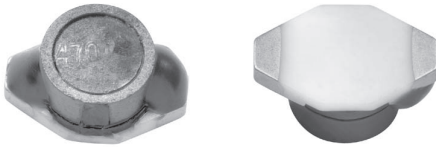


High Current, Surface Mount Inductor



FEATURES

- High energy storage.
- Low resistance.
- Tape and reel packaging for automatic handling.

ELECTRICAL SPECIFICATIONS

Inductance Range: 1.0 μ H to 1000 μ H, tested at 1.0Vrms.

Inductance Tolerance: 20%, tighter tolerances available upon request.

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

Resistance to Solder Heat: 260°C for 10 seconds.

MATERIALS

Core: Ferrite.

Wire: Enamelled copper wire.

Base: Ceramic.

Terminal: Gold over Nickel.

Adhesive: Epoxy resin.

STANDARD ELECTRICAL SPECIFICATIONS

| INDUCTANCE (μ H) | TOLERANCE | TEST FREQUENCY L (KHz) | DCR MAXIMUM (Ohms) | Isat (Amps) | Irms (Amps) |
|--------------------------|------------|---------------------------|-----------------------|----------------|----------------|
| 1.0 | $\pm 20\%$ | 100 | 0.05 | 2.9 | 2.9 |
| 1.5 | $\pm 20\%$ | 100 | 0.05 | 2.6 | 2.8 |
| 2.2 | $\pm 20\%$ | 100 | 0.07 | 2.3 | 2.4 |
| 3.3 | $\pm 20\%$ | 100 | 0.08 | 2.0 | 2.0 |
| 4.7 | $\pm 20\%$ | 100 | 0.09 | 1.5 | 1.5 |
| 6.8 | $\pm 20\%$ | 100 | 0.13 | 1.2 | 1.4 |
| 10 | $\pm 20\%$ | 100 | 0.16 | 1.1 | 1.1 |
| 15 | $\pm 20\%$ | 100 | 0.23 | 0.90 | 1.2 |
| 22 | $\pm 20\%$ | 100 | 0.37 | 0.70 | 0.80 |
| 33 | $\pm 20\%$ | 100 | 0.51 | 0.58 | 0.60 |
| 47 | $\pm 20\%$ | 100 | 0.64 | 0.50 | 0.50 |
| 68 | $\pm 20\%$ | 100 | 0.86 | 0.40 | 0.40 |
| 100 | $\pm 20\%$ | 100 | 1.27 | 0.31 | 0.30 |
| 150 | $\pm 20\%$ | 100 | 2.00 | 0.27 | 0.25 |
| 220 | $\pm 20\%$ | 100 | 3.11 | 0.22 | 0.20 |
| 330 | $\pm 20\%$ | 100 | 3.80 | 0.18 | 0.16 |
| 470 | $\pm 20\%$ | 100 | 5.06 | 0.16 | 0.15 |
| 680 | $\pm 20\%$ | 100 | 9.20 | 0.14 | 0.12 |
| 1000 | $\pm 20\%$ | 100 | 13.8 | 0.10 | 0.07 |

Inductance drop = 10% typ. at Isat
 $\Delta T = 15^\circ\text{C}$ typ. at I rms

DIMENSIONS in inches [millimeters]

| A (Max.) | B (Max.) | D (Max.) | E | F | G | H | I | J |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0.260 [6.60] | 0.175 [4.45] | 0.115 [2.92] | 0.050 [1.27] | 0.040 [1.02] | 0.170 [4.32] | 0.055 [1.40] | 0.160 [4.06] | 0.140 [3.56] |

DESCRIPTION

| | | |
|----------|------------------|----------------------|
| IDC-2512 | 10 μ H | $\pm 20\%$ |
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE |

SAP PART NUMBERING GUIDELINES (INTERNAL)

| | | | | |
|----------------|---------|--------------|------------------|------|
| I D C | 2 5 1 2 | N B | 1 0 0 | M |
| PRODUCT FAMILY | SIZE | PACKAGE CODE | INDUCTANCE VALUE | TOL. |

See the end of this data book for conversion tables