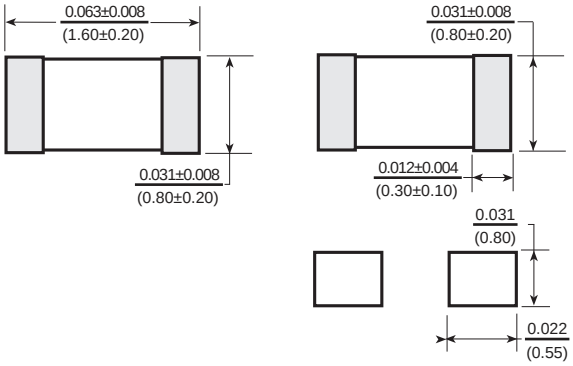
# CLC03 Ceramic Core Laser Cut Chip Inductor




**Dimensions:** Inches / (mm)

## Features

- 0603 EIA Size
- Available in 2% Tolerance
- High Self Resonant Frequencies
- Stable Performance at High Frequencies
- Suitable for Flow and Reflow Soldering
- Non-Magnetic core assures excellent thermal stability and batch consistency

## Electrical

**Inductance range:** 1.0nh to 220nh
**Tolerance:** see table for tolerance options
**Test Frequency:**
1nH to 100nH @ 100MHz
120nH to 220nH @ 25.2MHz
**Operating Temperature:** -40ºC-100ºC
**IDC:** Based on 15ºC temperature rise @ 25ºC Ambient.

## Test Equipment

**(L/Q):** HP4291B Impedance Analyzer with HP16192 Fixture
**(SRF):** HP8753E Network Analyzer
**(RDC):** HP4338 Millihohm meter

## Physical

**Packaging:** 3000 pieces per 7 inch reel.
**Marking:** N/A

| Allied Part Number | Inductance (nh) | Available Tolerances *SeeBelow | Q Min. | Q Typical @800MHz | SRF Typical (MHz) | DCR Max. (Ω) | IDC Max. (mA) |
|---|---|---|---|---|---|---|---|
| CLC03-1N0_-RC | 1.0 | S, B | 7 | 47 | 6000 | 0.05 | 500 |
| CLC03-1N2_-RC | 1.2 | S, B | 7 | 47 | 6000 | 0.06 | 500 |
| CLC03-1N5_-RC | 1.5 | S, B | 8 | 47 | 6000 | 0.07 | 500 |
| CLC03-1N8_-RC | 1.8 | S, B | 8 | 45 | 6000 | 0.08 | 500 |
| CLC03-2N2_-RC | 2.2 | S, B | 8 | 35 | 6000 | 0.09 | 500 |
| CLC03-2N7_-RC | 2.7 | S, B | 8 | 35 | 6000 | 0.10 | 500 |
| CLC03-3N3_-RC | 3.3 | S, B | 9 | 35 | 5500 | 0.12 | 500 |
| CLC03-3N9_-RC | 3.9 | J, B | 9 | 36 | 5500 | 0.15 | 450 |
| CLC03-4N7_-RC | 4.7 | J, B | 9 | 36 | 4800 | 0.17 | 450 |
| CLC03-5N6_-RC | 5.6 | J, B | 9 | 36 | 4600 | 0.18 | 430 |
| CLC03-6N8_-RC | 6.8 | J, B | 9 | 36 | 3550 | 0.20 | 430 |
| CLC03-8N2_-RC | 8.2 | J, B | 9 | 36 | 3500 | 0.28 | 400 |
| CLC03-10N_-RC | 10 | J, G | 10 | 37 | 2800 | 0.32 | 400 |
| CLC03-12N_-RC | 12 | J, G | 10 | 37 | 2800 | 0.35 | 400 |
| CLC03-15N_-RC | 15 | J, G | 10 | 38 | 2500 | 0.41 | 350 |
| CLC03-18N_-RC | 18 | J, G | 10 | 39 | 2300 | 0.45 | 350 |
| CLC03-22N_-RC | 22 | J, G | 10 | 40 | 2000 | 0.50 | 300 |
| CLC03-27N_-RC | 27 | J, G | 10 | 41 | 2000 | 0.55 | 300 |
| CLC03-33N_-RC | 33 | J, G | 10 | 40 | 1800 | 0.60 | 300 |
| CLC03-39N_-RC | 39 | J, G | 11 | 39 | 1800 | 0.80 | 300 |
| CLC03-47N_-RC | 47 | J, G | 11 | 38 | 1800 | 0.95 | 250 |
| CLC03-56N_-RC | 56 | J, G | 12 | 35 | 1800 | 1.20 | 250 |
| CLC03-68N_-RC | 68 | J, G | 12 | 35 | 1500 | 1.30 | 250 |
| CLC03-82N_-RC | 82 | J, G | 12 | 33 | 1500 | 1.50 | 250 |
| CLC03-R10_-RC | 100 | J, G | 12 | 30 | 1300 | 1.80 | 200 |
| CLC03-R12_-RC | 120 | J, G | 5 | 25 | 1200 | 3.00 | 130 |
| CLC03-R15_-RC | 150 | J, G | 5 | 22 | 1100 | 4.50 | 100 |
| CLC03-R18_-RC | 180 | J, G | 4 | 20 | 1000 | 6.50 | 80 |
| CLC03-R22_-RC | 220 | J, G | 4 | - | 900 | 7.50 | 70 |

* Please complete the part number with your required tolerance, S= ±0.3nH, B= ± 0.2nH, J= ±5%, G= ±2%
All specifications subject to change without notice.