





CERAMIC RF CHIP INDUCTORS – 0402CC SERIES



-  Monolithic inorganic material construction
-  Low DC resistance and high Q Values at high frequency
-  High Self Resonant Frequency
-  Industry Standard 0402 (1005) Surface Mount Land Pattern

Electrical Specifications @ 25°C

| Part Number | Inductance (nH) | Standard Tolerance | Q (Min.) | Test Frequency (MHz) | SRF (MHz MIN) | R _{dc} (Ω MAX) | I _{dc} (mA MAX) |
|------------------|-----------------|--------------------|----------|----------------------|---------------|-------------------------|--------------------------|
| PE-0402CC1N0STT | 1.0 | ±0.3nH (S) | 8 | 100 | 10000 | 0.08 | 300 |
| PE-0402CC1N2STT | 1.2 | ±0.3nH (S) | 8 | 100 | 10000 | 0.09 | 300 |
| PE-0402CC1N5STT | 1.5 | ±0.3nH (S) | 8 | 100 | 6000 | 0.1 | 300 |
| PE-0402CC1N8STT | 1.8 | ±0.3nH (S) | 8 | 100 | 6000 | 0.12 | 300 |
| PE-0402CC2N0STT | 2.0 | ±0.3nH (S) | 8 | 100 | 6000 | 0.12 | 300 |
| PE-0402CC2N2STT | 2.2 | ±0.3nH (S) | 8 | 100 | 6000 | 0.13 | 300 |
| PE-0402CC2N4STT | 2.4 | ±0.3nH (S) | 8 | 100 | 6000 | 0.13 | 300 |
| PE-0402CC2N7STT | 2.7 | ±0.3nH (S) | 8 | 100 | 6000 | 0.13 | 300 |
| PE-0402CC3N0STT | 3.0 | ±0.3nH (S) | 8 | 100 | 6000 | 0.16 | 300 |
| PE-0402CC3N3STT | 3.3 | ±0.3nH (S) | 8 | 100 | 6000 | 0.16 | 300 |
| PE-0402CC3N6STT | 3.6 | ±0.3nH (S) | 8 | 100 | 5000 | 0.20 | 300 |
| PE-0402CC3N9STT | 3.9 | ±0.3nH (S) | 8 | 100 | 4000 | 0.21 | 300 |
| PE-0402CC4N36STT | 4.3 | ±0.3nH (S) | 8 | 100 | 4000 | 0.20 | 300 |
| PE-0402CC4N7STT | 4.7 | ±0.3nH (S) | 8 | 100 | 4000 | 0.21 | 300 |
| PE-0402CC5N1STT | 5.1 | ±0.3nH (S) | 8 | 100 | 4000 | 0.21 | 300 |
| PE-0402CC5N6STT | 5.6 | ±0.3nH (S) | 8 | 100 | 4000 | 0.23 | 300 |
| PE-0402CC6N2STT | 6.2 | ±0.3nH (S) | 8 | 100 | 3900 | 0.25 | 300 |
| PE-0402CC6N8JTT | 6.8 | ±5% (J) | 8 | 100 | 3900 | 0.25 | 300 |
| PE-0402CC7N5JTT | 7.5 | ±5% (J) | 8 | 100 | 3700 | 0.25 | 300 |
| PE-0402CC8N2JTT | 8.2 | ±5% (J) | 8 | 100 | 3600 | 0.28 | 300 |
| PE-0402CC9N1JTT | 9.1 | ±5% (J) | 8 | 100 | 3400 | 0.30 | 300 |
| PE-0402CC100JTT | 10 | ±5% (J) | 8 | 100 | 3200 | 0.31 | 300 |
| PE-0402CC120JTT | 12 | ±5% (J) | 8 | 100 | 2700 | 0.4 | 300 |
| PE-0402CC150JTT | 15 | ±5% (J) | 8 | 100 | 2300 | 0.46 | 300 |
| PE-0402CC180JTT | 18 | ±5% (J) | 8 | 100 | 2100 | 0.55 | 300 |
| PE-0402CC220JTT | 22 | ±5% (J) | 8 | 100 | 1900 | 0.6 | 300 |
| PE-0402CC270JTT | 27 | ±5% (J) | 8 | 100 | 1600 | 0.7 | 300 |
| PE-0402CC330JTT | 33 | ±5% (J) | 8 | 100 | 1300 | 0.8 | 200 |

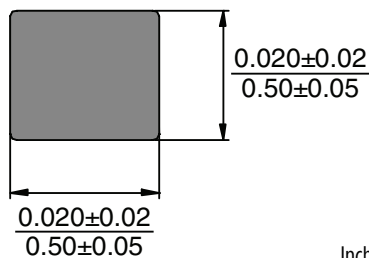
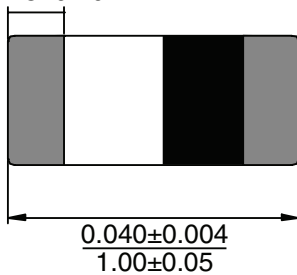
Electrical Specifications @ 25°C

| Part Number | Inductance (nH) | Standard Tolerance | Q (Min.) | Test Frequency (MHz) | SRF (MHz MIN) | R _{dc} (Ω MAX) | I _{bc} (mA MAX) |
|-----------------|-----------------|--------------------|----------|----------------------|---------------|-------------------------|--------------------------|
| PE-0402CC390JTT | 39 | ±5% (J) | 8 | 100 | 1200 | 0.9 | 200 |
| PE-0402CC470JTT | 47 | ±5% (J) | 8 | 100 | 1000 | 1.0 | 200 |
| PE-0402CC560JTT | 56 | ±5% (J) | 8 | 100 | 750 | 1.0 | 200 |
| PE-0402CC680JTT | 68 | ±5% (J) | 8 | 100 | 750 | 1.2 | 180 |
| PE-0402CC820JTT | 82 | ±5% (J) | 8 | 100 | 600 | 1.3 | 150 |
| PE-0402CC101JTT | 100 | ±5% (J) | 8 | 100 | 600 | 1.5 | 150 |
| PE-0402CC121JTT | 120 | ±5% (J) | 8 | 100 | 600 | 1.6 | 150 |
| PE-0402CC151JTT | 150 | ±5% (J) | 8 | 100 | 550 | 3.2 | 140 |
| PE-0402CC181JTT | 180 | ±5% (J) | 8 | 100 | 500 | 3.7 | 130 |
| PE-0402CC221JTT | 220 | ±5% (J) | 8 | 100 | 450 | 4.2 | 120 |
| PE-0402CC271JTT | 270 | ±5% (J) | 8 | 100 | 400 | 4.8 | 110 |

Mechanical

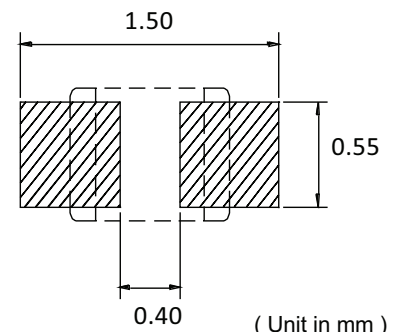
0402CC Series

$\frac{0.0098 \pm 0.0039}{0.25 \pm 0.10}$



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

Unless otherwise specified, all tolerances are $\pm \frac{.010}{0,25}$



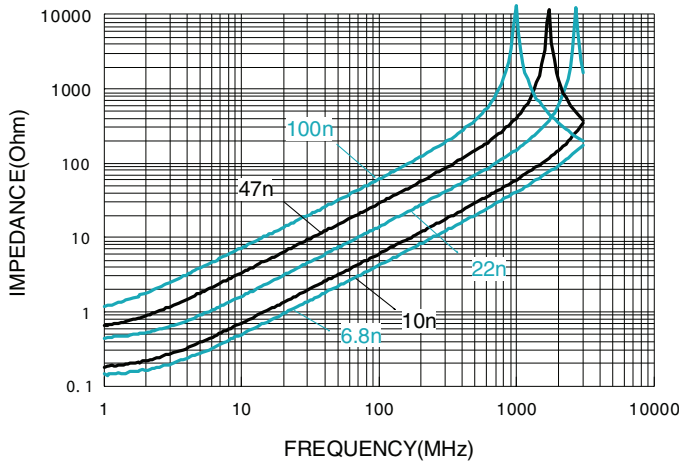
Suggested PCB LAND PATTERN

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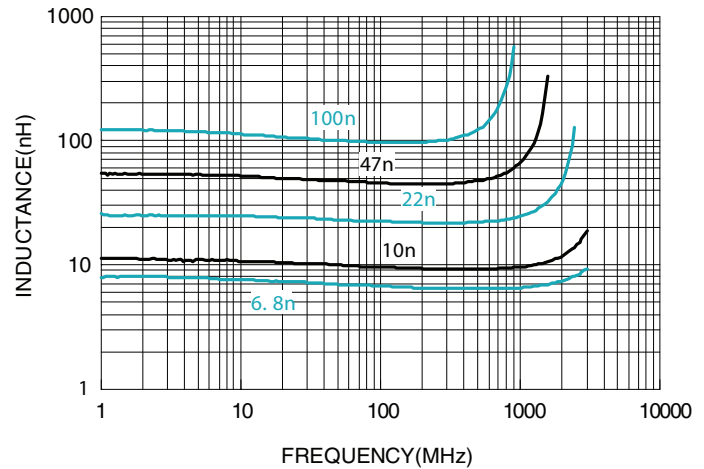
Characteristic Graphs

0402CC Series

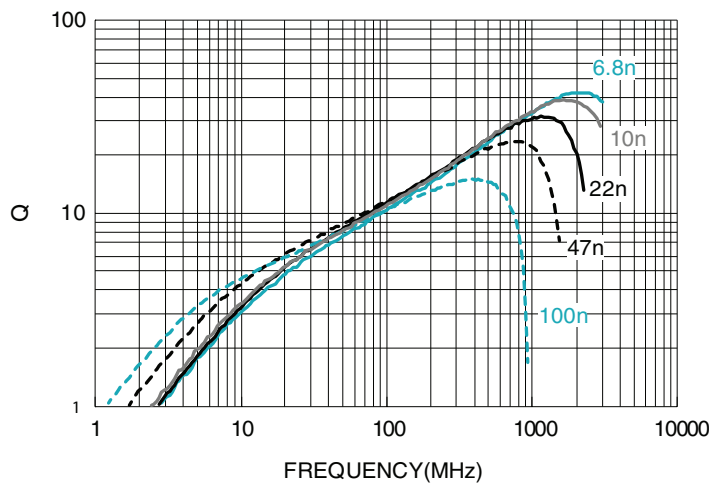
Impedance v.s. Frequency Characteristics



Inductance v.s. Frequency Characteristics



Q v.s. Frequency Characteristics



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