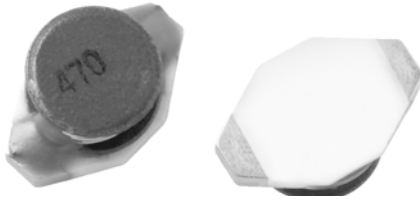


High Current, Surface Mount Inductors



FEATURES

- High energy storage
- Low resistance
- Tape and reel packaging for automatic handling
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition



RoHS
COMPLIANT
HALOGEN
FREE

ELECTRICAL SPECIFICATIONS

Inductance Range: 1.0 μH to 1000 μH , tested at 1.0 V_{RMS}
Inductance Tolerance: 20 %, tighter tolerance available upon request
Operating Temperature: - 40 °C to + 125 °C
Resistance to Solder Heat: 260 °C for 10 s

MECHANICAL SPECIFICATIONS

Core: Ferrite
Wire: Enamelled copper wire
Base: Ceramic
Terminals: Gold over nickel
Adhesive: Epoxy resin

| STANDARD ELECTRICAL SPECIFICATIONS | | | | | |
|------------------------------------|-------------|------------------------|-----------------------|----------------------|----------------------|
| INDUCTANCE (μH) | TOLERANCE | TEST FREQUENCY L (kHz) | DCR MAX. (Ω) | I_{SAT} (A) | I_{RMS} (A) |
| 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 |

Notes

- Inductance drop = 10 % typ. at I_{SAT}
- $\Delta T = 15 \text{ }^\circ\text{C}$ 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 μH | $\pm 20 \%$ | ER | e4 |
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC LEAD (Pb)-FREE STANDARD |

| GLOBAL PART NUMBER | | | | |
|--------------------|----------|------------------|----------|----------|
| I | D | C | 2 | 5 |
| PRODUCT FAMILY | | | SIZE | |
| E | R | 1 | 0 | 0 |
| PACKAGE CODE | | INDUCTANCE VALUE | | |
| M | TOL. | | | |



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