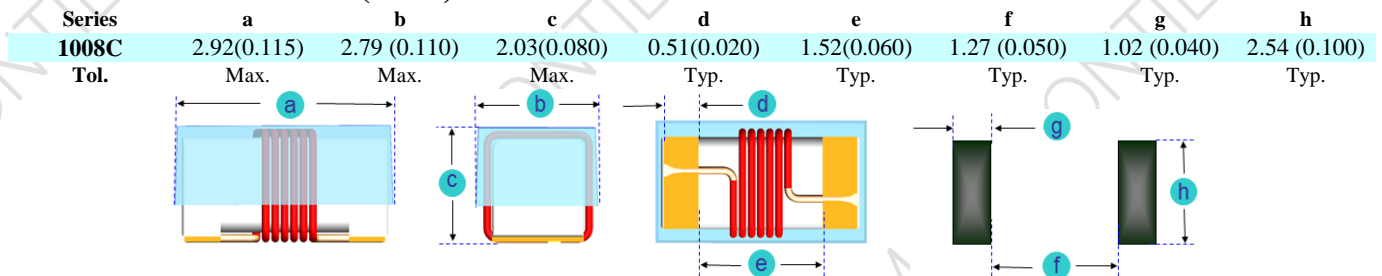


A. Electrical Specifications:

| P/N | L (nH) | Tol. | L Test Freq. (MHz) | Q Min. | Q Test Freq. (MHz) | SRF Min. (GHz) | DCR Max. (Ω) | I rms. Max. (A) | 1 st Color | 2 nd Color | 3 rd Color |
|-----------|--------|---------|--------------------|--------|--------------------|----------------|--------------|-----------------|-----------------------|-----------------------|-----------------------|
| 1008C-5N6 | 5.6 | K, J | 50 | 50 | 1500 | 4.00 | 0.15 | 1.00 | Green | Blue | Black |
| 1008C-10N | 10 | K, J | 50 | 50 | 500 | 4.10 | 0.08 | 1.00 | Brown | Black | Black |
| 1008C-12N | 12 | K, J | 50 | 50 | 500 | 3.30 | 0.09 | 1.00 | Brown | Red | Black |
| 1008C-15N | 15 | K, J | 50 | 50 | 500 | 2.50 | 0.10 | 1.00 | Brown | Green | Black |
| 1008C-18N | 18 | K, J, G | 50 | 50 | 350 | 2.50 | 0.11 | 1.00 | Brown | Gray | Black |
| 1008C-22N | 22 | K, J, G | 50 | 55 | 350 | 2.40 | 0.12 | 1.00 | Red | Red | Black |
| 1008C-24N | 24 | K, J, G | 50 | 50 | 350 | 1.50 | 0.13 | 1.00 | Red | Yellow | Black |
| 1008C-27N | 27 | K, J, G | 50 | 55 | 350 | 1.60 | 0.13 | 1.00 | Red | Violet | Black |
| 1008C-33N | 33 | K, J, G | 50 | 60 | 350 | 1.60 | 0.14 | 1.00 | Orange | Orange | Black |
| 1008C-36N | 36 | K, J, G | 50 | 60 | 350 | 1.60 | 0.15 | 1.00 | Orange | Blue | Black |
| 1008C-39N | 39 | K, J, G | 50 | 60 | 350 | 1.50 | 0.15 | 1.00 | Orange | White | Black |
| 1008C-47N | 47 | K, J, G | 50 | 65 | 350 | 1.50 | 0.16 | 1.00 | Yellow | Violet | Black |
| 1008C-56N | 56 | K, J, G | 50 | 65 | 350 | 1.30 | 0.18 | 1.00 | Green | Blue | Black |
| 1008C-62N | 62 | K, J, G | 25 | 45 | 350 | 1.25 | 0.20 | 1.00 | Blue | Red | Black |
| 1008C-68N | 68 | K, J, G | 50 | 65 | 350 | 1.30 | 0.20 | 1.00 | Blue | Gray | Black |
| 1008C-82N | 82 | K, J, G | 50 | 60 | 350 | 1.00 | 0.22 | 1.00 | Gray | Red | Black |
| 1008C-91N | 91 | K, J, G | 50 | 50 | 350 | 1.00 | 0.45 | 1.00 | White | Brown | Black |
| 1008C-R10 | 100 | K, J, G | 25 | 60 | 350 | 1.00 | 0.56 | 0.650 | Brown | Black | Brown |
| 1008C-R12 | 120 | K, J, G | 25 | 60 | 350 | 0.950 | 0.63 | 0.650 | Brown | Red | Brown |
| 1008C-R15 | 150 | K, J, G | 25 | 45 | 100 | 0.850 | 0.70 | 0.580 | Brown | Green | Brown |
| 1008C-R18 | 180 | K, J, G | 25 | 45 | 100 | 0.750 | 0.77 | 0.620 | Brown | Gray | Brown |
| 1008C-R20 | 200 | K, J, G | 25 | 50 | 100 | 0.750 | 0.81 | 0.500 | Red | Black | Brown |
| 1008C-R22 | 220 | K, J, G | 25 | 45 | 100 | 0.700 | 0.84 | 0.500 | Red | Red | Brown |
| 1008C-R24 | 240 | K, J, G | 25 | 50 | 100 | 0.600 | 0.84 | 0.500 | Red | Yellow | Brown |
| 1008C-R27 | 270 | K, J, G | 25 | 45 | 100 | 0.600 | 0.91 | 0.500 | Red | Violet | Brown |
| 1008C-R30 | 300 | K, J, G | 25 | 40 | 100 | 0.500 | 1.05 | 0.660 | Orange | Black | Brown |
| 1008C-R33 | 330 | K, J, G | 25 | 45 | 100 | 0.570 | 1.05 | 0.450 | Orange | Orange | Brown |
| 1008C-R36 | 360 | K, J, G | 25 | 40 | 100 | 0.500 | 1.05 | 0.660 | Orange | Blue | Brown |
| 1008C-R39 | 390 | K, J, G | 25 | 45 | 100 | 0.500 | 1.12 | 0.470 | Orange | White | Brown |
| 1008C-R43 | 430 | K, J, G | 25 | 45 | 100 | 0.425 | 1.19 | 0.600 | Yellow | Orange | Brown |
| 1008C-R47 | 470 | K, J, G | 25 | 45 | 100 | 0.450 | 1.19 | 0.470 | Yellow | Violet | Brown |
| 1008C-R56 | 560 | K, J, G | 25 | 45 | 100 | 0.415 | 1.33 | 0.400 | Green | Blue | Brown |
| 1008C-R62 | 620 | K, J, G | 25 | 45 | 100 | 0.375 | 1.40 | 0.300 | Blue | Red | Brown |
| 1008C-R68 | 680 | K, J, G | 25 | 45 | 100 | 0.375 | 1.47 | 0.400 | Blue | Gray | Brown |
| 1008C-R75 | 750 | K, J, G | 25 | 45 | 100 | 0.360 | 1.54 | 0.360 | Violet | Green | Brown |
| 1008C-R82 | 820 | K, J, G | 25 | 45 | 100 | 0.350 | 1.61 | 0.400 | Gray | Red | Brown |
| 1008C-R91 | 910 | K, J, G | 25 | 35 | 50 | 0.320 | 1.68 | 0.380 | White | Brown | Brown |
| 1008C-1R0 | 1000 | K, J, G | 25 | 35 | 50 | 0.290 | 1.75 | 0.370 | Brown | Black | Red |
| 1008C-1R2 | 1200 | K, J, G | 7.9 | 35 | 50 | 0.250 | 2.00 | 0.310 | Brown | Red | Red |
| 1008C-1R5 | 1500 | K, J, G | 7.9 | 28 | 50 | 0.200 | 2.30 | 0.330 | Brown | Green | Red |
| 1008C-1R8 | 1800 | K, J, G | 7.9 | 28 | 50 | 0.160 | 2.60 | 0.300 | Brown | Gray | Red |
| 1008C-2R0 | 2000 | K, J, G | 7.9 | 25 | 50 | 0.160 | 2.80 | 0.280 | Red | Black | Red |
| 1008C-2R2 | 2200 | K, J, G | 7.9 | 28 | 50 | 0.160 | 2.80 | 0.280 | Red | Red | Red |
| 1008C-2R7 | 2700 | K, J, G | 7.9 | 22 | 25 | 0.140 | 3.20 | 0.290 | Red | Violet | Red |
| 1008C-3R3 | 3300 | K, J, G | 7.9 | 22 | 25 | 0.110 | 3.40 | 0.290 | Orange | Orange | Red |
| 1008C-3R9 | 3900 | K, J, G | 7.9 | 20 | 25 | 0.100 | 3.60 | 0.260 | Orange | White | Red |
| 1008C-4R7 | 4700 | K, J, G | 7.9 | 20 | 25 | 0.090 | 4.00 | 0.260 | Yellow | Violet | Red |
| 1008C-5R6 | 5600 | K, J | 7.9 | 16 | 7.96 | 0.020 | 4.00 | 0.240 | Green | Blue | Red |
| 1008C-6R8 | 6800 | K, J | 7.9 | 15 | 7.96 | 0.040 | 4.90 | 0.200 | Blue | Gray | Red |
| 1008C-8R2 | 8200 | K, J | 7.9 | 15 | 7.96 | 0.025 | 6.00 | 0.170 | Gray | Red | Red |
| 1008C-100 | 10000 | K, J | 2.52 | 15 | 7.96 | 0.020 | 9.00 | 0.150 | Brown | Black | Orange |
| 1008C-120 | 12000 | K, J | 2.52 | 15 | 7.96 | 0.018 | 10.5 | 0.130 | Brown | Red | Orange |
| 1008C-150 | 15000 | K, J | 2.52 | 15 | 7.96 | 0.015 | 11.5 | 0.120 | Brown | Green | Orange |

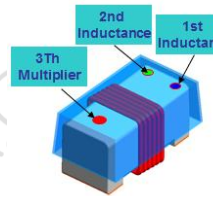
B. Dimensions: mm (Inch)



C. Color coding:

- Parts are marked with 3 color dots. The table 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.

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



D. General Information:

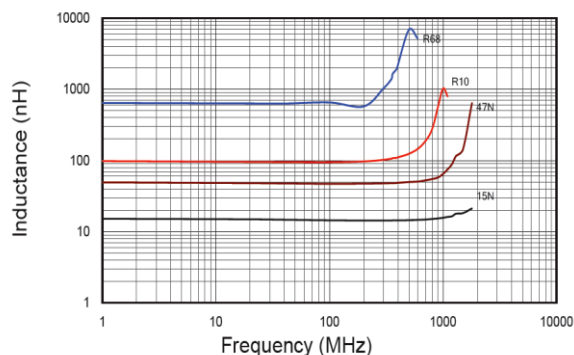
- P/N: 1008C-xxx_, “1008” = Size Type, “C” = Gold plated pads, “xxx” = Inductance, “_” = Tolerance.
- Tolerance “_”: K = ± 10%, J = ± 5%, G = ± 2%.
- Product material: Ceramic.
- Small and lightweight surface mounting type.
- High Q at high frequency & High self-resonance frequency.
- For 15°C Temperature Rise at 25°C ambient.
- Inductance & Q measured with HP4291B Impedance Analyzer.
- SRF measured using the HP8720D or HP8753E Network Analyzer.
- DCR measured using the 16502 milliohm meter.
- Operating temperature: -40°C to +125°C.
- This series has no color code due to the size is small.
- Inductance and Current Range: From 10 nH (1.0A) to 4700 nH (0.260A)
- SRF: From 0.09 GHz to 4.1 GHz
- MSL: Level 1.

E. Applications:

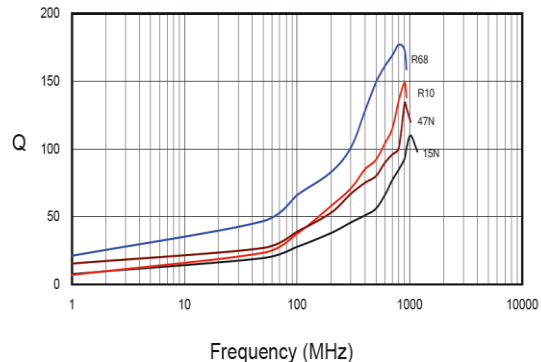
- Game Consoles
- Set Top Boxes
- Cables Modems
- Computers
- Mobile Communication Devices (Cell Phones, Radios, etc.)
- RF Filters

F. Characteristics Curve:

Inductance vs. Frequency



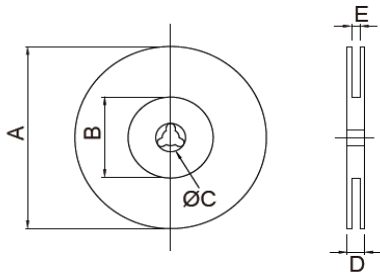
Typical Q vs. Frequency



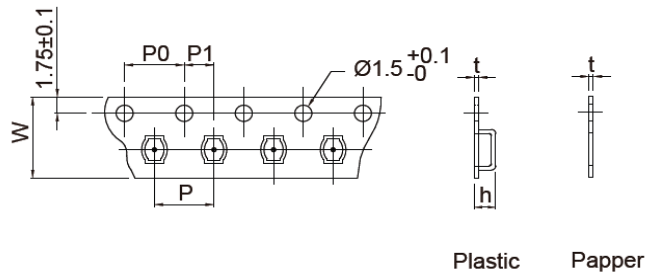
G. Supplementary Information:

1. Packaging Information

CARRIER TAPE REELS



TAPE DIMENSIONS (mm)



| Series P/N | Reel dimensions (mm) | | | | | Tape dimensions (mm) | | | | | | Parts per reel | | Quantity per | |
|---------------|----------------------|----|----|------|-----|----------------------|---|----|----|------|------|----------------|-----|--------------|--------|
| | A | B | C | D | E | W | P | P0 | P1 | h | t | 7" | 13" | Box | Carton |
| 1008C | 180 | 75 | 13 | 12.5 | 8.5 | 8 | 4 | 4 | 2 | 2.30 | 0.25 | 2,000 | --- | 10,000 | 60,000 |

2. RoHS Reflow Solder Profile

Typical RoHS Reflow Profile

