**MIL-STD-202F Method 103B** 40±2°C, 90~95% R.H. Max. working voltage for 1000 hrs with 1.5 hrs "ON" and 0.5 hrs "OFF"
4	Bending Strength	As SPEC.	**JIS-C-5201-1 6.1.4** Bending Amplitude 3mm for 10 seconds
5	Solder-ability	95% min coverage	**MIL-STD-202F Method 208H** 245±5°C for 3 seconds
6	Resistance to Soldering Heat	ΔL≤10%	**MIL-STD-202F Method 210E** 260±5°C for 10 seconds
7	Dielectric Withstand Voltage	>100V	**MIL-STD-202F Method 301.** Apply 100VA (rms) for 1minute.
8	High Temperature Exposure	ΔL≦ 10%	**JIS-C-5201-1-7.2** 85ºC ± 2ºC, 1000 +48/-0 hours
9	Low Temperature Storage	ΔL≦ 10%	**JIS-C-5201-1-7.1** -40ºC ± 3ºC, 1000 +48/-0 hours
10	Temperature Cycle	ΔL≦ 10%	**JIS-C-5201-1-7.4** -40/RT/85/RT, 10 cycles

- Storage Temperature: 25±3°C; Humidity < 80% RH

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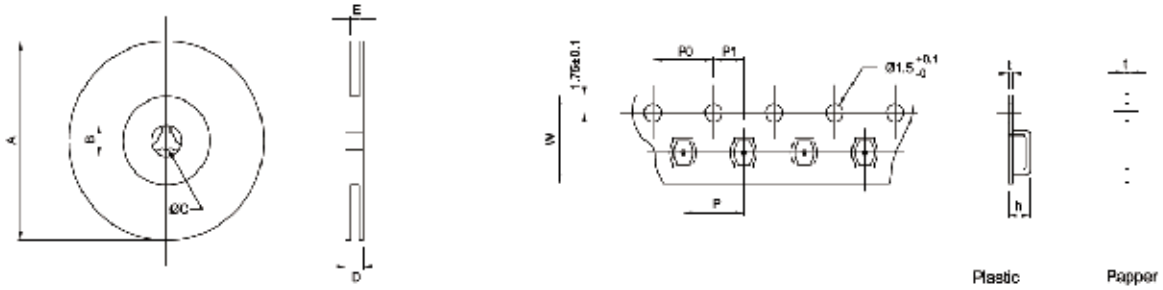
APPENDIX A
TAPE AND REEL SPECIFICATIONS



SMD Air Coil

Series	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
P/N	A	B	C	D	E	W	P	P0	P1	h	t	7"	13"	Box	Carton
291A	180	75	13	16.5	12.5	12	8	4	2	3.30	0.25	500	---	2,000	12,000
291B	180	75	13	20.5	16.5	16	8	4	2	3.30	0.25	500	---	1,500	9,000
292AR	180	75	13	12.5	8.4	8	4	4	2	1.70	0.30	2,000	---	10,000	60,000
292BR	180	50	13	18.4	12.4	12	4	4	2	1.75	0.35	2,000	---	6,000	36,000
293A	340	100	13	25.5	16.5	16	12	4	2	4.40	0.30	---	1,000	1,000	10,000
294A	340	100	13	30.4	24.5	24	12	4	2	5.30	0.35	---	1,000	1,000	8,000

SMD Square Type Air Coils

Series	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
P/N	A	B	C	D	E	W	P	P0	P1	h	t	7"	13"	Box	Carton
LSQ0806A	180	50	13	16.4	12.5	12	4	4	2	1.75	0.23	2,000	---	8,000	48,000
LSQ0807A	180	50	13	16.4	12.5	12	4	4	2	1.86	0.23	2,000	---	8,000	48,000
LSQ0908A	180	50	13	16.4	12.5	12	4	4	2	2.1	0.25	2,000	---	8,000	48,000

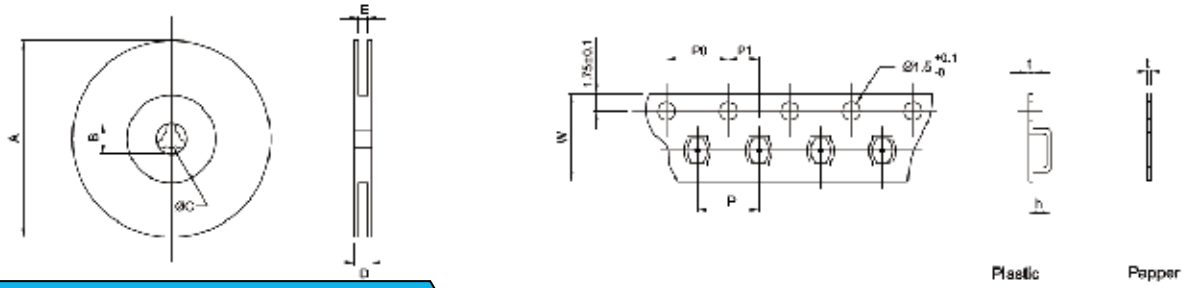
SMD Wire Wound RF Ceramic/Ferrite Chip Inductors

Series	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
P/N	A	B	C	D	E	W	P	P0	P1	h	t	7"	13"	Box	Carton
0402CP	180	75	13	12.5	8.4	8	2	4	2	---	0.60	4,000	---	20,000	120,000
0603CP	180	75	13	12.5	8.4	8	4	4	2	1.07	0.25	4,000	---	20,000	120,000
0805CP	180	75	13	12.5	8.4	8	4	4	2	1.38	0.25	3,000	---	15,000	90,000
1008CP	180	75	13	12.5	8.4	8	4	4	2	2.30	0.25	2,000	---	10,000	60,000
1210CP	180	75	13	12.5	8.4	8	4	4	2	2.43	0.23	1,500	---	7,500	45,000
1812CP	178	21	13	14.4	8.4	12	8	4	2	3.60	0.35	600	---	3,000	180,000
0603LS	180	75	13	12.5	8.4	8	4	4	2	1.07	0.25	4,000	---	20,000	120,000
0805F	180	75	13	12.5	8.4	8	4	4	2	1.38	0.25	3,000	---	15,000	90,000
1008F	180	75	13	12.5	8.4	8	4	4	2	2.52	0.25	2,000	---	10,000	60,000
1206SDFC	178	21	13	12.5	10	8	4	4	2	2.00	0.25	2,000	---	10,000	100,000
1210SDF	178	21	13	12.5	10	8	4	4	2	2.28	0.25	2,000	---	10,000	100,000
1812SDF	330	21.5	13	17.5	12.5	12	8	4	2	3	0.4	---	2,500	5,000	25,000
2220SDF	330	21.5	13	19.5	16.5	16	12.5	4	2	5.20	0.30	---	1,000	2,000	8,000

SMD Common Mode Chip Coils

Series	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
P/N	A	B	C	D	E	W	P	P0	P1	h	t	7"	13"	Box	Carton
SCM2012F-I	180	75	12	12.5	8.4	8	4	4	2	1.45	0.22	2,000	---	10,000	60,000
SCM2012FH-I	180	75	12	12.5	8.4	8	4	4	2	1.45	0.22	2,000	---	10,000	60,000
SCM7038F	340	100	13	22.4	16.5	16	12	4	2	4.25	0.35	---	1,000	2,000	6,000
CMF03	178	60	13.5	11.5	9.5	8	4	4	2	---	0.6	10,000	---	---	---
CMF04	178	60	13.5	11.5	9.5	8	4	4	2	---	0.74	4,000	---	---	---

APPENDIX A
TAPE AND REEL SPECIFICATIONS



SMD Molding Type Power Inductor

Series	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
P/N	A	B	C	D	E	W	P	P0	P1	h	t	7”	13”	Box	Carton
CF252018	180	50	13	12.5	8.4	8	4	4	2	2.10	0.30	2,000	---	10,000	60,000
CF322522	180	50	13	12.5	9.7	8	4	4	2	2.40	0.25	2,000	---	10,000	60,000
CF453232	180	50	13	18.4	12.4	12	8	4	2	3.50	0.35	500	---	2,000	12,000

SMD RF Multi-layer Ceramic/Ferrite Chip Inductors

Series	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
P/N	A	B	C	D	E	W	P	P0	P1	h	t	7”	13”	Box	Carton
TF060303(0402)	180	75	13	12.5	10	8	2	4	2	---	0.60	10,000	---	---	500,000
TF100505(0402)	180	75	13	12.5	10	8	2	4	2	---	0.60	10,000	---	---	500,000
TF160808(0603)	180	75	13	12.5	10	8	4	4	2	---	0.92	4,000	---	---	200,000
FL160808(0603)	180	75	13	12.5	10	8	4	4	2	---	0.92	4,000	---	---	200,000
FL201209(0805)	180	75	13	12.5	10	8	4	4	2	---	0.95	4,000	---	---	200,000
FL201212(0805)	180	75	13	12.5	10	8	4	4	2	---	1.22	3,000	---	---	150,000

SMD RF Multi-layer Ferrite Chip Beads

Series	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
P/N	A	B	C	D	E	W	P	P0	P1	h	t	7”	13”	Box	Carton
FB/TI100505(0402)	180	75	13	12.5	10	8	2	4	2	---	0.60	10,000	---	---	500,000
FB/TI160808(0603)	180	75	13	12.5	10	8	4	4	2	---	0.92	4,000	---	---	200,000
FB/TI201209(0805)	180	75	13	12.5	10	8	4	4	2	---	1.04	4,000	---	---	200,000
FB/TI321611(1206)	180	75	13	12.5	10	8	4	4	2	1.27	0.23	3,000	---	---	150,000
FB/TI322513(1210)	180	75	13	12.5	10	8	4	4	2	1.55	0.23	2,000	---	---	100,000
FB/TI451616(1806)	180	75	13	16.5	14	12	4	4	2	1.93	0.23	2,000	---	---	80,000
FB/TI453215(1812)	180	75	13	16.5	14	12	8	4	2	1.85	0.23	1,000	---	---	40,000

SMD Balun Transformers

Series	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
P/N	A	B	C	D	E	W	P	P0	P1	h	t	7”	13”	Box	Carton
BIH2012OB	180	75	12	8.4	8.4	8	4	4	2	1.45	0.22	2,000	---	10,000	60,000
SBT151	340	100	13	18.4	12.4	12	8	4	2	3.30	0.35	---	2,500	5,000	35,000
SBT201	340	100	13	18.4	12.4	12	8	4	2	3.40	0.35	---	2,500	5,000	35,000
SBT203	340	100	13	18.4	12.4	12	8	4	2	3.40	0.35	---	2,500	5,000	35,000
SBT301	340	100	13	22.4	16.4	16	12	4	2	4.30	0.35	---	1,000	2,000	12,000
SBT303	340	100	13	22.4	16.4	16	12	4	2	4.30	0.35	---	1,000	2,000	12,000

SMD Signal Chokes

Series	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
P/N	A	B	C	D	E	W	P	P0	P1	h	t	7”	13”	Box	Carton
OI0707BI	340	100	13	20.5	16.5	16	12	4	2	6.50	0.35	---	800	1,600	4,800
OI0604DV	340	100	13	20.5	16.5	16	12	4	2	6.50	0.40	---	700	1,400	4,200

SMD Molding Type High Current Power Chokes

Series	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
P/N	A	B	C	D	E	W	P	P0	P1	h	t	7”	13”	Box	Carton
MCS0402	330	100	13	12.4	16.6	12	8	4	2	2.50	0.30	---	2,000	4,000	24,000
MCS0603	340	100	13	21.2	16.6	16	12	4	2	3.40	0.40	---	1,000	1,000	7,000
MCS1040	340	100	13	29.2	24.6	24	16	4	2	4.25	0.40	---	500	500	3,000

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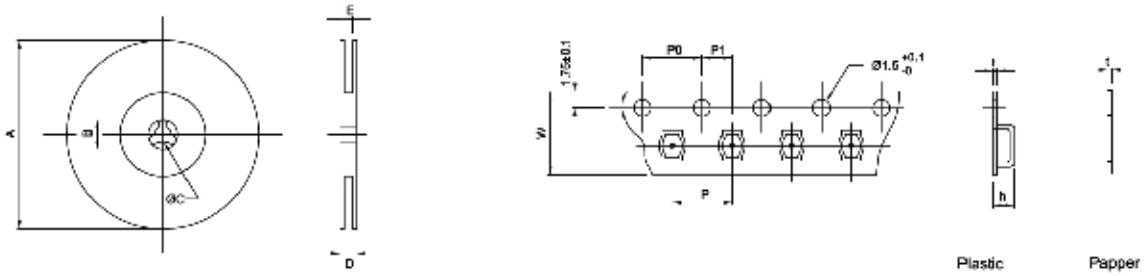
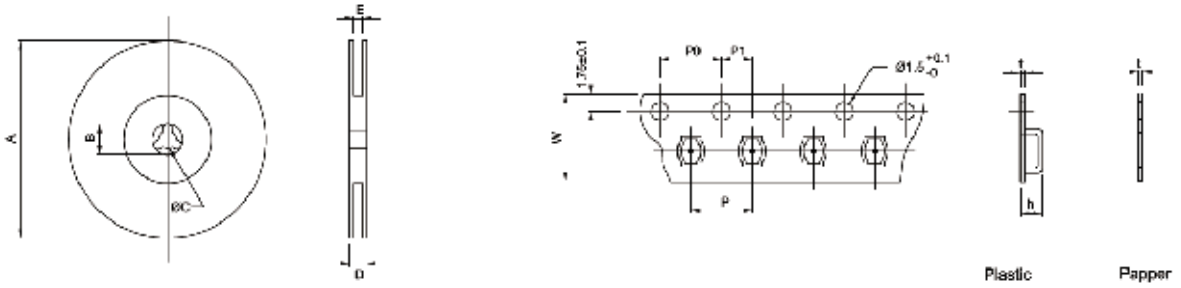
APPENDIX A
TAPE AND REEL SPECIFICATIONS



SMD Power Choke/Coating Resin Type Power Choke

Series	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
P/N	A	B	C	D	E	W	P	P0	P1	h	t	7”	13”	Box	Carton
CSN032D	180	80	13	18.5	12.5	12	8	4	2	2.50	0.35	500	---	2,000	12,000
CSN043D	340	100	13	18.4	12.4	12	8	4	2	3.60	0.35	---	2,250	4,500	13,500
CSN054D	340	80	13	18.4	12.4	12	12	4	2	5.00	0.35	---	1,000	3,000	9,000
CSN073D	340	60	13	22.4	16.4	16	12	4	2	3.80	0.35	---	1,400	2,800	8,400
CSN075D	340	80	13	22.4	16.4	16	12	4	2	5.50	0.40	---	1,000	2,000	6,000
CSN104D	340	100	13	29.5	24.5	24	12	4	2	4.80	0.30	---	1,200	1,200	4,800
CSN105D	340	100	13	30.4	24.4	24	16	4	2	5.80	0.30	---	700	700	2,800
CSN073F	340	100	13	22.4	16.5	16	12	4	2	3.70	0.30	---	1,400	2,800	8,400
CSN075F	340	100	13	22.4	16.5	16	12	4	2	5.30	0.35	---	1,100	2,200	6,600
CSN082F	340	100	13	30.4	24.5	24	16	4	2	3.00	0.35	---	1,300	1,300	13,000
CSN084F	340	100	13	30.4	24.5	24	16	4	2	5.50	0.35	---	750	750	6,000
CSS0211P	180	50	13	18.4	12.4	12	8	4	2	1.40	0.30	1,500	---	6,000	36,000
CSS0214P	180	50	13	18.4	12.4	12	8	4	2	1.60	0.30	1,000	---	3,000	15,000
CSS0218P	180	50	13	18.4	12.4	12	8	4	2	2.20	0.35	1,000	---	3,000	15,000
CSS0316P	180	50	13	16.5	12.5	12	8	4	2	2.20	0.30	1,000	---	4,000	24,000
CSS0418P	340	60	13	22.4	16.4	16	12	4	2	2.20	0.35	---	2,000	4,000	12,000
CSS0428P	340	60	13	22.4	16.4	16	12	4	2	3.20	0.35	---	1,500	3,000	9,000
CSS0518P	340	60	13	22.4	16.4	16	12	4	2	2.25	0.35	---	2,000	4,000	12,000
CSS0528P	340	60	13	22.4	16.4	16	12	4	2	3.25	0.35	---	1,500	3,000	9,000
CSS0628P	340	80	13	22.4	16.4	16	12	4	2	3.25	0.35	---	1,500	3,000	9,000
CSS0638P	340	100	13	22.4	16.4	16	12	4	2	4.50	0.35	---	1,200	2,400	7,200
CSS1050P	340	80	13	22.4	16.4	16	12	4	2	5.50	0.40	---	1,000	2,000	6,000
CSS124P	340	100	13	30.5	25.0	24	16	4	2	5.50	0.35	---	750	750	6,000
CSS125P	340	100	13	30.5	25.0	24	16	4	2	5.20	0.35	---	500	500	4,000
CSS127P	340	100	13	30.5	24.5	24	16	4	2	8.40	0.35	---	500	500	4,000
CSS0603G	340	100	13	18.4	12.4	12	12	4	2	3.15	0.30	---	1,500	3,000	9,000
CSS1038G	340	100	13	30.5	24.5	24	16	4	2	4.30	0.35	---	1,000	1,000	8,000
CSS1050G	340	100	13	30.5	24.5	24	16	4	2	5.40	0.35	---	500	500	4,000
CSS0625F	340	100	13	22.5	16.5	16	12	4	2	3.00	0.35	---	1,000	2,000	6,000
CSS0628F	340	100	13	22.5	16.5	16	12	4	2	3.10	0.35	---	1,000	2,000	6,000
CSS0728F	340	100	13	22.5	16.5	16	12	4	2	3.10	0.35	---	1,000	2,000	6,000
CSS0730F	340	100	13	22.5	16.5	16	12	4	2	3.30	0.35	---	1,000	2,000	6,000
CSS073F	340	80	13	22.5	16.5	16	12	4	2	3.70	0.35	---	1,400	2,800	8,400
CSS0732F	340	100	13	22.5	16.5	16	12	4	2	3.50	0.35	---	1,000	2,000	6,000
CSS0745F	340	100	13	22.5	16.5	16	12	4	2	4.80	0.35	---	1,000	2,000	6,000
CSS075F	340	80	13	22.5	16.5	16	12	4	2	5.30	0.30	---	1,100	2,200	6,600
CSS084F	340	100	13	30.5	24.5	24	16	4	2	5.50	0.35	---	750	750	6,000
CSS1045F	340	100	13	30.5	24.5	24	16	4	2	4.80	0.40	---	500	500	4,000
CSS124F	340	100	13	30.5	25.0	24	16	4	2	5.50	0.35	---	750	750	6,000
CSS125F	340	100	13	30.5	25.0	24	16	4	2	6.50	0.35	---	500	500	4,000
CSS127F	340	100	13	30.5	24.5	24	16	4	2	8.40	0.35	---	500	500	4,000
CSS1355F	340	100	13	30.4	24.4	24	16	4	2	6.10	0.40	---	650	650	5,200
CSS136F	340	100	13	38.4	32.5	32	20	4	2	7.65	0.40	---	350	350	2,800
CSS1365F	340	100	13	30.4	24.4	24	20	4	2	7.10	0.40	---	450	450	3,600
CSS1375F	340	100	13	30.4	24.4	24	20	4	2	8.10	0.40	---	400	400	3,200
CSS054D	330	21.5	13	21.4	16.5	16	12	4	2	5.50	0.30	---	1,000	2,000	8,000
CSS063D	330	21.5	13	21.4	16.5	16	8	4	2	3.50	0.35	---	1,500	3,000	15,000
CSS075D	330	21.5	13	21.4	16.5	16	12	4	2	6.00	0.30	---	700	700	3,500
CSS105D	330	21.5	13	29.5	24.5	24	16	4	2	6.00	0.30	---	500	500	2,500

APPENDIX A
TAPE AND REEL SPECIFICATIONS



SMD Power Choke/Coating Resin Type Power Choke

Series P/N	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
	A	B	C	D	E	W	P	P0	P1	h	t	7”	13”	Box	Carton
CSM0310D	180	60	13	12.5	8.4	8	4	4	2	1.40	0.23	2,000	---	12,000	72,000
CSM0315D	180	60	13	12.5	8.4	8	4	4	2	1.70	0.23	2,000	---	12,000	72,000
CSM0418D	330	80	13	18.5	13.5	12	8	4	2	2.10	0.30	---	3,500	7,000	28,000
CSM0840D	330	100	13	22.4	16.4	16	12	4	2	4.40	0.35	---	1,000	2,000	6,000
CSMH2410D	180	60	13	---	10	8	4	4	2	1.30	0.25	2,500	---	12,500	75,000
CSMH2412D	180	60	13	---	10	8	4	4	2	1.30	0.25	2,500	---	12,500	75,000
CSMH0312D	180	60	13	---	10	8	4	4	2	1.60	0.30	2,000	---	12,000	72,000
CSMS2012D	180	60	13	---	10	8	4	4	2	1.30	0.25	2,500	---	12,500	75,000
CSMS0410D	330	80	13	18.5	13.5	12	8	4	2	1.40	0.30	---	5,000	10,000	40,000
CSMS0412D	330	80	13	18.5	13.5	12	8	4	2	1.60	0.30	---	4,500	9,000	36,000
CSMS0510D	180	60	13	---	14.0	12	8	4	2	1.40	0.30	1,000	---	4,000	24,000
CSMS0512D	180	60	13	---	14.0	12	8	4	2	1.40	0.30	1,000	---	4,000	24,000
CSMS0520D	180	60	13	---	14.0	12	8	4	2	2.30	0.30	800	---	3,200	19,200
CSMS0540D	330	80	13	18.5	13.5	12	8	4	2	4.20	0.40	---	1,500	3,000	9,000
CSMS0610D	180	60	13	---	14.0	12	8	4	2	1.40	0.40	1,000	---	4,000	24,000
CSMS0612D	180	60	13	---	14.0	12	8	4	2	1.60	0.40	1,000	---	4,000	24,000
CSMS0620D	330	80	13	18.5	13.5	12	8	4	2	2.30	0.40	---	2,500	5,000	15,000
CSMS0628D	330	80	13	18.5	13.5	12	8	4	2	3.10	0.40	---	2,000	4,000	24,000
CSMS0645D	330	80	13	18.5	13.5	12	8	4	2	4.70	0.40	---	1,500	3,000	12,000
TSS1230F-01	340	20.2	13	30.4	24.4	24.0	16.0	4	2	3.10	0.30	---	1,000	1,000	8,000

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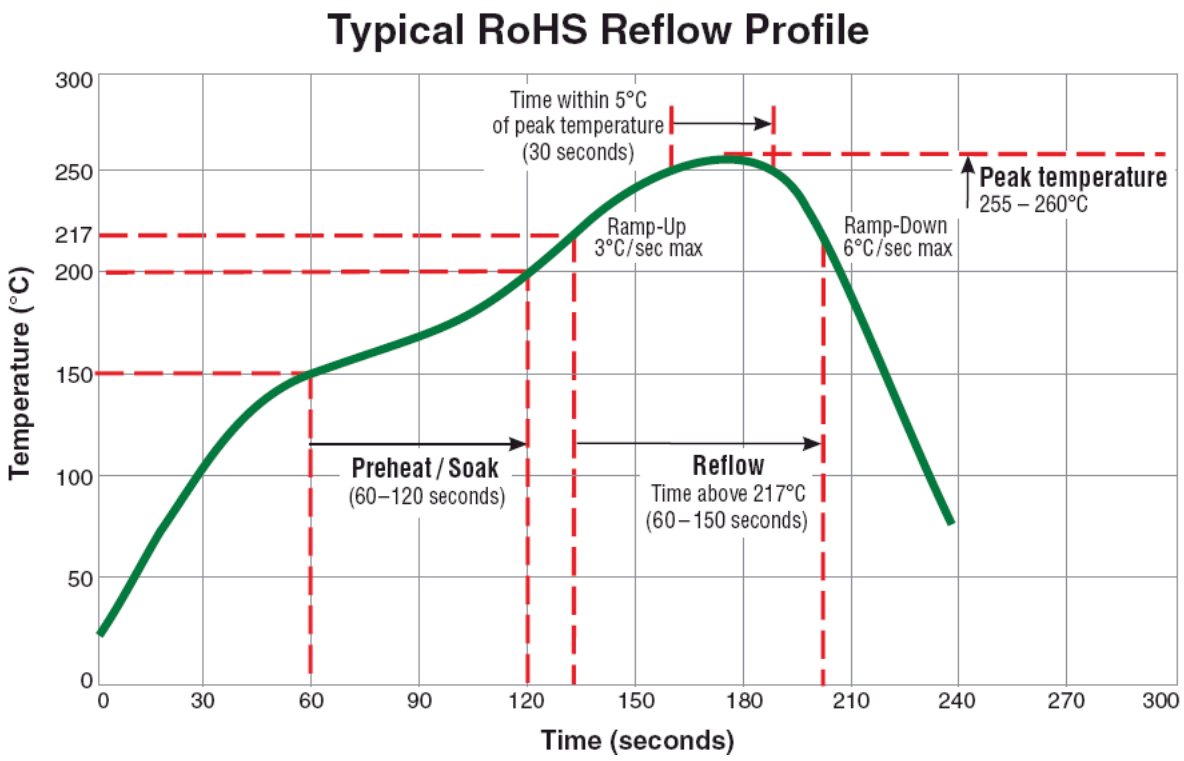
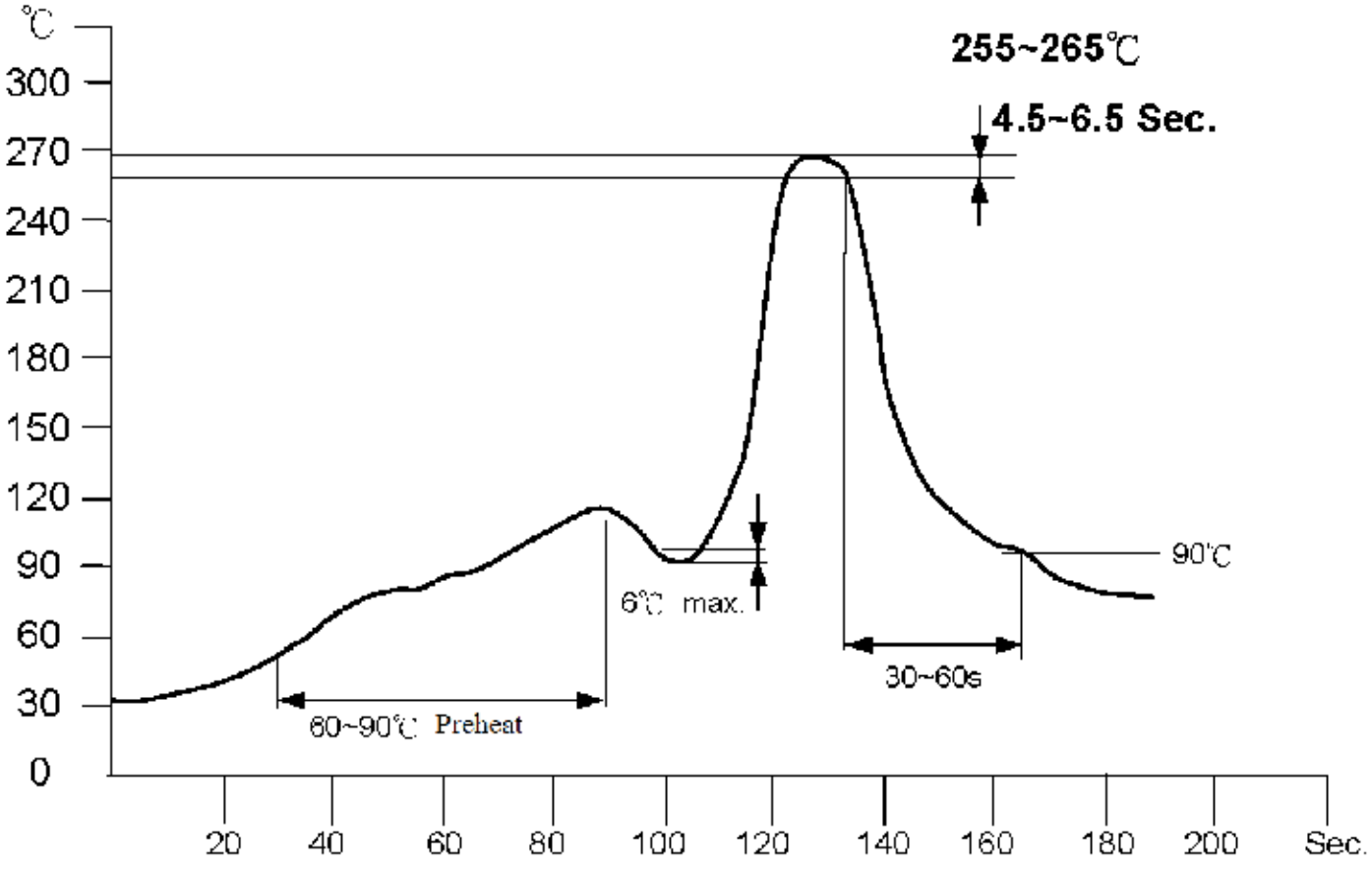
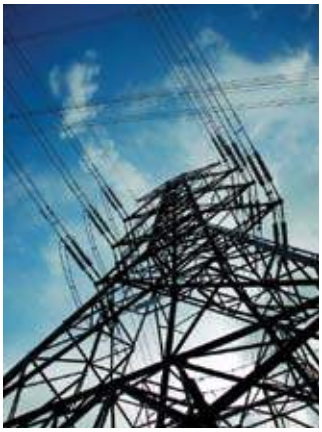
SMD Solder Profile



Through Hole Solder Profile



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