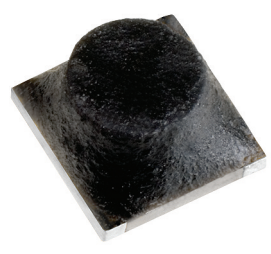
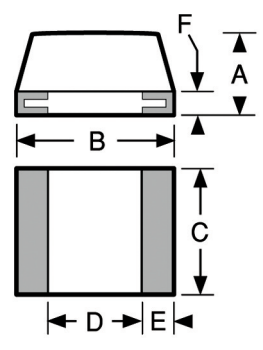




Micro i® Low Profile Chip Inductors



Actual Size

Physical Parameters

| | Inches | Millimeters |
|---|-------------------|------------------|
| A | 0.050 Max. | 1.27 Max. |
| B | 0.100±0.010 | 2.54±0.254 |
| C | 0.100±0.010 | 2.54±0.254 |
| D | 0.050 Min. | 1.27 Min. |
| E | 0.015 Min. (Typ.) | 0.38 Min. (Typ.) |
| F | 0.020 Max. (Typ.) | 0.51 Max. (Typ.) |

Current Rating at 90°C Ambient 35°C Rise

Operating Temperature Range -55°C to +125°C

Maximum Power Dissipation at 90°C 0.105 W

Core Material Powdered iron core for improved temperature stability.

Mechanical Configuration Units are epoxy encapsulated. Contact area for reflow soldering are gold plated per MIL-G-45204 Type 1 Grade A. Internal connections are thermal compression bonded.

Termination Finish Options

Standard: Gold over Nickel.

For Tin/Lead over Nickel: Add suffix "S" to part number and allow an additional .010 inch for maximum height. For RoHS, order 3090R - XXXKS.

Notes 1) Designed specifically for reflow soldering and other high temperature processes with metalized edges to exhibit solder fillet. **2)** Self Resonant Frequency (SRF) values 250 MHz and above are calculated and for reference only.

Packaging Tape & reel (8mm): 7" reel, 2000 pieces max.; 13" reel, 8000 pieces max.

MIL-PRF-83446 (Reference) for testing methods only.

Made in the U.S.A.

| DASH NUMBER | INDUCTANCE (µH) | TOLERANCE | Q MINIMUM | TEST FREQUENCY (MHz) | SRF MINIMUM (MHz) | DC RESISTANCE MAXIMUM (OHMS) | CURRENT RATING MAXIMUM (mA) |
|-------------|-----------------|-----------|-----------|----------------------|-------------------|------------------------------|-----------------------------|
|-------------|-----------------|-----------|-----------|----------------------|-------------------|------------------------------|-----------------------------|

| SERIES 3090 IRON CORE | | | | | | | |
|-----------------------|-------|-------|----|------|------|-------|-----|
| -100M | 0.010 | ± 20% | 42 | 50.0 | 1000 | 0.095 | 890 |
| -150M | 0.015 | ± 20% | 42 | 50.0 | 1000 | 0.115 | 810 |
| -220M | 0.022 | ± 20% | 40 | 50.0 | 1000 | 0.140 | 765 |
| -330K | 0.033 | ± 10% | 40 | 50.0 | 900 | 0.185 | 640 |
| -390K | 0.039 | ± 10% | 40 | 50.0 | 900 | 0.100 | 870 |
| -470K | 0.047 | ± 10% | 38 | 50.0 | 900 | 0.110 | 830 |
| -560K | 0.056 | ± 10% | 35 | 50.0 | 800 | 0.135 | 750 |
| -680K | 0.068 | ± 10% | 30 | 50.0 | 700 | 0.16 | 690 |
| -820K | 0.082 | ± 10% | 25 | 50.0 | 650 | 0.19 | 630 |
| -101K | 0.10 | ± 10% | 32 | 25.0 | 510 | 0.08 | 970 |
| -121K | 0.12 | ± 10% | 32 | 25.0 | 410 | 0.10 | 870 |
| -151K | 0.15 | ± 10% | 32 | 25.0 | 370 | 0.12 | 795 |
| -181K | 0.18 | ± 10% | 32 | 25.0 | 330 | 0.14 | 765 |
| -221K | 0.22 | ± 10% | 34 | 25.0 | 300 | 0.16 | 690 |
| -271K | 0.27 | ± 10% | 34 | 25.0 | 250 | 0.20 | 615 |
| -331K | 0.33 | ± 10% | 34 | 25.0 | 220 | 0.25 | 550 |
| -391K | 0.39 | ± 10% | 34 | 25.0 | 200 | 0.30 | 500 |
| -471K | 0.47 | ± 10% | 34 | 25.0 | 180 | 0.36 | 460 |
| -561K | 0.56 | ± 10% | 34 | 25.0 | 160 | 0.45 | 410 |
| -681K | 0.68 | ± 10% | 30 | 25.0 | 140 | 0.50 | 390 |
| -821K | 0.82 | ± 10% | 28 | 25.0 | 120 | 0.60 | 355 |
| -102K | 1.00 | ± 10% | 24 | 25.0 | 100 | 0.70 | 330 |
| -122K | 1.20 | ± 10% | 24 | 7.9 | 95 | 1.10 | 265 |
| -152K | 1.50 | ± 10% | 24 | 7.9 | 90 | 1.20 | 250 |
| -182K | 1.80 | ± 10% | 24 | 7.9 | 85 | 1.25 | 245 |
| -222K | 2.20 | ± 10% | 25 | 7.9 | 80 | 1.30 | 240 |
| -272K | 2.70 | ± 10% | 25 | 7.9 | 70 | 1.50 | 225 |
| -332K | 3.30 | ± 10% | 25 | 7.9 | 65 | 1.90 | 200 |
| -392K | 3.90 | ± 10% | 25 | 7.9 | 60 | 2.30 | 180 |
| -472K | 4.70 | ± 10% | 24 | 7.9 | 55 | 3.00 | 160 |
| -562K | 5.60 | ± 10% | 22 | 7.9 | 53 | 3.50 | 145 |
| -682K | 6.80 | ± 10% | 22 | 7.9 | 50 | 4.00 | 135 |
| -822K | 8.20 | ± 10% | 22 | 7.9 | 45 | 4.50 | 130 |
| -103K | 10.0 | ± 10% | 20 | 7.9 | 40 | 5.00 | 120 |

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%
 *Complete part # must include series # PLUS the dash #
 For surface finish information, refer to www.delevanfinishes.com