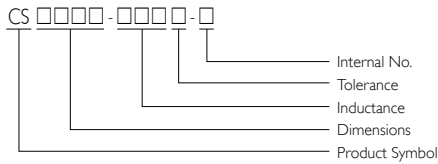


SMD Wire Wound Chip Inductors

CS Series



PRODUCT IDENTIFICATION



APPLICATIONS

RF products for Cellular Phone, GPS Receiver, Base Station, Repeater, Wireless LAN/Mouse/Keyboard/ Earphone, Remote Control, Security System and other RF modules.

OUTLINE

Based on our technical expertise and skill in accurately winding, these chip inductors are designed as filtering, impedance matching, resonance and choke circuits for RF designers.

The standard series as well as custom design to meet your needs of telecom & wireless products.

FEATURES

Ceramic body and wire wound construction provide highest SRFs.

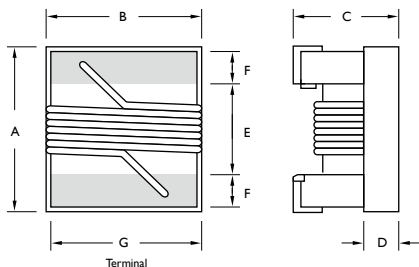
These ultra-compact inductors provided exceptional Q values, even at high frequencies.

Their ceramic construction delivers the highest possible SRFs as well as excellent Q values.

The non-magnetic coil form also assures the utmost in thermal stability, predictability and batch consistency.

CS series is standard parts for RF designers.

SHAPES AND DIMENSIONS



| TYPE | UNIT | A | B | C | D | E | F | G |
|--------|------|---------------|------------|----------------|-------|-------|-------|-------|
| | | Max. | Max. | Max. | | | | |
| CS0402 | inch | 0.047 | 0.028 | 0.026 | 0.010 | 0.020 | 0.009 | 0.022 |
| | mm | 1.19 | 0.70 | 0.66 | 0.25 | 0.51 | 0.23 | 0.56 |
| CS0603 | inch | 0.070 | 0.044 | 0.040 | 0.015 | 0.030 | 0.013 | 0.034 |
| | mm | 1.6 +0.2/-0.1 | 1.02 ± 0.1 | 0.82 +0.2/-0.1 | 0.38 | 0.76 | 0.33 | 0.86 |
| CS0805 | inch | 0.093 | 0.068 | 0.060 | 0.020 | 0.050 | 0.020 | 0.040 |
| | mm | 2.35 | 1.73 | 1.52 | 0.51 | 1.27 | 0.51 | 1.02 |
| CS1008 | inch | 0.115 | 0.110 | 0.083 | 0.020 | 0.080 | 0.020 | 0.060 |
| | mm | 2.92 | 2.79 | 2.10 | 0.51 | 2.03 | 0.51 | 1.52 |

ELECTRICAL CHARACTERISTICS CS0402

| PART NO. | INDUCTANCE (nH) | TOLERANCE (±%) | Q Min. | SRF (MHz) Min. | DC RESISTANCE (Ω) Max. | I _{rms} (mA) Max. | 900MHz | | 1.7GHz | |
|---------------|--------------------|-------------------|-----------|----------------------|------------------------------|----------------------------------|-----------|-----------|-----------|-----------|
| | | | | | | | L Typ. | Q Typ. | L Typ. | Q Typ. |
| CS0402-1N0□-N | 1.0 | 5 / 10 | 16 | 12.7 | 0.045 | 1,360 | 1.02 | 77 | 1.02 | 69 |
| CS0402-1N9□-N | 1.9 | 5 / 10 | 16 | 11.3 | 0.070 | 1,040 | 1.72 | 68 | 1.74 | 82 |
| CS0402-2N0□-N | 2.0 | 5 / 10 | 16 | 11.1 | 0.070 | 1,040 | 1.93 | 54 | 1.93 | 75 |
| CS0402-2N2□-N | 2.2 | 5 / 10 | 19 | 10.8 | 0.070 | 960 | 2.19 | 59 | 2.23 | 100 |
| CS0402-2N4□-N | 2.4 | 5 / 10 | 15 | 10.5 | 0.068 | 790 | 2.24 | 51 | 2.27 | 68 |
| CS0402-2N7□-N | 2.7 | 5 / 10 | 16 | 10.4 | 0.120 | 640 | 2.58 | 42 | 2.60 | 61 |
| CS0402-3N3□-N | 3.3 | 5 / 10 | 19 | 7.00 | 0.066 | 840 | 3.10 | 65 | 3.12 | 87 |
| CS0402-3N6□-N | 3.6 | 5 / 10 | 19 | 6.80 | 0.066 | 840 | 3.56 | 45 | 3.62 | 71 |
| CS0402-3N9□-N | 3.9 | 5 / 10 | 19 | 6.00 | 0.066 | 840 | 3.89 | 50 | 4.00 | 75 |
| CS0402-4N3□-N | 4.3 | 5 / 10 | 18 | 6.00 | 0.091 | 700 | 4.19 | 47 | 4.30 | 71 |
| CS0402-4N7□-N | 4.7 | 5 / 10 | 15 | 4.77 | 0.130 | 640 | 4.55 | 48 | 4.68 | 68 |
| CS0402-5N1□-N | 5.1 | 5 / 10 | 20 | 4.80 | 0.083 | 800 | 5.15 | 56 | 5.25 | 82 |
| CS0402-5N6□-N | 5.6 | 5 / 10 | 20 | 4.80 | 0.083 | 760 | 5.16 | 54 | 5.28 | 81 |
| CS0402-6N2□-N | 6.2 | 5 / 10 | 20 | 4.80 | 0.083 | 760 | 6.16 | 52 | 6.37 | 76 |
| CS0402-6N8□-N | 6.8 | 5 / 10 | 20 | 4.80 | 0.083 | 680 | 6.56 | 63 | 6.93 | 78 |
| CS0402-7N5□-N | 7.5 | 5 / 10 | 22 | 4.80 | 0.10 | 680 | 7.91 | 60 | 8.22 | 88 |
| CS0402-8N2□-N | 8.2 | 5 / 10 | 22 | 4.40 | 0.10 | 680 | 8.50 | 57 | 8.85 | 84 |
| CS0402-8N7□-N | 8.7 | 5 / 10 | 18 | 4.10 | 0.20 | 480 | 8.78 | 54 | 9.21 | 73 |
| CS0402-9N0□-N | 9.0 | 5 / 10 | 22 | 4.16 | 0.10 | 680 | 9.07 | 62 | 9.53 | 78 |
| CS0402-9N5□-N | 9.5 | 5 / 10 | 18 | 4.00 | 0.20 | 480 | 9.42 | 54 | 9.98 | 69 |
| CS0402-10N□-N | 10 | 5 / 10 | 21 | 3.90 | 0.20 | 480 | 9.80 | 50 | 10.10 | 67 |
| CS0402-11N□-N | 11 | 5 / 10 | 24 | 3.68 | 0.12 | 640 | 10.70 | 52 | 11.20 | 78 |
| CS0402-12N□-N | 12 | 5 / 10 | 24 | 3.60 | 0.12 | 640 | 11.90 | 53 | 12.70 | 71 |
| CS0402-13N□-N | 13 | 5 / 10 | 24 | 3.45 | 0.21 | 440 | 13.40 | 51 | 14.63 | 57 |
| CS0402-15N□-N | 15 | 5 / 10 | 24 | 3.28 | 0.17 | 560 | 14.60 | 55 | 15.50 | 77 |
| CS0402-16N□-N | 16 | 5 / 10 | 24 | 3.10 | 0.22 | 560 | 16.60 | 46 | 18.86 | 47 |
| CS0402-18N□-N | 18 | 5 / 10 | 25 | 3.10 | 0.23 | 420 | 18.30 | 57 | 20.28 | 62 |
| CS0402-19N□-N | 19 | 5 / 10 | 24 | 3.04 | 0.20 | 480 | 19.10 | 50 | 21.10 | 67 |
| CS0402-20N□-N | 20 | 5 / 10 | 25 | 3.00 | 0.25 | 420 | 20.70 | 52 | 23.66 | 53 |
| CS0402-22N□-N | 22 | 5 / 10 | 25 | 2.80 | 0.30 | 400 | 23.20 | 53 | 26.75 | 53 |
| CS0402-23N□-N | 23 | 5 / 10 | 22 | 2.72 | 0.30 | 400 | 23.80 | 49 | 26.90 | 64 |
| CS0402-24N□-N | 24 | 5 / 10 | 25 | 2.70 | 0.30 | 400 | 25.10 | 51 | 29.50 | 50 |
| CS0402-27N□-N | 27 | 5 / 10 | 24 | 2.48 | 0.30 | 400 | 28.70 | 49 | 33.50 | 63 |
| CS0402-30N□-N | 30 | 5 / 10 | 25 | 2.35 | 0.35 | 400 | 31.10 | 46 | 38.50 | 39 |
| CS0402-33N□-N | 33 | 5 / 10 | 24 | 2.35 | 0.40 | 400 | 34.90 | 31 | 41.74 | 32 |
| CS0402-36N□-N | 36 | 5 / 10 | 24 | 2.32 | 0.44 | 320 | 39.50 | 44 | 48.40 | 53 |
| CS0402-39N□-N | 39 | 5 / 10 | 25 | 2.10 | 0.55 | 200 | 41.70 | 47 | 50.23 | 45 |
| CS0402-40N□-N | 40 | 5 / 10 | 24 | 2.24 | 0.44 | 320 | 39.00 | 44 | 47.40 | 33 |
| CS0402-43N□-N | 43 | 5 / 10 | 25 | 2.03 | 0.81 | 100 | 45.80 | 46 | 61.55 | 34 |
| CS0402-47N□-N | 47 | 5 / 10 | 20 | 2.10 | 0.83 | 150 | 50.00 | 38 | - | - |
| CS0402-51N□-N | 51 | 5 / 10 | 25 | 1.75 | 0.82 | 100 | 56.60 | 40 | - | - |
| CS0402-56N□-N | 56 | 5 / 10 | 22 | 1.76 | 0.97 | 100 | 62.80 | 42 | - | - |
| CS0402-68N□-N | 68 | 5 / 10 | 22 | 1.62 | 1.12 | 100 | 78.20 | 36 | - | - |
| CS0402-82N□-N | 82 | 5 / 10 | 20 | 1.26 | 1.55 | 50 | - | - | - | - |
| CS0402-R10□-N | 100 | 5 / 10 | 20 | 1.16 | 2.00 | 30 | - | - | - | - |

When ordering, please specify tolerance and packaging codes.

Test Instruments: L/Q- Agilent/HP4291A+Agilent/HP16197A at 250MHz; SRF- Agilent/HP8753D+Agilent/HP8722ES

Tolerance: J = ± 5%, K = ± 10%

Packaging: Clear tape and reel (standard)



ELECTRICAL CHARACTERISTICS CS0603

| PART NO. | INDUCTANCE (nH) | TOLERANCE (±%) | TEST FREQUENCY (MHz) | Q Min. | SRF (MHz) Min. | DC RESISTANCE (Ω) Max. | I _{rms} (mA) Max. | 900MHz | | 1.7GHz | | COLOR CODING |
|---------------|--------------------|-------------------|----------------------------|-----------|----------------------|------------------------------|----------------------------------|-----------|-----------|-----------|-----------|-----------------|
| | | | | | | | | L Typ. | Q Typ. | L Typ. | Q Typ. | |
| CS0603-1N6□-N | 1.6 | 5 / 10 | 250 | 24 | 12,500 | 0.030 | 700 | 1.67 | 49 | 1.65 | 63 | Red |
| CS0603-1N8□-N | 1.8 | 5 / 10 | 250 | 16 | 12,500 | 0.045 | 700 | 1.63 | 35 | 1.66 | 50 | Black |
| CS0603-3N6□-N | 3.6 | 5 / 10 | 250 | 22 | 5,900 | 0.063 | 700 | 3.72 | 53 | 3.71 | 65 | Red |
| CS0603-3N9□-N | 3.9 | 5 / 10 | 250 | 22 | 6,900 | 0.080 | 700 | 3.95 | 49 | 3.96 | 67 | Brown |
| CS0603-4N3□-N | 4.3 | 5 / 10 | 250 | 22 | 5,900 | 0.063 | 700 | 4.32 | 50 | 4.33 | 70 | Orange |
| CS0603-4N7□-N | 4.7 | 5 / 10 | 250 | 20 | 5,800 | 0.116 | 700 | 4.72 | 47 | 4.75 | 57 | Violet |
| CS0603-5N1□-N | 5.1 | 5 / 10 | 250 | 20 | 5,700 | 0.140 | 700 | 4.93 | 47 | 4.95 | 56 | Green |
| CS0603-5N6□-N | 5.6 | 5 / 10 | 250 | 20 | 5,800 | 0.170 | 700 | 5.53 | 56 | 5.86 | 77 | Yellow |
| CS0603-6N3□-N | 6.3 | 5 / 10 | 250 | 20 | 5,700 | 0.140 | 700 | 5.50 | 47 | 6.10 | 60 | White |
| CS0603-6N8□-N | 6.8 | 5 / 10 | 250 | 27 | 5,800 | 0.110 | 700 | 6.75 | 60 | 7.10 | 81 | Red |
| CS0603-7N5□-N | 7.5 | 5 / 10 | 250 | 28 | 4,800 | 0.106 | 700 | 7.70 | 60 | 7.82 | 65 | Brown |
| CS0603-8N2□-N | 8.2 | 5 / 10 | 250 | 28 | 4,700 | 0.109 | 700 | 8.30 | 60 | 8.50 | 60 | White |
| CS0603-8N7□-N | 8.7 | 5 / 10 | 250 | 28 | 4,600 | 0.109 | 700 | 8.86 | 62 | 9.32 | 58 | Yellow |
| CS0603-9N5□-N | 9.5 | 5 / 10 | 250 | 28 | 5,400 | 0.135 | 700 | 9.70 | 59 | 9.92 | 61 | Blue |
| CS0603-10N□-N | 10 | 2 / 5 / 10 | 250 | 31 | 4,800 | 0.130 | 700 | 10.0 | 66 | 10.6 | 83 | Orange |
| CS0603-11N□-N | 11 | 2 / 5 / 10 | 250 | 33 | 4,000 | 0.086 | 700 | 11.0 | 53 | 11.5 | 56 | Gray |
| CS0603-12N□-N | 12 | 2 / 5 / 10 | 250 | 35 | 4,000 | 0.130 | 700 | 12.3 | 72 | 13.5 | 83 | Yellow |
| CS0603-15N□-N | 15 | 2 / 5 / 10 | 250 | 35 | 4,000 | 0.170 | 700 | 15.4 | 64 | 16.8 | 89 | Green |
| CS0603-16N□-N | 16 | 2 / 5 / 10 | 250 | 34 | 3,300 | 0.104 | 700 | 16.2 | 55 | 17.3 | 52 | White |
| CS0603-18N□-N | 18 | 2 / 5 / 10 | 250 | 35 | 3,100 | 0.170 | 700 | 18.7 | 70 | 21.4 | 69 | Blue |
| CS0603-22N□-N | 22 | 2 / 5 / 10 | 250 | 38 | 3,000 | 0.190 | 700 | 22.8 | 73 | 26.1 | 71 | Violet |
| CS0603-24N□-N | 24 | 2 / 5 / 10 | 250 | 37 | 2,650 | 0.135 | 700 | 24.5 | 45 | 28.7 | 39 | Black |
| CS0603-27N□-N | 27 | 2 / 5 / 10 | 250 | 40 | 2,800 | 0.220 | 600 | 29.2 | 74 | 34.6 | 65 | Gray |
| CS0603-30N□-N | 30 | 2 / 5 / 10 | 250 | 37 | 2,250 | 0.144 | 600 | 31.4 | 47 | 39.9 | 28 | Brown |
| CS0603-33N□-N | 33 | 2 / 5 / 10 | 250 | 40 | 2,300 | 0.220 | 600 | 36.0 | 67 | 49.5 | 42 | White |
| CS0603-36N□-N | 36 | 2 / 5 / 10 | 250 | 38 | 2,080 | 0.250 | 600 | 39.4 | 47 | 52.7 | 24 | Red |
| CS0603-39N□-N | 39 | 2 / 5 / 10 | 250 | 40 | 2,200 | 0.250 | 600 | 42.7 | 60 | 60.2 | 40 | Black |
| CS0603-43N□-N | 43 | 2 / 5 / 10 | 250 | 39 | 2,000 | 0.280 | 600 | 47.0 | 44 | 64.9 | 21 | Orange |
| CS0603-47N□-N | 47 | 2 / 5 / 10 | 200 | 38 | 2,000 | 0.280 | 600 | 52.2 | 62 | 77.2 | 35 | Brown |
| CS0603-56N□-N | 56 | 2 / 5 / 10 | 200 | 38 | 1,900 | 0.310 | 600 | 62.5 | 56 | 97.0 | 26 | Red |
| CS0603-68N□-N | 68 | 2 / 5 / 10 | 200 | 37 | 1,700 | 0.340 | 600 | 80.5 | 54 | 168 | 21 | Orange |
| CS0603-72N□-N | 72 | 2 / 5 / 10 | 150 | 34 | 1,700 | 0.490 | 400 | 82.0 | 53 | 135 | 20 | Yellow |
| CS0603-82N□-N | 82 | 2 / 5 / 10 | 150 | 34 | 1,700 | 0.540 | 400 | 96.2 | 54 | 177 | 21 | Green |
| CS0603-R10□-N | 100 | 2 / 5 / 10 | 150 | 34 | 1,400 | 0.580 | 400 | 124.0 | 49 | - | - | Blue |
| CS0603-R11□-N | 110 | 2 / 5 / 10 | 150 | 32 | 1,350 | 0.610 | 300 | 138.0 | 43 | - | - | Violet |
| CS0603-R12□-N | 120 | 2 / 5 / 10 | 150 | 32 | 1,300 | 0.750 | 300 | 166.0 | 39 | - | - | Gray |
| CS0603-R15□-N | 150 | 2 / 5 / 10 | 150 | 28 | 990 | 0.920 | 280 | 250.0 | 25 | - | - | White |
| CS0603-R18□-N | 180 | 2 / 5 / 10 | 100 | 25 | 990 | 1.250 | 240 | 305.0 | 22 | - | - | Black |
| CS0603-R22□-N | 220 | 2 / 5 / 10 | 100 | 25 | 900 | 2.100 | 200 | - | - | - | - | Brown |
| CS0603-R27□-N | 270 | 2 / 5 / 10 | 100 | 24 | 900 | 2.800 | 170 | - | - | - | - | Red |
| CS0603-R33□-N | 330 | 2 / 5 / 10 | 100 | 25 | 900 | 3.890 | 100 | - | - | - | - | Orange |
| CS0603-R39□-N | 390 | 2 / 5 / 10 | 100 | 25 | 900 | 4.350 | 100 | - | - | - | - | Yellow |

When ordering, please specify tolerance and packaging codes.

Test Instruments: L/Q- Agilent/HP4291A+Agilent/HPI 6197A; SRF- HP8753D/HP4291A; RDC- CH502BC/HP4338B; I_{rms}- For a 15 °C rise above 25 °C ambient.

Operating Temperature Range: -40 °C to +125 °C

Tolerance: G = ± 2%, J = ± 5%, K = ± 10%

Packaging: Clear tape and reel (standard)

ELECTRICAL CHARACTERISTICS CS0805

| PART NO. | INDUCTANCE (nH) | TOLERANCE (±%) | TEST FREQUENCY (MHz) | Q Min. | TEST FREQUENCY (MHz) | SRF (MHz) Min. | DC RESISTANCE (Ω) Max. | I _{rms} (mA) Max. | COLOR CODING |
|---------------|--------------------|-------------------|----------------------------|-----------|----------------------------|----------------------|------------------------------|----------------------------------|-----------------|
| CS0805-2N8□-N | 2.8 | 5 / 10 | 250 | 80 | 1,500 | 7,900 | 0.06 | 800 | Gray |
| CS0805-3N0□-N | 3.0 | 5 / 10 | 250 | 65 | 1,500 | 7,900 | 0.06 | 800 | White |
| CS0805-3N3□-N | 3.3 | 5 / 10 | 250 | 50 | 1,500 | 7,900 | 0.08 | 600 | Black |
| CS0805-5N6□-N | 5.6 | 5 / 10 | 250 | 65 | 1,000 | 5,500 | 0.08 | 600 | Orange |
| CS0805-6N8□-N | 6.8 | 5 / 10 | 250 | 50 | 1,000 | 5,500 | 0.11 | 600 | Brown |
| CS0805-7N5□-N | 7.5 | 5 / 10 | 250 | 50 | 1,000 | 4,500 | 0.14 | 600 | Green |
| CS0805-8N2□-N | 8.2 | 5 / 10 | 250 | 50 | 1,000 | 4,700 | 0.12 | 600 | Red |
| CS0805-10N□-N | 10 | 2 / 5 / 10 | 250 | 60 | 500 | 4,200 | 0.10 | 600 | Blue |
| CS0805-12N□-N | 12 | 2 / 5 / 10 | 250 | 50 | 500 | 4,000 | 0.15 | 600 | Orange |
| CS0805-15N□-N | 15 | 2 / 5 / 10 | 250 | 50 | 500 | 3,400 | 0.17 | 600 | Yellow |
| CS0805-18N□-N | 18 | 2 / 5 / 10 | 250 | 50 | 500 | 3,300 | 0.20 | 600 | Green |
| CS0805-22N□-N | 22 | 2 / 5 / 10 | 250 | 55 | 500 | 2,600 | 0.22 | 500 | Blue |
| CS0805-24N□-N | 24 | 2 / 5 / 10 | 250 | 50 | 500 | 2,000 | 0.22 | 500 | Gray |
| CS0805-27N□-N | 27 | 2 / 5 / 10 | 250 | 55 | 500 | 2,500 | 0.25 | 500 | Violet |
| CS0805-33N□-N | 33 | 2 / 5 / 10 | 250 | 60 | 500 | 2,050 | 0.27 | 500 | Gray |
| CS0805-36N□-N | 36 | 2 / 5 / 10 | 250 | 55 | 500 | 1,700 | 0.27 | 500 | Orange |
| CS0805-39N□-N | 39 | 2 / 5 / 10 | 250 | 60 | 500 | 2,000 | 0.29 | 500 | White |
| CS0805-43N□-N | 43 | 2 / 5 / 10 | 200 | 60 | 500 | 1,650 | 0.34 | 500 | Yellow |
| CS0805-47N□-N | 47 | 2 / 5 / 10 | 200 | 60 | 500 | 1,650 | 0.31 | 500 | Black |
| CS0805-56N□-N | 56 | 2 / 5 / 10 | 200 | 60 | 500 | 1,550 | 0.34 | 500 | Brown |
| CS0805-68N□-N | 68 | 2 / 5 / 10 | 200 | 60 | 500 | 1,450 | 0.38 | 500 | Red |
| CS0805-82N□-N | 82 | 2 / 5 / 10 | 150 | 65 | 500 | 1,300 | 0.42 | 400 | Orange |
| CS0805-91N□-N | 91 | 2 / 5 / 10 | 150 | 65 | 500 | 1,200 | 0.48 | 400 | Black |
| CS0805-R10□-N | 100 | 2 / 5 / 10 | 150 | 65 | 500 | 1,200 | 0.46 | 400 | Yellow |
| CS0805-R11□-N | 110 | 2 / 5 / 10 | 150 | 50 | 250 | 1,000 | 0.48 | 400 | Brown |
| CS0805-R12□-N | 120 | 2 / 5 / 10 | 150 | 50 | 250 | 1,100 | 0.51 | 400 | Green |
| CS0805-R15□-N | 150 | 2 / 5 / 10 | 100 | 50 | 250 | 920 | 0.56 | 400 | Blue |
| CS0805-R18□-N | 180 | 2 / 5 / 10 | 100 | 50 | 250 | 870 | 0.64 | 400 | Violet |
| CS0805-R20□-N | 200 | 2 / 5 / 10 | 100 | 50 | 250 | 860 | 0.68 | 400 | Red |
| CS0805-R22□-N | 220 | 2 / 5 / 10 | 100 | 50 | 250 | 850 | 0.70 | 400 | Gray |
| CS0805-R24□-N | 240 | 2 / 5 / 10 | 100 | 44 | 250 | 690 | 1.00 | 350 | Red |
| CS0805-R25□-N | 250 | 2 / 5 / 10 | 100 | 45 | 250 | 660 | 1.20 | 350 | Yellow |
| CS0805-R27□-N | 270 | 2 / 5 / 10 | 100 | 48 | 250 | 650 | 1.00 | 350 | White |
| CS0805-R33□-N | 330 | 2 / 5 / 10 | 100 | 48 | 250 | 600 | 1.40 | 310 | Black |
| CS0805-R39□-N | 390 | 2 / 5 / 10 | 100 | 48 | 250 | 560 | 1.50 | 290 | Brown |
| CS0805-R47□-N | 470 | 2 / 5 / 10 | 50 | 33 | 100 | 375 | 1.76 | 250 | Violet |
| CS0805-R56□-N | 560 | 2 / 5 / 10 | 25 | 23 | 50 | 340 | 1.90 | 230 | Orange |
| CS0805-R62□-N | 620 | 2 / 5 / 10 | 25 | 23 | 50 | 220 | 2.20 | 210 | Yellow |
| CS0805-R68□-N | 680 | 2 / 5 / 10 | 25 | 23 | 50 | 188 | 2.20 | 190 | Green |
| CS0805-R82□-N | 820 | 2 / 5 / 10 | 25 | 23 | 50 | 215 | 2.35 | 180 | Blue |
| CS0805-1R0□-N | 1,000 | 2 / 5 / 10 | 25 | 20 | 50 | 100 | 2.50 | 170 | Gray |

When ordering, please specify tolerance and packaging codes.

Test Instruments: L/Q- Agilent/HP4291A+Agilent/HP16197A; SRF- HP8753D/HP4291A; RDC- CH502BC/HP4338B; I_{rms}- For a 15 °C rise above 25 °C ambient.

Operating Temperature Range: -40 °C to +125 °C

Tolerance: G = ± 2%, J = ± 5%, K = ± 10%

Packaging: Clear tape and reel (standard)



ELECTRICAL CHARACTERISTICS CS1008

| PART NO. | INDUCTANCE (nH) | TOLERANCE (±%) | TEST FREQUENCY (MHz) | Q Min. | TEST FREQUENCY (MHz) | SRF (MHz) Min. | DC RESISTANCE (Ω) Max. | I _{rms} (mA) Max. | COLOR CODING | | |
|---------------|--------------------|-------------------|----------------------------|-----------|----------------------------|----------------------|------------------------------|----------------------------------|-----------------|-----------------|-----------------|
| | | | | | | | | | 1 st | 2 nd | 3 rd |
| CSI008-10N□-N | 10 | 2 / 5 / 10 | 50 | 50 | 500 | 4,100 | 0.08 | 1,000 | Brown | Black | Black |
| CSI008-12N□-N | 12 | 2 / 5 / 10 | 50 | 50 | 500 | 3,300 | 0.09 | 1,000 | Brown | Red | Black |
| CSI008-15N□-N | 15 | 2 / 5 / 10 | 50 | 50 | 500 | 2,500 | 0.10 | 1,000 | Brown | Green | Black |
| CSI008-18N□-N | 18 | 2 / 5 / 10 | 50 | 50 | 350 | 2,500 | 0.11 | 1,000 | Brown | Gray | Black |
| CSI008-22N□-N | 22 | 2 / 5 / 10 | 50 | 55 | 350 | 2,400 | 0.12 | 1,000 | Red | Red | Black |
| CSI008-27N□-N | 27 | 2 / 5 / 10 | 50 | 55 | 350 | 1,600 | 0.13 | 1,000 | Red | Violet | Black |
| CSI008-33N□-N | 33 | 2 / 5 / 10 | 50 | 60 | 350 | 1,600 | 0.14 | 1,000 | Orange | Orange | Black |
| CSI008-39N□-N | 39 | 2 / 5 / 10 | 50 | 60 | 350 | 1,500 | 0.15 | 1,000 | Orange | White | Black |
| CSI008-47N□-N | 47 | 2 / 5 / 10 | 50 | 65 | 350 | 1,500 | 0.16 | 1,000 | Yellow | Violet | Black |
| CSI008-56N□-N | 56 | 2 / 5 / 10 | 50 | 65 | 350 | 1,300 | 0.18 | 1,000 | Green | Blue | Black |
| CSI008-68N□-N | 68 | 2 / 5 / 10 | 50 | 65 | 350 | 1,300 | 0.20 | 1,000 | Blue | Gray | Black |
| CSI008-82N□-N | 82 | 2 / 5 / 10 | 50 | 60 | 350 | 1,000 | 0.22 | 1,000 | Gray | Red | Black |
| CSI008-R10□-N | 100 | 2 / 5 / 10 | 25 | 60 | 350 | 1,000 | 0.56 | 650 | Brown | Black | Brown |
| CSI008-R12□-N | 120 | 2 / 5 / 10 | 25 | 60 | 350 | 950 | 0.63 | 650 | Brown | Red | Brown |
| CSI008-R15□-N | 150 | 2 / 5 / 10 | 25 | 45 | 100 | 850 | 0.70 | 580 | Brown | Green | Brown |
| CSI008-R18□-N | 180 | 2 / 5 / 10 | 25 | 45 | 100 | 750 | 0.77 | 620 | Brown | Gray | Brown |
| CSI008-R22□-N | 220 | 2 / 5 / 10 | 25 | 45 | 100 | 700 | 0.84 | 500 | Red | Red | Brown |
| CSI008-R27□-N | 270 | 2 / 5 / 10 | 25 | 45 | 100 | 600 | 0.91 | 500 | Red | Violet | Brown |
| CSI008-R33□-N | 330 | 2 / 5 / 10 | 25 | 45 | 100 | 570 | 1.05 | 450 | Orange | Orange | Brown |
| CSI008-R39□-N | 390 | 2 / 5 / 10 | 25 | 45 | 100 | 500 | 1.12 | 470 | Orange | White | Brown |
| CSI008-R47□-N | 470 | 2 / 5 / 10 | 25 | 45 | 100 | 450 | 1.19 | 470 | Yellow | Violet | Brown |
| CSI008-R56□-N | 560 | 2 / 5 / 10 | 25 | 45 | 100 | 415 | 1.33 | 400 | Green | Blue | Brown |
| CSI008-R62□-N | 620 | 2 / 5 / 10 | 25 | 45 | 100 | 375 | 1.40 | 300 | Blue | Red | Brown |
| CSI008-R68□-N | 680 | 2 / 5 / 10 | 25 | 45 | 100 | 375 | 1.47 | 400 | Blue | Gray | Brown |
| CSI008-R75□-N | 750 | 2 / 5 / 10 | 25 | 45 | 100 | 360 | 1.54 | 360 | Violet | Green | Brown |
| CSI008-R82□-N | 820 | 2 / 5 / 10 | 25 | 45 | 100 | 350 | 1.61 | 400 | Gray | Red | Brown |
| CSI008-R91□-N | 910 | 2 / 5 / 10 | 25 | 35 | 50 | 320 | 1.68 | 380 | White | Brown | Brown |
| CSI008-1R0□-N | 1,000 | 2 / 5 / 10 | 25 | 35 | 50 | 290 | 1.75 | 370 | Brown | Black | Red |
| CSI008-1R2□-N | 1,200 | 2 / 5 / 10 | 7.90 | 35 | 50 | 250 | 2.00 | 310 | Brown | Red | Red |
| CSI008-1R5□-N | 1,500 | 2 / 5 / 10 | 7.90 | 28 | 50 | 200 | 2.30 | 330 | Brown | Green | Red |
| CSI008-1R8□-N | 1,800 | 2 / 5 / 10 | 7.90 | 28 | 50 | 160 | 2.60 | 300 | Brown | Gray | Red |
| CSI008-2R2□-N | 2,200 | 2 / 5 / 10 | 7.90 | 28 | 50 | 160 | 2.80 | 280 | Red | Red | Red |
| CSI008-2R7□-N | 2,700 | 2 / 5 / 10 | 7.90 | 22 | 25 | 140 | 3.20 | 290 | Red | Violet | Red |
| CSI008-3R3□-N | 3,300 | 2 / 5 / 10 | 7.90 | 22 | 25 | 110 | 3.40 | 290 | Orange | Orange | Red |
| CSI008-3R9□-N | 3,900 | 2 / 5 / 10 | 7.90 | 20 | 25 | 100 | 3.60 | 260 | Orange | White | Red |
| CSI008-4R7□-N | 4,700 | 2 / 5 / 10 | 7.90 | 20 | 25 | 90 | 4.00 | 260 | Yellow | Violet | Red |
| CSI008-5R6□-N | 5,600 | 2 / 5 / 10 | 7.90 | 18 | 7.9 | 45 | 4.00 | 240 | Green | Blue | Red |
| CSI008-6R8□-N | 6,800 | 2 / 5 / 10 | 7.90 | 18 | 7.9 | 40 | 4.90 | 200 | Blue | Gray | Red |
| CSI008-8R2□-N | 8,200 | 2 / 5 / 10 | 7.90 | 18 | 7.9 | 25 | 6.00 | 170 | Gray | Red | Red |
| CSI008-100□-N | 10,000 | 2 / 5 / 10 | 2.52 | 18 | 7.9 | 25 | 8.00 | 150 | Brown | Black | Orange |

When ordering, please specify tolerance and packaging codes.

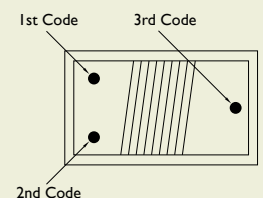
Test Instruments: L/Q- Agilent/HP4291A+Agilent/HPI6197A; SRF- HP8753D/HP4291A;
RDC- CH502BC/HP4338B; I_{rms}- For a 15 °C rise above 25 °C ambient.

Operating Temperature Range: -40 °C to +125 °C

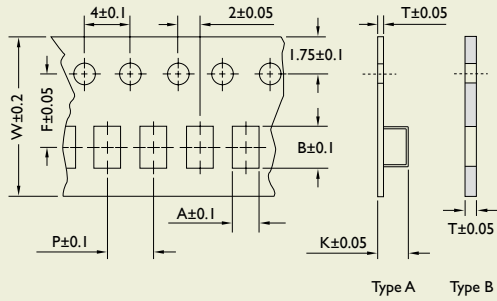
Tolerance: G = ± 2%, J = ± 5%, K = ± 10%

Packaging: Clear tape and reel (standard)

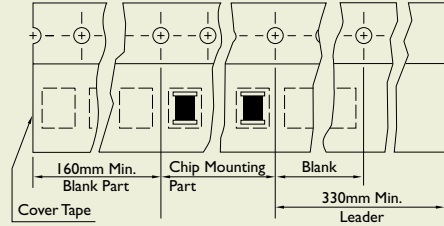
Color Coding



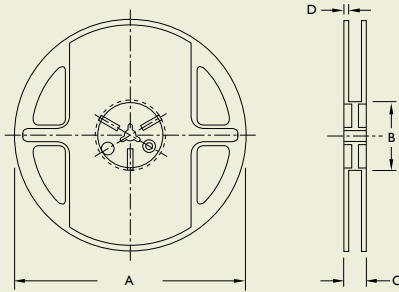
TAPE DIMENSIONS



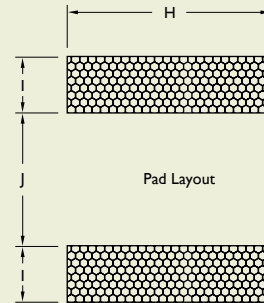
TAPE MATERIAL



REEL DIMENSIONS



RECOMMENDED PATTERN



Dimensions: mm

| TYPE | TAPE DIMENSIONS | | | | | | | | TAPE TYPE | RECOMMENDED PATTERN | | | REEL DIMENSIONS | | | | QUANTITY/ REEL |
|--------|-----------------|------|------|---|---|------|------|------|-----------|---------------------|-------|-------|-----------------|----|----|-----|----------------|
| | A | B | T | W | P | F | K | UNIT | | H | I | J | A | B | C | D | |
| CS0402 | 0.74 | 1.23 | 0.68 | 8 | 2 | 3.50 | - | B | inch | 0.026 | 0.014 | 0.018 | 178 | 60 | 12 | 1.5 | 4,000 |
| | | | | | | | | | mm | 0.66 | 0.36 | 0.46 | | | | | |
| CS0603 | 1.23 | 1.90 | 0.97 | 8 | 4 | 3.50 | - | B | inch | 0.040 | 0.025 | 0.025 | 178 | 60 | 12 | 1.5 | 4,000 |
| | | | | | | | | | mm | 1.02 | 0.64 | 0.64 | | | | | |
| CS0805 | 1.85 | 2.45 | 0.23 | 8 | 4 | 3.50 | 1.45 | A | inch | 0.070 | 0.040 | 0.030 | 178 | 60 | 12 | 1.5 | 2,000 |
| | | | | | | | | | mm | 1.78 | 1.02 | 0.76 | | | | | |
| CS1008 | 2.80 | 2.95 | 0.23 | 8 | 4 | 3.50 | 2.20 | A | inch | 0.100 | 0.040 | 0.050 | 178 | 60 | 16 | 1.5 | 2,000 |
| | | | | | | | | | mm | 2.54 | 1.02 | 1.27 | | | | | |