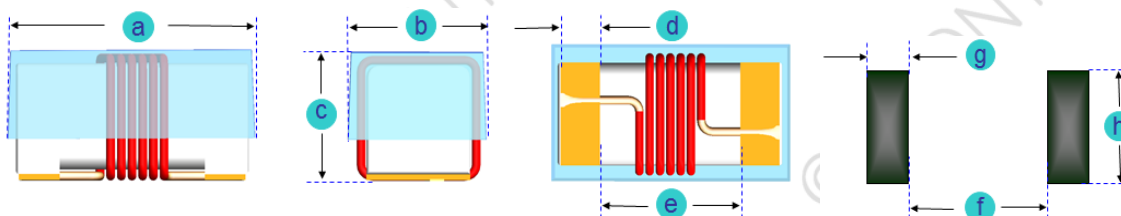


A. Electrical Specifications:

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)	1 st Color	2 nd Color	3 rd 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

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.

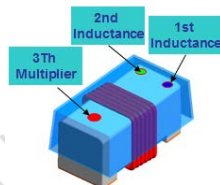




C. Color coding:

1. Parts are marked with 3 color dots. The table at 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. General Information:

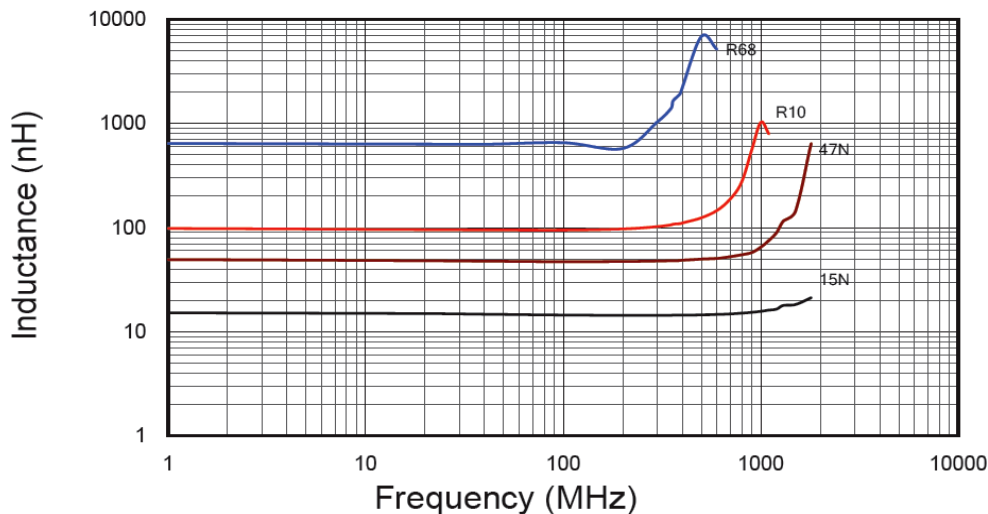
1. P/N: 1008CP-xxx_, “1008CP” = Size Type, “xxx” = Inductance, “_” = Tolerance.
2. Tolerance “_” : K: $\pm 10\%$, J: $\pm 5\%$, G: $\pm 2\%$.
3. Small and lightweight surface mounting type.
4. High Q at high frequency & High self-resonance frequency.
5. For 15°C Temperature Rise at 25°C ambient.
6. Inductance & Q measured with HP4291B Impedance Analyzer.
7. SRF measured using the HP8720D or HP8753E Network Analyzer.
8. DCR measured using the 16502 milliohm meter.
9. Operating temperature: -40°C to $+125^{\circ}\text{C}$.
10. This series has no color code due to the size is small.
11. Inductance and Current Range: From 10 nH (1000mA) to 4700 nH (260 mA)
12. SRF: From 90 MHz to 4100 MHz
13. 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. Characteristics Curve:

Inductance vs. Frequency





1008CP Series – SMD WIRE WOUND CERAMIC CHIP INDUCTORS

Rev. A

Typical Q vs. Frequency

