## ◆ Feature

1.Particular ceramic material and coil structure provide high frequency application range up to 10GHz
2.High Q at high frequency
3.Small size and low profile
4.Available in various sizes
5.Excellent solderability and resistance

## ◆ Application

RF and wireless communication, information technology equipment which includes computer, telecommunications,
radar detectors, automotive electronics, cellular phones, pagers, audio equipment, PDAs, keyless remote system and low-voltage power supply modules.

## ◆ How to Order

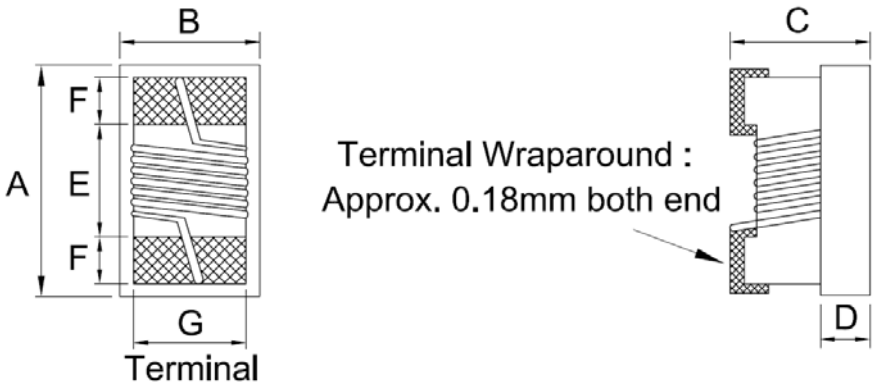
| WCI | 1005 | - | 1NO | J |
|---|---|---|---|---|
| (1) | (2) | | (3) | (4) |

(1) Series Name
(2) Size Code: the first two digitals: length (mm), the last two digitals: width (mm)
(3) Inductance (N=decimal point), unit: nH
(4) Tolerance: J=±5%, K= ±10%

## ◆ Dimension

**Unit: mm**

| TYPE | A(Max.) | B(Max.) | C(Max.) | D | E | F | G |
|---|---|---|---|---|---|---|---|
| **1005 (0402)** | $1.19^{+0}$ | $0.70^{+0}$ | $0.66^{+0}$ | 0.25 ref. | 0.56 | 0.23 | 0.51 |



## ◆ Specification

| Part Number | Inductance (nH) | Q Min. | L / Q Test Freq. (MHz) | S.R.F. (MHz) Min. | DCR (Ω) Max. | Irms (mA)Max. | Tolerance (±%) |
|---|---|---|---|---|---|---|---|
| **1005(0402)** | | | | | | | |
| WCI1005-1N0_ | 1.0 | 16 | 250/250 | 12700 | 0.045 | 1360 | 10.5 |
| WCI1005-1N9_ | 1.9 | 16 | 250/250 | 11300 | 0.07 | 1040 | 10.5 |
| WCI1005-2N0_ | 2.0 | 16 | 250/250 | 11100 | 0.07 | 1040 | 10.5 |
| WCI1005-2N2_ | 2.2 | 19 | 250/250 | 10800 | 0.07 | 960 | 10.5 |
| WCI1005-2N4_ | 2.4 | 15 | 250/250 | 10500 | 0.068 | 790 | 10.5 |
| WCI1005-2N7_ | 2.7 | 16 | 250/250 | 10400 | 0.12 | 640 | 10.5 |
| WCI1005-3N3_ | 3.3 | 19 | 250/250 | 7000 | 0.066 | 840 | 10.5 |
| WCI1005-3N6_ | 3.6 | 19 | 250/250 | 6800 | 0.066 | 840 | 10.5 |
| WCI1005-3N9_ | 3.9 | 19 | 250/250 | 6000 | 0.066 | 840 | 10.5 |
| WCI1005-4N3_ | 4.3 | 18 | 250/250 | 6000 | 0.091 | 700 | 10.5 |
| WCI1005-4N7_ | 4.7 | 15 | 250/250 | 4770 | 0.13 | 640 | 10.5 |
| WCI1005-5N1_ | 5.1 | 20 | 250/250 | 4800 | 0.083 | 800 | 10.5 |
| WCI1005-5N6_ | 5.6 | 20 | 250/250 | 4800 | 0.083 | 760 | 10.5 |
| WCI1005-6N2_ | 6.2 | 20 | 250/250 | 4800 | 0.083 | 760 | 10.5 |
| WCI1005-6N8_ | 6.8 | 20 | 250/250 | 4800 | 0.083 | 680 | 10.5 |
| WCI1005-7N5_ | 7.5 | 22 | 250/250 | 4800 | 0.1 | 680 | 10.5 |
| WCI1005-8N2_ | 8.2 | 22 | 250/250 | 4400 | 0.1 | 680 | 10.5 |
| WCI1005-8N7_ | 8.7 | 18 | 250/250 | 4100 | 0.2 | 480 | 10.5 |
| WCI1005-9N0_ | 9.0 | 22 | 250/250 | 4160 | 0.1 | 680 | 10.5 |
| WCI1005-9N1_ | 9.1 | 22 | 250/250 | 4160 | 0.1 | 680 | 10.5 |
| WCI1005-9N5_ | 9.5 | 18 | 250/250 | 4000 | 0.2 | 480 | 10.5 |
| WCI1005-10N_ | 10 | 21 | 250/250 | 3900 | 0.2 | 480 | 10.5 |
| WCI1005-11N_ | 11 | 24 | 250/250 | 3680 | 0.12 | 640 | 10.5 |
| WCI1005-12N_ | 12 | 24 | 250/250 | 3600 | 0.12 | 640 | 10.5 |
| WCI1005-13N_ | 13 | 24 | 250/250 | 3450 | 0.21 | 440 | 10.5 |
| WCI1005-15N_ | 15 | 24 | 250/250 | 3280 | 0.17 | 560 | 10.5 |
| WCI1005-16N_ | 16 | 24 | 250/250 | 3100 | 0.22 | 560 | 10.5 |
| WCI1005-18N_ | 18 | 25 | 250/250 | 3100 | 0.23 | 420 | 10.5 |
| WCI1005-19N_ | 19 | 24 | 250/250 | 3040 | 0.2 | 480 | 10.5 |
| WCI1005-20N_ | 20 | 25 | 250/250 | 3000 | 0.25 | 420 | 10.5 |
| WCI1005-22N_ | 22 | 25 | 250/250 | 2800 | 0.3 | 400 | 10.5 |
| WCI1005-23N_ | 23 | 22 | 250/250 | 2720 | 0.3 | 400 | 10.5 |
| WCI1005-24N_ | 24 | 25 | 250/250 | 2700 | 0.3 | 400 | 10.5 |
| WCI1005-27N_ | 27 | 24 | 250/250 | 2480 | 0.3 | 400 | 10.5 |

## ◆ Specification

| Part Number | Inductance (nH) | Q Min. | L / Q Test Freq. (MHz) | S.R.F. (MHz) Min. | DCR (Ω) Max. | Irms (mA)Max. | Tolerance (±%) |
|---|---|---|---|---|---|---|---|
| WCI1005-30N_ | 30 | 25 | 250/250 | 2350 | 0.35 | 400 | 10.5 |
| WCI1005-33N_ | 33 | 24 | 250/250 | 2350 | 0.4 | 400 | 10.5 |
| WCI1005-36N_ | 36 | 24 | 250/250 | 2320 | 0.44 | 320 | 10.5 |
| WCI1005-39N_ | 39 | 25 | 250/250 | 2100 | 0.55 | 200 | 10.5 |
| WCI1005-40N_ | 40 | 24 | 250/250 | 2240 | 0.44 | 320 | 10.5 |
| WCI1005-43N_ | 43 | 25 | 250/250 | 2030 | 0.81 | 100 | 10.5 |
| WCI1005-47N_ | 47 | 20 | 250/250 | 2100 | 0.83 | 150 | 10.5 |
| WCI1005-51N_ | 51 | 25 | 250/250 | 1750 | 0.82 | 100 | 10.5 |
| WCI1005-56N_ | 56 | 22 | 250/250 | 1760 | 0.97 | 100 | 10.5 |
| WCI1005-68N_ | 68 | 22 | 250/250 | 1620 | 1.12 | 100 | 10.5 |
| WCI1005-82N_ | 82 | 20 | 250/250 | 1260 | 1.55 | 50 | 10.5 |
| WCI1005-R10_ | 100 | 20 | 250/250 | 1160 | 2 | 30 | 10.5 |
| Test Instruments | • Agilent/HP 4291A+ Agilent/HP 16197A for L, Q<br>• Agilent/HP 8753D / Agilent/HP 8722ES for SRF<br>• CH502BC/HP4338B for DCR<br>• Irms for 15℃ rise above 25℃ ambient<br>• OSC test level: 200 mV | | | | | | |

## ◆ General Technical Data

| | |
|---|---|
| **Operating Temperature Range** | - 40℃ ~ +125℃ |
| **Storage Condition** | 20℃ ~ 25℃ and 65% RH (For Reference) |

## ◆ Package

| Size (EIA) | 1005 (0402) |
|---|---|
| Standard Packing Quantity (pcs / reel) | 10,000 |