

RF CERAMIC CHIP INDUCTORS



Polarity Half-Marked Inductors (0201 only)

High frequency multi-layer chip inductors feature a monolithic body made of low loss ceramic and high conductivity metal electrodes to achieve optimal high frequency performance.

These RF chip inductors are compact in size and feature lead-free tin plated nickel barrier terminations and tape and reel packaging which makes them ideal for small size/high volume wireless applications.

APPLICATIONS & FEATURES

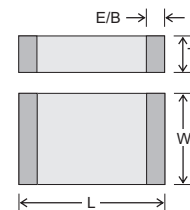
- CELL/PCS Modules
- Wireless LAN
- Broadband Components
- RFID
- RF Tranceivers
- RoHS Compliant (Standard, "V" Code)
- Sn/Pb Terminations Optional ("T" Code)

PRODUCT RANGE SUMMARY

| EIA SIZE (mm) | SIZE CODE | L RANGE | Q FACTOR (Min.) | SRF (Typ.) | TEMPERATURE |
|---------------|-----------|--------------|-----------------|------------------|-----------------|
| 0201 (0603) | L-05 | 0.6 - 39 nH | 4 (100 MHz) | >21 GHz (1.0 nH) | -55°C to +100°C |
| 0402 (1005) | L-07 | 1.0 - 120 nH | 8 (100 MHz) | >21 GHz (1.0 nH) | -55°C to +100°C |
| 0603 (1608) | L-14 | 1.0 - 220 nH | 12 (100 MHz) | >23 GHz (1.0 nH) | -55°C to +100°C |

MECHANICAL CHARACTERISTICS

| | 0201 (0603) | | 0402 (1005) | | 0603 (1608) | |
|-----------|-------------|--------------|-------------|-------------|-------------|-------------|
| | Inches | mm | Inches | mm | Inches | mm |
| Length | .024 ±.001" | (0.6 ±0.03) | .039 ±.004" | (1.00 ±.10) | .063 ±.006" | (1.60 ±.15) |
| Width | .012 ±.001" | (0.3 ±0.03) | .020 ±.004" | (0.50 ±.10) | .031 ±.006" | (0.80 ±.15) |
| Thickness | .012 ±.001" | (0.3 ±0.03) | .020 ±.004" | (0.50 ±.10) | .031 ±.006" | (0.80 ±.15) |
| End Band | .006 ±.002" | (0.15 ±0.05) | .009 ±.004" | (0.23 ±.10) | .012 ±.008" | (0.30 ±.20) |

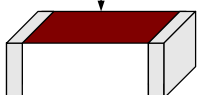


HOW TO ORDER

| DEVI | SIZE | TYPE | VALUE | TOLERANCE | TERMINATION | MARKING | PACKAGING |
|----------|-------------------------------------|--|-----------|--|----------------------------|--|--|
| Inductor | 05 = 0201 07 = 0402 14 = 0603 | B = Polarity Half-Marked (all 0201) C = 0402 and 0603 (see "Marking") | See Table | C = ± 0.2 nH ≤ 1.0 nH S = ± 0.3 nH 1.0 to 5.6 nH J = ± 5% 6.8 nH and above K = ± 10% 3.3 nH and above | V = Ni/Sn T = Ni / SnPb | 4 = No Marking (all 0603) 6 = Orientation Mark (all 0201 and 0402*) | Tape and Reel Size Code Tape Reel Qty 0201 T Paper 7" 15,000 0402 T Paper 7" 10,000 0603 T Paper 7" 4,000 Bulk (Loose Pcs.) Size Code All S |

Part number written: L-07C10NJV6T

Orientation Full Marking (all 0402)



*Please note that all 0402 inductors (L-07C) have orientation full marking only.

RF CHIP INDUCTOR SELECTION CHART

| Inductor Value | | EIA Size | 0201 (L-05) | 0402 (L-07) | 0603 (L-14) | |
|----------------|------|-----------|-------------|-----------------|-----------------|--------|
| Inductance nH | Code | Tolerance | | | | |
| 0.6 | 0N6 | C S | 300 mA | | | |
| 0.7 | 0N7 | | 300 mA | | | |
| 0.8 | 0N8 | | 300 mA | | | |
| 0.9 | 0N9 | | 300 mA | | | |
| 1.0 | 1N0 | | 300 mA | 300 mA | 300 mA (S only) | |
| 1.2 | 1N2 | | 300 mA | 300 mA (S only) | 300 mA (S only) | |
| 1.3 | 1N3 | | 300 mA | | | |
| 1.5 | 1N5 | | 300 mA | 300 mA (S only) | 300 mA (S only) | |
| 1.8 | 1N8 | | 300 mA | 300 mA (S only) | 300 mA (S only) | |
| 1.9 | 1N9 | | 300 mA | 300 mA (S only) | | |
| 2.0 | 2N0 | | 300 mA | 300 mA (S only) | | |
| 2.2 | 2N2 | | 300 mA | 300 mA (S only) | 300 mA (S only) | |
| 2.3 | 2N3 | | 300 mA | | | |
| 2.4 | 2N4 | | 300 mA | 300 mA (S only) | | |
| 2.5 | 2N5 | | 300 mA | | | |
| 2.7 | 2N7 | | 300 mA | 300 mA (S only) | 300 mA (S only) | |
| 3.0 | 3N0 | | 300 mA | 300 mA (S only) | | |
| 3.3 | 3N3 | | K S | 300 mA | 300 mA | 300 mA |
| 3.6 | 3N6 | | | 300 mA | 300 mA | |
| 3.7 | 3N7 | | | 300 mA | | |
| 3.9 | 3N9 | 300 mA | | 300 mA | 300 mA | |
| 4.3 | 4N3 | | | 300 mA | | |
| 4.7 | 4N7 | 300 mA | | 300 mA | 300 mA | |
| 5.1 | 5N1 | 300 mA | | 300 mA | | |
| 5.6 | 5N6 | 300 mA | | 300 mA | 300 mA | |
| 6.2 | 6N2 | | | 300 mA | | |
| 6.8 | 6N8 | | | 250 mA | 300 mA | |
| 7.5 | 7N5 | | 250 mA | | | |
| 8.2 | 8N2 | | 250 mA | 300 mA | | |
| 10 | 10N | | 250 mA | 300 mA | | |
| 12 | 12N | | 250 mA | 300 mA | | |
| 13 | 13N | | 250 mA | | | |
| 15 | 15N | | 250 mA | 300 mA | | |
| 18 | 18N | | 200 mA | 300 mA | | |
| 22 | 22N | | 200 mA | 300 mA | | |
| 23 | 23N | | | 200 mA | | |
| 27 | 27N | | 200 mA | 200 mA | 300 mA | |
| 33 | 33N | | 200 mA | 200 mA | 300 mA | |
| 39 | 39N | J K | 200 mA | 150 mA | 300 mA | |
| 43 | 43N | | | 150 mA | | |
| 47 | 47N | | | 150 mA | 300 mA | |
| 56 | 56N | | | 150 mA | 300 mA | |
| 68 | 68N | | | 100 mA | 300 mA | |
| 82 | 82N | | | 100 mA | 300 mA | |
| 100 | R10 | | | 100 mA | 300 mA | |
| 120 | R12 | | | 100 mA | 300 mA | |
| 150 | R15 | | | | 300 mA | |
| 180 | R18 | | | | 300 mA | |
| 220 | R22 | | | 300 mA | | |
| 270 | R27 | | | | | |
| 330 | R33 | | | | | |
| 390 | R39 | | | | | |
| 420 | R42 | | | | | |
| 560 | R56 | | | | | |
| 680 | R68 | | | | | |

Consult factory for Non-Standard values. C tolerance are non-standard terms
See web page for Chip Inductor Product Detail Summary by part number

