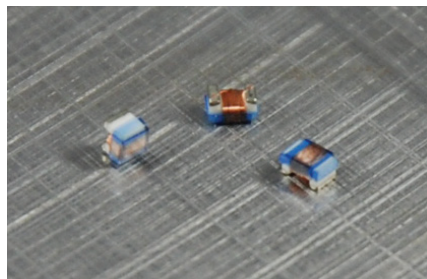
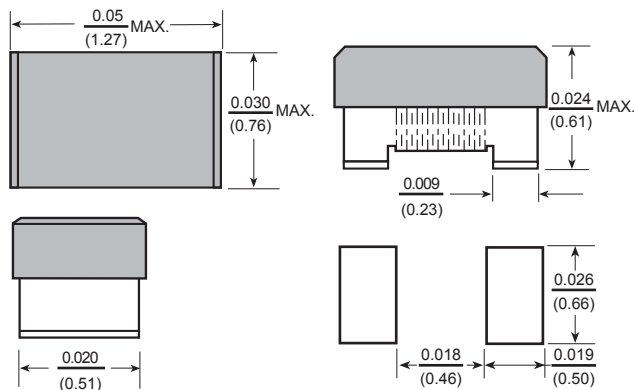




Ceramic Core Chip Inductors CC02



Dimensions: $\frac{\text{Inches}}{\text{(mm)}}$



Recommended PCB Layout

| Allied Part Number | Inductance (nH) | Tolerance (%) * | Q Min. | Test Freq. (MHz) | SRF Min. (MHz) | DCR Max. (Ω) | Rated Current (mA) |
|--------------------|-----------------|-----------------|--------|------------------|----------------|--------------|--------------------|
| CC02-1N0_-RC | 1.0 | K | 16 | 250 | 12700 | 0.045 | 1360 |
| CC02-1N9_-RC | 1.9 | K | 16 | 250 | 11300 | 0.070 | 1040 |
| CC02-2N0_-RC | 2.0 | K | 16 | 250 | 11100 | 0.070 | 1040 |
| CC02-2N2_-RC | 2.2 | J,K | 19 | 250 | 10800 | 0.070 | 960 |
| CC02-2N4_-RC | 2.4 | J,K | 15 | 250 | 10500 | 0.068 | 790 |
| CC02-2N7_-RC | 2.7 | J,K | 16 | 250 | 10400 | 0.120 | 640 |
| CC02-3N3_-RC | 3.3 | J,K | 19 | 250 | 7000 | 0.066 | 840 |
| CC02-3N6_-RC | 3.6 | J,K | 19 | 250 | 6800 | 0.066 | 840 |
| CC02-3N9_-RC | 3.9 | J,K | 19 | 250 | 5800 | 0.066 | 840 |
| CC02-4N3_-RC | 4.3 | J,K | 18 | 250 | 6000 | 0.091 | 700 |
| CC02-4N7_-RC | 4.7 | J,K | 18 | 250 | 4770 | 0.130 | 640 |
| CC02-5N1_-RC | 5.1 | J,K | 20 | 250 | 4800 | 0.083 | 800 |
| CC02-5N8_-RC | 5.8 | J,K | 20 | 250 | 4800 | 0.083 | 760 |
| CC02-6N2_-RC | 6.2 | J,K | 20 | 250 | 4800 | 0.083 | 760 |
| CC02-6N8_-RC | 6.8 | J,K | 20 | 250 | 4800 | 0.083 | 680 |
| CC02-7N5_-RC | 7.5 | J,K | 22 | 250 | 4800 | 0.104 | 680 |
| CC02-8N2_-RC | 8.2 | J,K | 22 | 250 | 4400 | 0.104 | 680 |
| CC02-8N7_-RC | 8.7 | J,K | 18 | 250 | 4100 | 0.200 | 480 |
| CC02-9N0_-RC | 9.0 | J,K | 22 | 250 | 4160 | 0.104 | 680 |
| CC02-9N5_-RC | 9.5 | J,K | 18 | 250 | 4000 | 0.200 | 480 |
| CC02-10N_-RC | 10 | G,J,K | 21 | 250 | 3900 | 0.195 | 480 |
| CC02-11N_-RC | 11 | G,J,K | 24 | 250 | 3680 | 0.120 | 640 |
| CC02-12N_-RC | 12 | G,J,K | 24 | 250 | 3600 | 0.120 | 640 |
| CC02-13N_-RC | 13 | G,J,K | 24 | 250 | 3450 | 0.210 | 440 |
| CC02-15N_-RC | 15 | G,J,K | 24 | 250 | 3280 | 0.172 | 560 |
| CC02-16N_-RC | 16 | G,J,K | 24 | 250 | 3100 | 0.220 | 560 |
| CC02-18N_-RC | 18 | G,J,K | 25 | 250 | 3100 | 0.230 | 420 |
| CC02-19N_-RC | 19 | G,J,K | 24 | 250 | 3040 | 0.202 | 480 |
| CC02-20N_-RC | 20 | G,J,K | 25 | 250 | 3000 | 0.250 | 420 |
| CC02-22N_-RC | 22 | G,J,K | 25 | 250 | 2800 | 0.300 | 400 |
| CC02-23N_-RC | 23 | G,J,K | 24 | 250 | 2720 | 0.300 | 400 |
| CC02-24N_-RC | 24 | G,J,K | 25 | 250 | 2700 | 0.300 | 400 |
| CC02-27N_-RC | 27 | G,J,K | 24 | 250 | 2480 | 0.300 | 400 |
| CC02-30N_-RC | 30 | G,J,K | 25 | 250 | 2350 | 0.350 | 400 |
| CC02-33N_-RC | 33 | G,J,K | 24 | 250 | 2350 | 0.350 | 400 |
| CC02-36N_-RC | 36 | G,J,K | 24 | 250 | 2320 | 0.440 | 320 |
| CC02-39N_-RC | 39 | G,J,K | 25 | 250 | 2100 | 0.550 | 200 |
| CC02-40N_-RC | 40 | G,J,K | 24 | 250 | 2240 | 0.050 | 320 |
| CC02-43N_-RC | 43 | G,J,K | 25 | 250 | 2030 | 0.810 | 100 |
| CC02-47N_-RC | 47 | G,J,K | 25 | 250 | 2100 | 0.830 | 150 |
| CC02-51N_-RC | 51 | G,J,K | 25 | 250 | 1750 | 0.820 | 100 |
| CC02-56N_-RC | 56 | G,J,K | 25 | 250 | 1760 | 0.970 | 100 |
| CC02-68N_-RC | 68 | G,J,K | 25 | 250 | 1620 | 1.120 | 100 |
| CC02-82N_-RC | 82 | G,J,K | 22 | 250 | 1260 | 1.550 | 50 |
| CC02-100N_-RC | 100 | G,J,K | 22 | 250 | 1160 | 2.000 | 30 |
| CC02-120N_-RC | 120 | G,J,K | 20 | 250 | >1800 | 2.660 | 30 |

Features

- 0402 size suitable for pick and place automation
- Low Profile under .61mm
- Ceramic core provide high self resonant frequency.
- High Q values at high frequencies
- Ceramic core also provides excellent thermal and batch consistency

Electrical

Inductance Range: 1nH to 120nH
Tolerance: Available as noted. Insert letter for desired tolerance
Test Frequency: At specified frequency
Operating Temp: -40°C ~ 125°C
Rated Current: Current at which inductance will be changed by no more than 20% initial value without current.

Resistance to Soldering Heat

Test Method: Reflow Solder the device onto PCB
Peak Temp: 260°C ± 5°C for 10 sec.
Inductance Change: Within 5% of initial value
Q Change: Within 10% of initial value.

Test Equipment

(L/Q): HP4286
(SRF): HP4287
(RDC): GOM 801G
I_{rms}: HP4284A + HP42841A / HP4285A + HP42841A

Physical

Packaging: 4000 pieces per 7 inch reel.
Marking: None

*Insert letter for desired tolerance. G=±2%, J=±5%, K=±10%
 All specifications subject to change without notice.