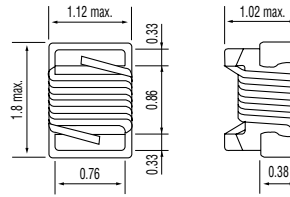


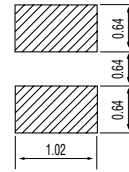
The TOKO LLQ1608 Series is a wirewound ceramic chip inductor that conforms to the EIA standard 0603 footprint and delivers superb Q and SRF performance with high inductance tolerance.



Dimensions



Recommended Footprint

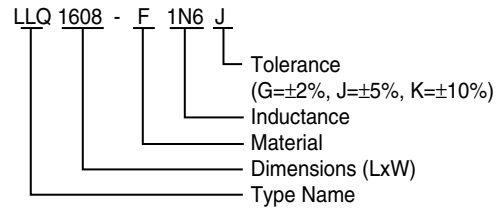


Unit: mm
Tolerance: ± 0.1 mm

Features

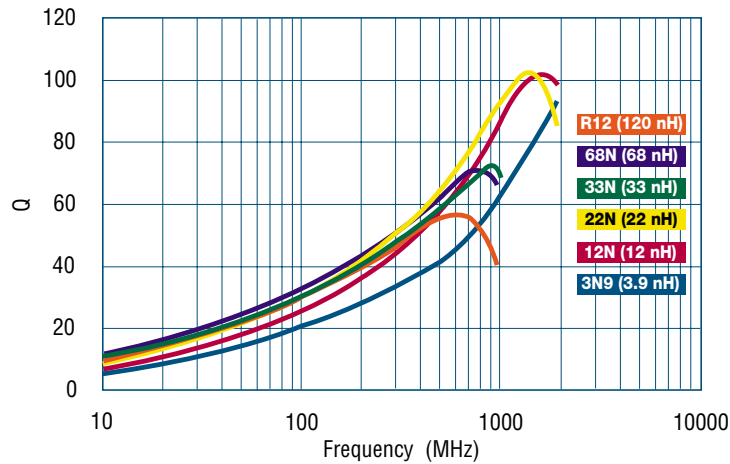
- Inductance tolerance: $\pm 2\%$, $\pm 5\%$, $\pm 10\%$
- EIA standard 0603 footprint (1.6mm x 0.8mm)
- Lead-free terminations
- High Q
- High self-resonant frequency
- Operating temperature: -40°C to $+125^{\circ}\text{C}$
- Packaged on tape and reel in 3,000 piece quantity
- Reflow solderable

Part Numbering

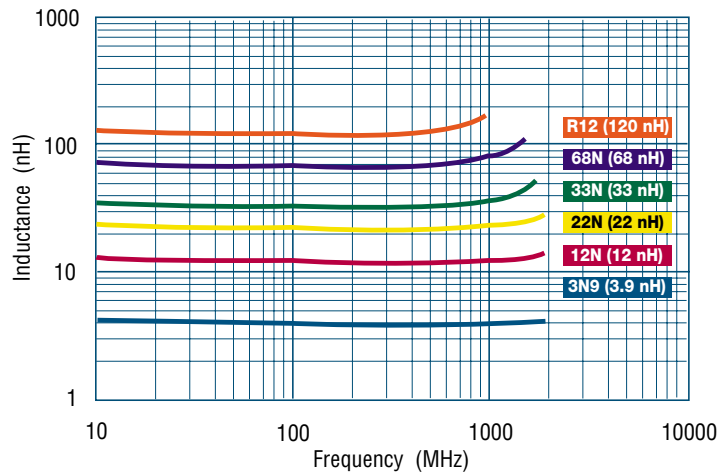


ELECTRICAL CHARACTERISTICS

Q vs Frequency



Inductance vs Frequency



STANDARD PARTS SELECTION GUIDE

TYPE LLQ1608

| TOKO Part Number | Inductance | | Q (min.) | Test Frequency MHz | Self Resonant Frequency (MHz) min. | DC Resistance (Ω) max. | IDC (mA) max. |
|------------------|------------|-----------|----------|--------------------|------------------------------------|------------------------|---------------|
| | Lo (nH) | Tolerance | | | | | |
| LLQ1608-F1N6_* | 1.6 | J, K | 24 | 250 | 12500 | 0.030 | 700 |
| LLQ1608-F1N8_* | 1.8 | J, K | 16 | 250 | 12500 | 0.045 | 700 |
| LLQ1608-F3N6_* | 3.6 | J, K | 22 | 250 | 5900 | 0.063 | 700 |
| LLQ1608-F3N9_* | 3.9 | J, K | 22 | 250 | 6900 | 0.080 | 700 |
| LLQ1608-F4N3_* | 4.3 | J, K | 22 | 250 | 5900 | 0.063 | 700 |
| LLQ1608-F4N7_* | 4.7 | J, K | 20 | 250 | 5800 | 0.116 | 700 |
| LLQ1608-F5N1_* | 5.1 | J, K | 20 | 250 | 5700 | 0.140 | 700 |
| LLQ1608-F6N8_* | 6.8 | G, J, K | 27 | 250 | 5800 | 0.110 | 700 |
| LLQ1608-F7N5_* | 7.5 | G, J, K | 28 | 250 | 4800 | 0.106 | 700 |
| LLQ1608-F8N7_* | 8.7 | G, J, K | 28 | 250 | 4600 | 0.109 | 700 |
| LLQ1608-F9N5_* | 9.5 | G, J, K | 28 | 250 | 5400 | 0.135 | 700 |
| LLQ1608-F10N_* | 10 | G, J, K | 31 | 250 | 4800 | 0.130 | 700 |
| LLQ1608-F11N_* | 11 | G, J, K | 33 | 250 | 4000 | 0.107 | 700 |
| LLQ1608-F12N_* | 12 | G, J, K | 35 | 250 | 4000 | 0.130 | 700 |
| LLQ1608-F15N_* | 15 | G, J, K | 35 | 250 | 4000 | 0.170 | 700 |
| LLQ1608-F16N_* | 16 | G, J, K | 34 | 250 | 3300 | 0.134 | 700 |
| LLQ1608-F18N_* | 18 | G, J, K | 35 | 250 | 3100 | 0.170 | 700 |
| LLQ1608-F22N_* | 22 | G, J, K | 38 | 250 | 3000 | 0.190 | 700 |
| LLQ1608-F24N_* | 24 | G, J, K | 37 | 250 | 2650 | 0.161 | 700 |
| LLQ1608-F27N_* | 27 | G, J, K | 40 | 250 | 2800 | 0.220 | 600 |
| LLQ1608-F30N_* | 30 | G, J, K | 37 | 250 | 2250 | 0.187 | 600 |
| LLQ1608-F33N_* | 33 | G, J, K | 40 | 250 | 2300 | 0.220 | 600 |
| LLQ1608-F36N_* | 36 | G, J, K | 38 | 250 | 2080 | 0.250 | 600 |
| LLQ1608-F39N_* | 39 | G, J, K | 40 | 250 | 2200 | 0.250 | 600 |
| LLQ1608-F43N_* | 43 | G, J, K | 39 | 250 | 2000 | 0.280 | 600 |
| LLQ1608-F47N_* | 47 | G, J, K | 38 | 200 | 2000 | 0.280 | 600 |
| LLQ1608-F56N_* | 56 | G, J, K | 38 | 200 | 1900 | 0.310 | 600 |
| LLQ1608-F68N_* | 68 | G, J, K | 37 | 200 | 1700 | 0.340 | 600 |
| LLQ1608-F72N_* | 72 | G, J, K | 34 | 150 | 1700 | 0.490 | 400 |
| LLQ1608-F82N_* | 82 | G, J, K | 34 | 150 | 1700 | 0.540 | 400 |
| LLQ1608-FR10_* | 100 | G, J, K | 34 | 150 | 1400 | 0.580 | 400 |
| LLQ1608-FR11_* | 110 | G, J, K | 32 | 150 | 1350 | 0.610 | 300 |
| LLQ1608-FR12_* | 120 | G, J, K | 32 | 150 | 1300 | 0.720 | 300 |
| LLQ1608-FR15_* | 150 | G, J, K | 28 | 150 | 990 | 0.920 | 280 |
| LLQ1608-FR18_* | 180 | G, J, K | 25 | 100 | 990 | 1.25 | 240 |
| LLQ1608-FR22_* | 220 | G, J, K | 25 | 100 | 900 | 2.10 | 200 |
| LLQ1608-FR27_* | 270 | G, J, K | 24 | 100 | 900 | 2.30 | 170 |

* Add tolerance to part number: G = ±2%, J = ±5%, K = ±10%

Testing Conditions: L,Q: Agilent 4287A (Test fixture Agilent 16193A). SRF: Agilent 8720ES. RDC: Agilent 34420A. IDC: Agilent 34401A.