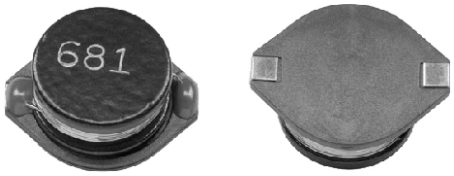
# High Current, Surface Mount Inductors - Non-Shielded




## FEATURES

- High energy storage
- Low resistance
- Tape and reel packaging for automatic handling
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

HALOGEN FREE

## ELECTRICAL SPECIFICATIONS

**Inductance Range:** 1.0 µH to 1000 µH, tested at 0.1 $V_{RMS}$

**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:** LCP

**Terminals:** nickel bronze

**Adhesive:** epoxy resin

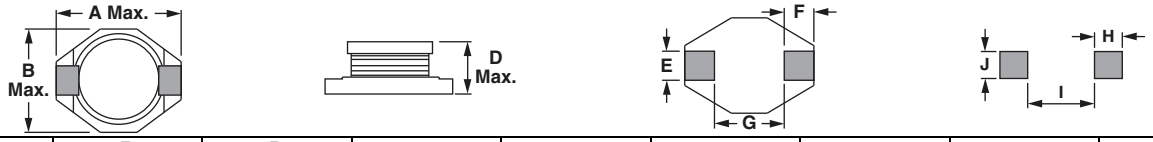
## STANDARD ELECTRICAL SPECIFICATIONS

| INDUCTANCE (µH) | TOLERANCE | TEST FREQUENCY L (kHz) | DCR MAX. (Ω) | $I_{SAT}$ (A) | $I_{RMS}$ (A) |
|---|---|---|---|---|---|
| 1.0 | ± 20 % | 100 | 0.009 | 20.0 | 8.6 |
| 2.2 | ± 20 % | 100 | 0.014 | 16.0 | 7.1 |
| 3.3 | ± 20 % | 100 | 0.018 | 14.0 | 6.2 |
| 5.6 | ± 20 % | 100 | 0.020 | 12.0 | 5.3 |
| 10 | ± 20 % | 100 | 0.031 | 10.0 | 4.3 |
| 15 | ± 20 % | 100 | 0.036 | 8.0 | 4.0 |
| 22 | ± 20 % | 100 | 0.047 | 7.0 | 3.5 |
| 33 | ± 20 % | 100 | 0.066 | 5.5 | 3.0 |
| 47 | ± 20 % | 100 | 0.086 | 4.5 | 2.6 |
| 68 | ± 20 % | 100 | 0.13 | 3.5 | 2.3 |
| 100 | ± 20 % | 100 | 0.19 | 3.0 | 1.8 |
| 150 | ± 20 % | 100 | 0.25 | 2.6 | 1.5 |
| 220 | ± 20 % | 100 | 0.38 | 2.4 | 1.2 |
| 330 | ± 20 % | 100 | 0.56 | 1.9 | 1.0 |
| 470 | ± 20 % | 100 | 0.85 | 1.4 | 0.82 |
| 680 | ± 20 % | 100 | 1.1 | 1.2 | 0.72 |
| 1000 | ± 20 % | 100 | 1.8 | 1.0 | 0.56 |

**Notes**

- Inductance drop = 10 % typ. at $I_{SAT}$
- ΔT = 40 °C typ. at $I_{RMS}$

## DIMENSIONS in inches [millimeters]




| A (Max.) | B (Max.) | D (Max.) | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|
| 0.730 [18.54] | 0.600 [15.24] | 0.280 [7.11] | 0.100 [2.54] | 0.100 [2.54] | 0.500 [12.70] | 0.115 [2.92] | 0.490 [12.45] | 0.110 [2.79] |

## DESCRIPTION

| IDC-7328 | 10 µH | ± 20 % | ER | e3 |
|---|---|---|---|---|
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC® LEAD (Pb)-FREE STANDARD |

## GLOBAL PART NUMBER

| I | D | C | 7 | 3 | 2 | 8 | E | R | 1 | 0 | 0 | M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PRODUCT FAMILY | | | SIZE | | | | PACKAGE CODE | | INDUCTANCE VALUE | | | TOL. |

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