



# 0805C Series – SMD WIRE WOUND CERAMIC CHIP INDUCTORS

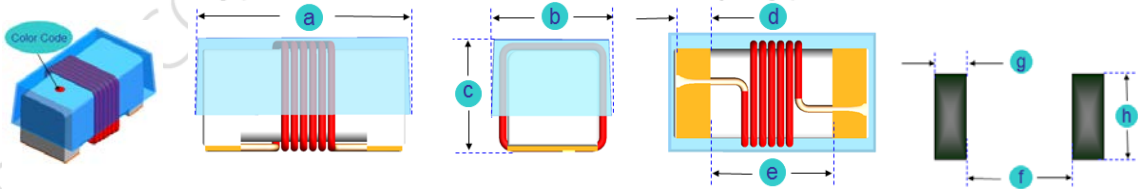
Rev. A

## A. Electrical Specifications:

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

**B. Dimensions: mm (Inch)**

Series	a	b	c	d	e	f	g	h
<b>0805C</b>	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)
<b>Tol.</b>	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.



**C. General Information:**

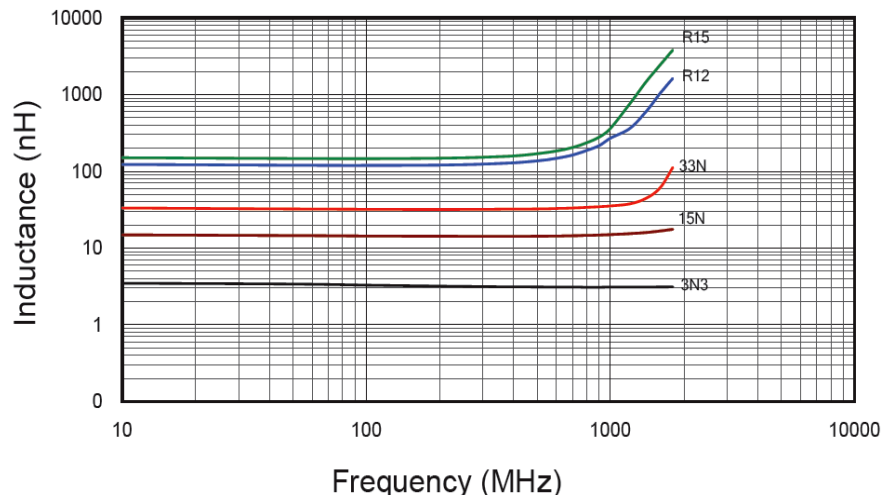
- i. P/N: 0805C-xxx\_, “0805” = Size Type, “C” = Gold plated pads, “xxx” = Inductance.
- ii. Tolerance “\_”: K: ± 10%, J: ± 5%, G: ± 2%.
- iii. Product material: Ceramic.
- iv. 0805C has first inductance color code only.
- v. Small and lightweight surface mounting type.
- vi. High Q at high frequency & High self-resonance frequency.
- vii. For 15°C Temperature Rise at 25°C ambient.
- viii. Inductance & Q measured with HP4291B Impedance Analyzer.
- ix. SRF measured using the HP8720D or HP8753E Network Analyzer.
- x. DCR measured using the 16502 milliohm meter.
- xi. Operating temperature: -40°C to +125°C.
- xii. This series has no color code due to the size is small.
- xiii. Inductance and Current Range: From 2.2 nH (600mA) to 820 nH (180 mA)
- xiv. SRF: From 188 MHz to 7900 MHz
- xv. 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 Filters

**E. Characteristics Curve:**

Inductance vs. Frequency





# 0805C Series – SMD WIRE WOUND CERAMIC CHIP INDUCTORS

Rev. A

### Typical Q vs. Frequency

