



1008C Series – SMD WIRE WOUND CERAMIC CHIP INDUCTORS

Rev. A

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

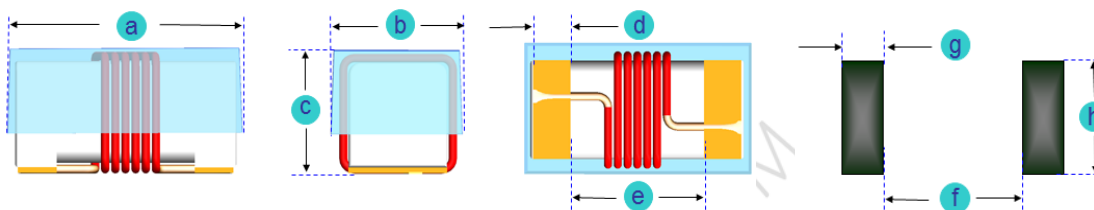
B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
1008C	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.



1008C Series – SMD WIRE WOUND CERAMIC CHIP INDUCTORS

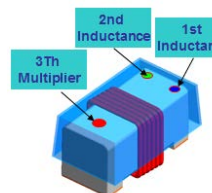
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C. Color coding:

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. General Information:

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

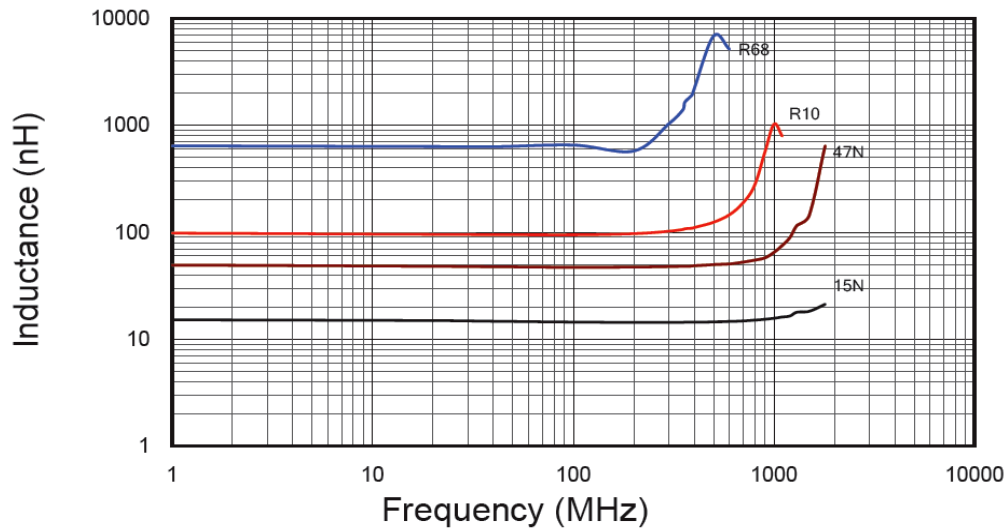
E. Applications:

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



Typical Q vs. Frequency

