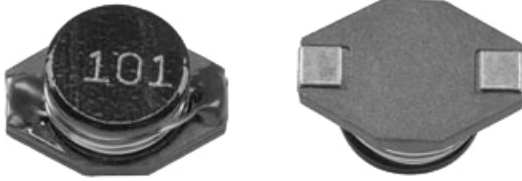


High Current, Surface Mount Inductors



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

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

MECHANICAL SPECIFICATIONS

Core: Ferrite
Wire: Enamelled copper wire
Base: LCP
Terminals: Nickel bronze
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 | 0.009 | 9.0 | 6.8 |
| 1.5 | $\pm 20 \%$ | 100 | 0.010 | 8.0 | 6.4 |
| 2.2 | $\pm 20 \%$ | 100 | 0.012 | 7.0 | 6.1 |
| 3.3 | $\pm 20 \%$ | 100 | 0.015 | 6.4 | 5.4 |
| 4.7 | $\pm 20 \%$ | 100 | 0.018 | 5.4 | 4.8 |
| 6.8 | $\pm 20 \%$ | 100 | 0.027 | 4.6 | 4.4 |
| 10 | $\pm 20 \%$ | 100 | 0.038 | 3.8 | 3.9 |
| 15 | $\pm 20 \%$ | 100 | 0.046 | 3.0 | 3.1 |
| 22 | $\pm 20 \%$ | 100 | 0.085 | 2.6 | 2.7 |
| 33 | $\pm 20 \%$ | 100 | 0.10 | 2.0 | 2.1 |
| 47 | $\pm 20 \%$ | 100 | 0.14 | 1.6 | 1.8 |
| 68 | $\pm 20 \%$ | 100 | 0.20 | 1.4 | 1.5 |
| 100 | $\pm 20 \%$ | 100 | 0.28 | 1.2 | 1.3 |
| 150 | $\pm 20 \%$ | 100 | 0.40 | 1.0 | 1.0 |
| 220 | $\pm 20 \%$ | 100 | 0.61 | 0.8 | 0.8 |
| 330 | $\pm 20 \%$ | 100 | 1.02 | 0.6 | 0.6 |
| 470 | $\pm 20 \%$ | 100 | 1.27 | 0.5 | 0.5 |
| 680 | $\pm 20 \%$ | 100 | 2.02 | 0.4 | 0.4 |
| 1000 | $\pm 20 \%$ | 100 | 3.00 | 0.3 | 0.3 |

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 | |
| 0.510 [12.95] | 0.370 [9.40] | 0.205 [5.21] | 0.100 [2.54] | 0.100 [2.54] | 0.300 [7.62] | 0.115 [2.92] | 0.290 [7.37] | 0.110 [2.79] | |

| DESCRIPTION | | | | |
|-------------|------------------|----------------------|--------------|-------------------------------|
| IDC-5020 | 10 μH | $\pm 20 \%$ | ER | e3 |
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC LEAD (Pb)-FREE STANDARD |

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



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