



# Frontier Electronics Corp.

667 E. COCHRAN STREET, SIMI VALLEY, CA 93065

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## SMD Wire Wound Ceramic Chip Inductors—1008C series

### A. Electrical Specifications:

Part No.	L (nH)	Tolerance	Q (Min.)	SRF (MHz) (Min.)	DCR $\Omega$ (Max)	I rms. (mA)	Color Code		
							1st	2 <sup>nd</sup>	3rd
1008C-10N	10@50MHz	M, K	50@500MHz	4100	0.08	1000	Brown	Black	Black
1008C-12N	12@50MHz	M, K	50@500MHz	3300	0.09	1000	Brown	Red	Black
1008C-15N	15@50MHz	M, K	50@500MHz	2500	0.10	1000	Brown	Green	Black
1008C-18N	18@50MHz	M, K, J, G	50@500MHz	2500	0.11	1000	Brown	Gray	Black
1008C-22N	22@50MHz	M, K, J, G	55@350MHz	2400	0.12	1000	Red	Red	Black
1008C-27N	27@50MHz	M, K, J, G	55@350MHz	1600	0.13	1000	Red	Violet	Black
1008C-33N	33@50MHz	M, K, J, G	60@350MHz	1600	0.14	1000	Orange	Orange	Black
1008C-39N	39@50MHz	M, K, J, G	60@350MHz	1500	0.15	1000	Orange	White	Black
1008C-47N	47@50MHz	M, K, J, G	65@350MHz	1500	0.16	1000	Yellow	Violet	Black
1008C-56N	56@50MHz	K, J, G	65@350MHz	1300	0.18	1000	Green	Blue	Black
1008C-68N	68@50MHz	K, J, G	65@350MHz	1300	0.20	1000	Blue	Gray	Black
1008C-82N	82@50MHz	K, J, G	60@350MHz	1000	0.22	1000	Gray	Red	Black
1008C-R10	100@25MHz	K, J, G	60@350MHz	1000	0.56	650	Brown	Black	Brown
1008C-R12	120@25MHz	K, J, G	60@350MHz	950	0.63	650	Brown	Red	Brown
1008C-R15	150@25MHz	K, J, G	45@100MHz	850	0.70	580	Brown	Green	Brown
1008C-R18	180@25MHz	K, J, G	45@100MHz	750	0.77	620	Brown	Gray	Brown
1008C-R20	200@25MHz	K, J, G	50@100MHz	750	0.81	500	Red	Black	Brown
1008C-R22	220@25MHz	K, J, G	45@100MHz	700	0.84	500	Red	Red	Brown
1008C-R24	240@25MHz	K, J, G	50@100MHz	600	0.84	500	Red	Yellow	Brown
1008C-R27	270@25MHz	K, J, G	45@100MHz	600	0.91	500	Red	Violet	Brown
1008C-R30	300@150MHz	K, J, G	40@100MHz	500	1.05	660	Orange	Black	Brown
1008C-R33	330@25MHz	K, J, G	45@100MHz	570	1.05	450	Orange	Orange	Brown
1008C-R36	360@150MHz	K, J, G	40@100MHz	500	1.05	660	Orange	Blue	Brown
1008C-R39	390@25MHz	K, J, G	45@100MHz	500	1.12	470	Org	White	Brown
1008C-R43	430@150MHz	K, J, G	40@100MHz	425	1.19	600	Yellow	Orange	Brown
1008C-R47	470@25MHz	K, J, G	45@100MHz	450	1.19	470	Yellow	Violet	Brown
1008C-R56	560@25MHz	K, J, G	45@100MHz	415	1.33	400	Green	Blue	Brown
1008C-R62	620@25MHz	K, J, G	45@100MHz	375	1.40	300	Blue	Red	Brown
1008C-R68	680@25MHz	K, J, G	45@100MHz	375	1.47	400	Blue	Gray	Brown
1008C-R75	750@25MHz	K, J, G	45@100MHz	360	1.54	360	Violet	Green	Brown
1008C-R82	820@25MHz	K, J, G	45@100MHz	350	1.61	400	Gray	Red	Brown
1008C-R91	910@25MHz	K, J, G	35@50MHz	320	1.68	380	White	Brown	Brown
1008C-1R0	1000@25MHz	K, J, G	35@50MHz	290	1.75	370	Brown	Black	Red
1008C-1R2	1200@7.9MHz	K, J, G	35@50MHz	250	2.00	310	Brown	Red	Red
1008C-1R5	1500@7.9MHz	K, J, G	28@50MHz	200	2.30	330	Brown	Green	Red
1008C-1R8	1800@7.9MHz	K, J, G	28@50MHz	160	2.60	300	Brown	Gray	Red
1008C-2R0	2000@25MHz	K, J, G	25@50MHz	160	2.80	280	Red	Black	Red
1008C-2R2	2200@7.9MHz	K, J, G	28@50MHz	160	2.80	280	Red	Red	Red
1008C-2R7	2700@7.9MHz	K, J, G	22@25MHz	140	3.20	290	Red	Violet	Red
1008C-3R3	3300@7.9MHz	K, J, G	22@25MHz	110	3.40	290	Orange	Org	Red
1008C-3R9	3900@7.9MHz	K, J, G	20@25MHz	100	3.60	260	Orange	White	Red
1008C-4R7	4700@7.9MHz	K, J, G	20@25MHz	90	4.00	260	Yellow	Violet	Red



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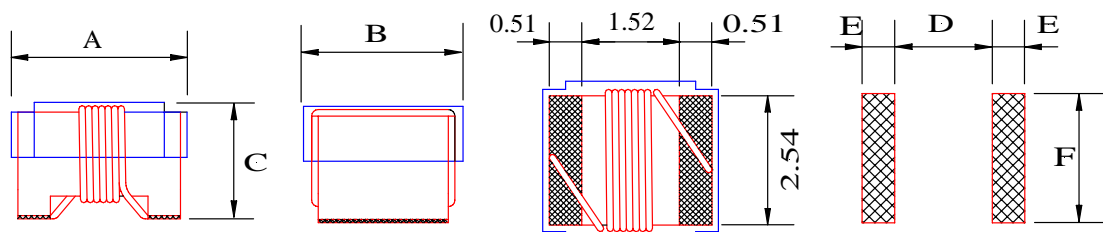
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## SMD Wire Wound Ceramic Chip Inductors—1008C series

### B. Dimensions: (Unit: mm )

SERIES	A (Max.)	B (Max.)	C (Max.)	D (Max.)	E	F
1008C	2.92	2.79	2.03	1.02	1.27	2.54

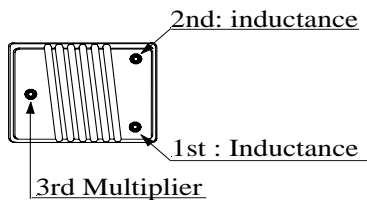
### C. Mechanical Drawing:



Land Pattern

### D. Color coding:

- Parts are marked with 3 color dots. The table at below shows the significance of each color.
- Dots 1 and 2 indicate the inductance in nano-Henries.
- Dots 3 indicate number of zeroes to be added.



Top view

0 = Black	5 = Green
1 = Brown	6 = Blue
2 = Red	7 = Violet
3 = Orange	8 = Gray
4 = Yellow	9 = White

Color code table



### E. General information:

- Tolerance: M:  $\pm 20\%$ , K:  $\pm 10\%$ , J:  $\pm 5\%$ , G:  $\pm 2\%$ , F:  $\pm 1\%$ .
- High Q at high frequency.
- High self-resonance frequency.
- Inductance & Q measured using the HP4291B
- SRF measured using the HP8720D or HP8753E.
- DCR measured using the 502BC.
- For 15°C Temperature Rise.
- Operating temperature: -40°C TO +125°C.
- Inductance Range:
  - 1008C (Ceramic) Series: 10.0nH(1000mA)~4700nH(260mA). SRF from 4.1GHz to 90MHz.
- RoHS compliant.

### F. Applications:

\* Pagers. \* Mobile communication units. \* Portable telephone. \* Hybrid.

★ *Special specifications are available for customer's requirement.*



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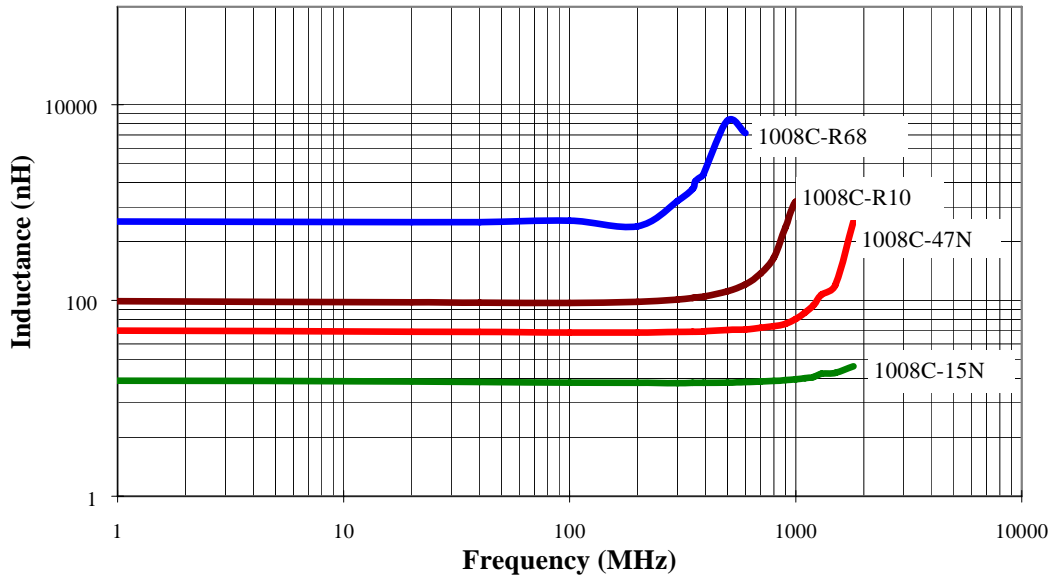
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## SMD Wire Wound Ceramic Chip Inductors—1008C series

### G. Characteristic curve:

#### 1. L vs. Frequency:



#### 2. Typical Q vs. Frequency:

