

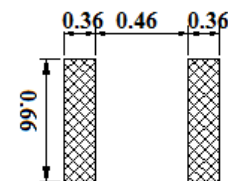
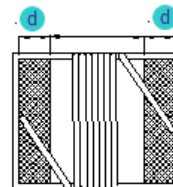
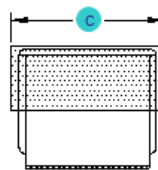
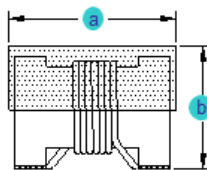
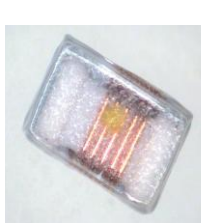
A. Electrical Specifications:

P/N	L (nH)	Tol.	L Test Freq. (MHz)	Q Min. Typ.	Q Test Freq. (MHz)	SRF Min. (GHz)	DCR Max. (Ω)	Rated Current (A)
0402HQ-1N3_	1.3	D, C	100	20	250	16	0.017	1.200
0402HQ-1N4_	1.4	D, C	100	25	250	15	0.019	1.100
0402HQ-2N2_	2.2	D, C	100	25	250	14	0.027	1.000
0402HQ-2N3_	2.3	D, C	100	25	250	14	0.027	1.000
0402HQ-2N4_	2.4	D	100	25	250	14	0.027	1.000
0402HQ-3N3_	3.3	D	100	30	250	12	0.040	0.900
0402HQ-3N4_	3.4	D, C	100	30	250	12	0.040	0.900
0402HQ-3N5_	3.5	D, C	100	30	250	9.5	.040	0.900
0402HQ-3N6_	3.6	D, C	100	30	250	9.5	0.040	0.900
0402HQ-3N8_	3.8	D, C	100	30	250	7.0	0.040	0.900
0402HQ-3N9_	3.9	D	100	30	250	7.0	0.040	0.900
0402HQ-4N0_	4.0	D, C	100	30	250	6.5	0.051	0.800
0402HQ-4N2_	4.2	D, C	100	30	250	6.5	0.051	0.800
0402HQ-4N7_	4.7	D	100	30	250	8.0	0.051	0.800
0402HQ-5N1_	5.1	D, C	100	30	250	8.0	0.051	0.800
0402HQ-5N2_	5.2	D, C	100	30	250	8.0	0.051	0.800
0402HQ-5N3_	5.3	D, C	100	30	250	8.0	0.051	0.800
0402HQ-5N4_	5.4	D, C	100	30	250	8.0	0.051	0.800
0402HQ-5N5_	5.5	D, C	100	30	250	8.0	0.051	0.800
0402HQ-5N6_	5.6	D, C	100	30	250	8.0	0.051	0.800
0402HQ-5N7_	5.7	D, C	100	30	250	8.0	0.051	0.800
0402HQ-5N9_	5.9	D, C	100	30	250	7.7	0.056	0.760
0402HQ-6N0_	6.0	D, C	100	30	250	7.7	0.056	0.760
0402HQ-6N1_	6.1	D, C	100	30	250	7.7	0.056	0.760
0402HQ-7N4_	7.4	D, C	100	30	250	6.8	0.058	0.750
0402HQ-7N6_	7.6	D, C	100	30	250	6.8	0.058	0.750
0402HQ-7N7_	7.7	D, C	100	30	250	6.8	0.058	0.750
0402HQ-7N8_	7.8	D, C	100	30	250	6.8	0.058	0.750
0402HQ-7N9_	7.9	D, C	100	30	250	7.5	0.079	0.640
0402HQ-8N0_	8.0	D, C	100	30	250	7.5	0.079	0.640
0402HQ-8N1_	8.1	D, C	100	30	250	7.5	0.079	0.640
0402HQ-8N3_	8.3	D, C	100	30	250	7.5	0.079	0.640
0402HQ-8N4_	8.4	D, C	100	30	250	7.5	0.079	0.640

Note: 1. Termination: Tin plating is standard.
2. 0402HQ has no color code.

B. Dimensions: mm (Inch)

P/N	a	b	c	d
0402HQ	1.0 (0.0394)	0.5 (0.0197)	0.6 (0.0236)	0.2 (0.0079)
Tol.	±0.1 (0.0039)	±0.1 (0.0039)	±0.1 (0.0039)	±0.1 (0.0039)



Recommended Patterns

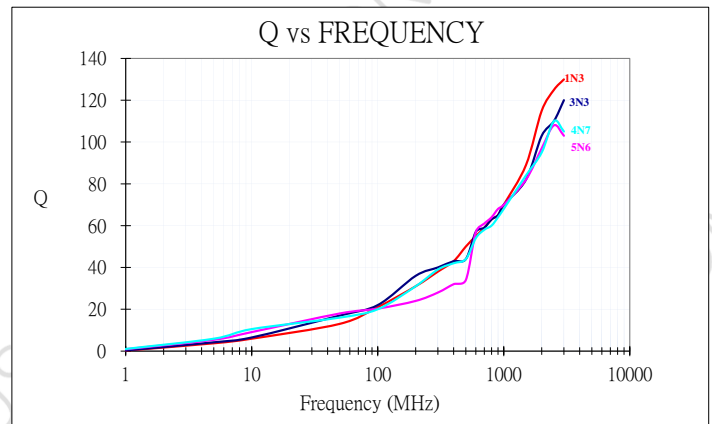
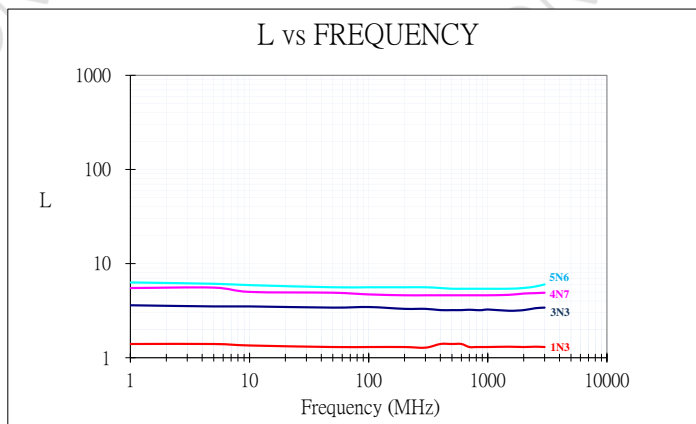
C. General Information:

1. P/N: 0402HQ-xxx, “0402HQ”= Size Type, “xxx” = Inductance, “_” = Tolerance
2. Tolerance “_”: D= $\pm 0.5nH$, C= $\pm 0.2nH$
3. Product material: Ceramic.
4. Excellent solder ability and high heat resistance for either flow or reflow soldering
5. Monolithic structures for highly reliable surface mount applications.
6. Superior Q characteristics guaranteed over the wide frequency and allow high frequency application.
7. The completely monolithic structure gives high reliability and allows high SRF.
8. Both flow and IR re-flow application are possible.
9. Operating temperature: $-40^{\circ}C$ to $+125^{\circ}C$
10. Maximum Temperature Rise: $15^{\circ}C$ (when measured at $25^{\circ}C$ ambient).
11. Inductance & Q measured using 4287A with 16197A
12. SRF measured using HP 8753E/HP 4291B with 16193A/ENA5071C or it’s equivalent
13. DCR measured using Zentech 502BC or its equivalent
14. Unspecified values available on request.
15. Inductance and Current range:
From 1.3 nH (1.2A) to 8.4nH (0.640 A)
16. SRF:
From 7.5GHz to 16GHz
17. MSL: Level 1.

D. Applications:

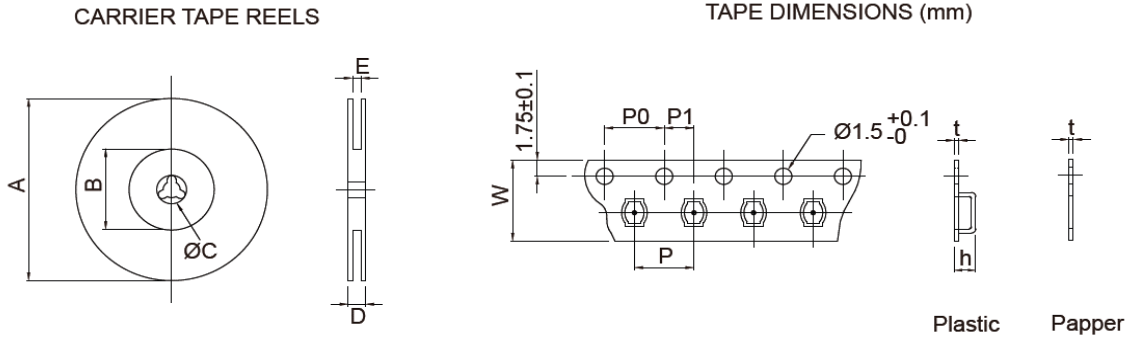
1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. RF Filter

E. Characteristics Curve:



F. Supplementary Information:

1. Packaging Information



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
0402HQ	180	60	13	13	9	8	2	4	2	---	0.80	10,000	---	---	50,000

2. RoHS Reflow Solder Profile

Typical RoHS Reflow Profile

