

CERAMIC WOUND CHIP INDUCTOR SERIES CI

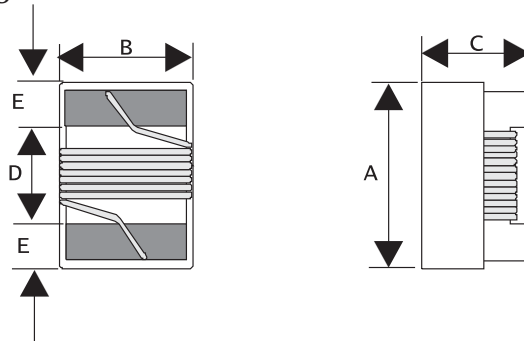
FEATURES

Ceramic core for Very High SRF and exceptional Q
 Ultra small size, ideal for Ultra High Frequency applications, Wireless and Telecom products
 Excellent DCR and current carrying characteristics
 Excellent thermal stability due to non-magnetic core. Good for reflow soldering
 Several sizes with varying inductance ranges to choose from
 Available on tape and reel

SPECIFICATIONS

Inductance range	CI0603 1.6 nano Henry to 390 nano Henry CI0805 2.2 nano Henry to 2200 nano Henry CI1008 10 nano Henry to 10000 nano Henry
Tolerance	± 5%, 10%, and 20% available
Rated current	Based on value obtained when coil has temperature rise up to 15°C
Test procedure	L & Q are measured with HP-4291A SRF is measured with HP-8753A
Operating temperature	-40°C to +125°C
Construction	Wire wound
Soldering heat resistance	230°C for 10 seconds
Terminal construction	Metal wrap
Resistance to solvents	Meets MIL-STD-202E
Marking	On part: None On reel: Part number, Quantity, Lot & Date code
Packaging	CI0603 & CI0805 sizes 3000 pieces per reel CI1008 sizes 2000 pieces per reel
Reel specifications	178 mm paper reel with 8 mm embossed carrier tape

DIMENSIONS IN MILLIMETERS



PART NUMBER	CI0603	CI0805	CI1008
A	1.60mm ± 0.20mm	2.30mm ± 0.20mm	2.80mm ± 0.20mm
B	1.20mm ± 0.20mm	1.70mm ± 0.20mm	2.60mm ± 0.20mm
C	1.00mm ± 0.20mm	1.60mm ± 0.20mm	2.10mm ± 0.20mm
D	0.80mm ± 0.10mm	1.00mm ± 0.10mm	1.50mm ± 0.10mm
E	0.34mm ± 0.10mm	0.50mm ± 0.10mm	0.50mm ± 0.10mm

ELECTRICAL SPECIFICATIONS

SERIES CI0603

PART NUMBER	L (nH)	L. TEST FREQ (MHz)	TOL (%) ±	Q min	Q TEST FREQ (MHz)	DCR max (Ω)	SRF min (MHz)	Rated Current (mA)
CI0603-1N6K	1.6	250	10	24	250	.030	12500	700
CI0603-1N8K	1.8	250	10	16	250	.045	12500	700
CI0603-3N6K	3.6	250	10	22	250	.063	5900	700
CI0603-3N9K	3.9	250	10	22	250	.080	6900	700
CI0603-4N3K	4.3	250	10	22	250	.063	5900	700
CI0603-4N7K	4.7	250	10	20	250	.116	5800	700
CI0603-5N1K	5.1	250	10	20	250	.140	5700	700
CI0603-6N8K	6.8	250	10	27	250	.110	5800	700
CI0603-7N5K	7.5	250	10	28	250	.106	4800	700
CI0603-8N7J	8.7	250	5	28	250	.109	4600	700
CI0603-9N5J	9.5	250	5	28	250	.135	5400	700
CI0603-10NJ	10	250	5	31	250	.130	4800	700
CI0603-11NJ	11	250	5	33	250	.086	4000	700
CI0603-12NJ	12	250	5	35	250	.130	4000	700
CI0603-15NJ	15	250	5	35	250	.170	4000	700
CI0603-16NJ	16	250	5	34	250	.104	3300	700
CI0603-18NJ	18	250	5	35	250	.170	3100	700
CI0603-22NJ	22	250	5	38	250	.190	3000	700
CI0603-24NJ	24	250	5	37	250	.135	2650	700
CI0603-27NJ	27	250	5	40	250	.220	2800	600
CI0603-30NJ	30	250	5	37	250	.144	2250	600
CI0603-33NJ	33	250	5	40	250	.220	2300	600
CI0603-36NJ	36	250	5	38	250	.250	2080	600
CI0603-39NJ	39	250	5	40	250	.250	2200	600
CI0603-43NJ	43	250	5	39	250	.280	2000	600
CI0603-47NJ	47	200	5	38	200	.280	2000	600
CI0603-56NJ	56	200	5	38	200	.310	1900	600
CI0603-68NJ	68	200	5	37	200	.340	1700	600
CI0603-72NJ	72	150	5	34	150	.490	1700	400
CI0603-82NJ	82	150	5	34	150	.540	1700	400
CI0603-R10J	100	150	5	34	150	.580	1400	400
CI0603-R11J	110	150	5	32	150	.610	1350	300
CI0603-R12J	120	150	5	32	150	.650	1300	300
CI0603-R15J	150	150	5	28	150	.920	990	280
CI0603-R18J	180	100	5	25	100	1.25	990	240
CI0603-R22J	220	100	5	25	100	2.10	900	200
CI0603-R27J	270	100	5	24	100	2.30	900	170
CI0603-R39J	390	100	5	24	100	3.00	800	100

SERIES CI0805

PART NUMBER	L (nH)	L. TEST FREQ (MHz)	TOL (%) ±	Q min	Q TEST FREQ (MHz)	DCR max (Ω)	SRF min (MHz)	Rated Current (mA)
CI0805-2N2M	2.2	250	20	50	1500	0.05	6000	600
CI0805-3N3M	3.3	250	20	50	1500	0.08	6000	600
CI0805-6N8M	6.8	250	20	50	1000	0.11	5500	600
CI0805-8N2M	8.2	250	20	50	500	0.12	4700	600
CI0805-12NM	12	250	20	50	500	0.15	4000	600
CI0805-15NM	15	250	20	50	500	0.17	3400	600
CI0805-18NM	18	250	20	50	500	0.20	3300	600
CI0805-22NM	22	250	20	55	500	0.22	2600	500
CI0805-27NM	27	250	20	55	500	0.25	2500	500
CI0805-33NK	33	250	10	60	500	0.27	2050	500
CI0805-39NK	39	250	10	60	500	0.29	2000	500
CI0805-47NK	47	200	10	60	500	0.31	1650	500
CI0805-56NK	56	200	10	60	500	0.34	1550	500
CI0805-68NK	68	200	10	60	500	0.38	1450	500
CI0805-82NK	82	150	10	65	500	0.42	1300	400
CI0805-R10K	100	150	10	65	500	0.46	1200	400
CI0805-R12K	120	150	10	50	250	0.51	1100	400
CI0805-R15K	150	100	10	50	250	0.56	920	400
CI0805-R18K	180	100	10	50	250	0.64	870	400
CI0805-R22K	220	100	10	50	250	0.70	850	400
CI0805-R27K	270	100	10	40	100	1.00	950	280
CI0805-R33K	330	100	10	40	100	1.20	890	260
CI0805-R39K	390	100	10	40	100	1.50	830	200
CI0805-R47K	470	100	10	40	100	2.50	750	170
CI0805-R56K	560	100	10	40	100	3.50	700	170
CI0805-R68K	680	50	10	30	50	4.00	650	170
CI0805-R82K	820	50	10	20	50	4.50	600	170
CI0805-1R0K	1000	50	10	20	50	5.00	400	70
CI0805-1R5K	1500	50	10	20	50	6.00	300	70
CI0805-1R8K	1800	50	10	20	50	6.50	250	70
CI0805-2R2K	2200	50	10	20	50	7.00	200	70

ELECTRICAL SPECIFICATIONS

CI1008 SERIES

PART NUMBER	L (nH)	L TEST FREQ (MHz)	TOL (%) ±	Q min	Q TEST FREQ (MHz)	DCR max (Ω)	SRF min (MHz)	RATED CURRENT (mA)
CI1008-10NM	10	50	20	50	500	0.08	4100	1000
CI1008-12NM	12	50	20	50	500	0.09	3300	1000
CI1008-15NM	15	50	20	50	500	0.10	2500	1000
CI1008-18NM	18	50	20	50	350	0.11	2500	1000
CI1008-22NM	22	50	20	55	350	0.12	2400	1000
CI1008-27NM	27	50	20	55	350	0.13	1600	1000
CI1008-33NK	33	50	10	60	350	0.14	1600	1000
CI1008-39NK	39	50	10	60	350	0.15	1500	1000
CI1008-47NK	47	50	10	65	350	0.16	1500	1000
CI1008-56NK	56	50	10	65	350	0.18	1300	1000
CI1008-68NK	68	50	10	65	350	0.20	1300	1000
CI1008-82NK	82	50	10	60	350	0.22	1000	1000
CI1008-R10K	100	25	10	60	350	0.56	1000	650
CI1008-R12K	120	25	10	60	350	0.63	950	650
CI1008-R15K	150	25	10	45	100	0.70	850	620
CI1008-R18K	180	25	10	45	100	0.77	750	580
CI1008-R22K	220	25	10	45	100	0.84	700	500
CI1008-R27K	270	25	10	45	100	0.91	600	500
CI1008-R33K	330	25	10	45	100	1.05	570	450
CI1008-R39K	390	25	10	45	100	1.12	500	450
CI1008-R47K	470	25	10	45	100	1.19	450	450
CI1008-R56K	560	25	10	45	100	1.33	415	400
CI1008-R62K	620	25	10	45	100	1.40	375	300
CI1008-R68K	680	25	10	45	100	1.47	375	350
CI1008-R75K	750	25	10	45	100	1.54	360	360
CI1008-R82K	820	25	10	45	100	1.61	350	350
CI1008-R91K	910	25	10	45	100	1.68	320	380
CI1008-1R0K	1000	25	10	35	50	1.75	290	370
CI1008-1R2K	1200	7.9	10	37	50	2.00	250	350
CI1008-1R5K	1500	7.9	10	28	50	2.30	200	300
CI1008-1R8K	1800	7.9	10	28	50	2.60	160	300
CI1008-2R2K	2200	7.9	10	28	50	2.80	160	300
CI1008-2R7K	2700	7.9	10	22	25	3.20	140	270
CI1008-3R3K	3300	7.9	10	22	25	3.40	110	270
CI1008-3R9K	3900	7.9	10	20	25	3.60	100	250
CI1008-4R7K	4700	7.9	10	20	25	4.00	90	250
CI1008-5R6K	5600	7.9	10	20	25	8.00	55	200
CI1008-6R8K	6800	7.9	10	20	25	9.00	45	180
CI1008-8R2K	8200	7.9	10	20	25	9.50	35	160
CI1008-100K	10000	7.9	10	20	7.9	10.00	25	100

LAND PATTERN

Area	CI0603	CI0805	CI1008
A	0.64 mm	0.76 mm	1.27 mm
B	1.30 mm	1.90 mm	2.54 mm
C	0.64 mm	1.02 mm	1.02 mm

