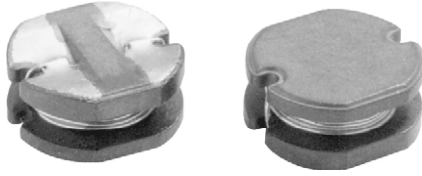




High Current, Surface Mount Inductors - Non-Shielded



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



RoHS
COMPLIANT
HALOGEN
FREE

ELECTRICAL SPECIFICATIONS

Inductance Range: 10 μ H to 560 μ H

Inductance Tolerance: 20 %

Operating Temperature: -40 °C to +125 °C (temperature rise included)

Storage Temperature: -40 °C to +125 °C

Resistance to Solder Heat: 260 °C for 10 s

MATERIALS

Core: ferrite

Wire: enamelled copper wire

Terminals: Ni and Sn / Ag / Cu

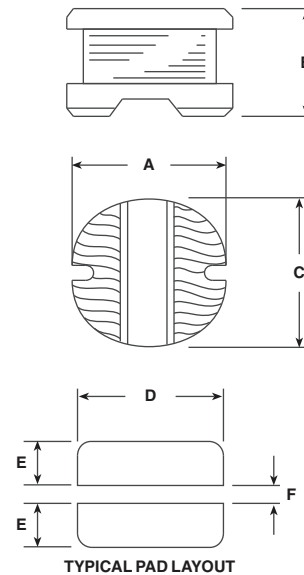
STANDARD ELECTRICAL SPECIFICATIONS

| INDUCTANCE (μ H) | TEST FREQUENCY L | DCR MAX. (Ω) | RATED DC CURRENT (A) ⁽¹⁾ |
|-----------------------|------------------|-----------------------|-------------------------------------|
| 10.0 | 2.52 MHz | 0.05 | 2.38 |
| 12.0 | 2.52 MHz | 0.06 | 2.13 |
| 15.0 | 2.52 MHz | 0.07 | 1.87 |
| 18.0 | 2.52 MHz | 0.08 | 1.73 |
| 22.0 | 2.52 MHz | 0.09 | 1.60 |
| 27.0 | 2.52 MHz | 0.10 | 1.44 |
| 33.0 | 2.52 MHz | 0.12 | 1.26 |
| 39.0 | 2.52 MHz | 0.15 | 1.20 |
| 47.0 | 2.52 MHz | 0.17 | 1.10 |
| 56.0 | 2.52 MHz | 0.20 | 1.01 |
| 68.0 | 2.52 MHz | 0.22 | 0.91 |
| 82.0 | 2.52 MHz | 0.25 | 0.85 |
| 100.0 | 1 kHz | 0.34 | 0.74 |
| 120.0 | 1 kHz | 0.40 | 0.69 |
| 150.0 | 1 kHz | 0.54 | 0.61 |
| 180.0 | 1 kHz | 0.62 | 0.56 |
| 220.0 | 1 kHz | 0.72 | 0.53 |
| 270.0 | 1 kHz | 0.95 | 0.45 |
| 330.0 | 1 kHz | 1.10 | 0.42 |
| 390.0 | 1 kHz | 1.24 | 0.38 |
| 470.0 | 1 kHz | 1.53 | 0.35 |
| 560.0 | 1 kHz | 1.90 | 0.32 |

Note

⁽¹⁾ Rated Current: Value obtained when current flows and the temperature has risen 40 °C or when DC current flows and the initial value of inductance has fallen by 10 %, whichever is smaller

DIMENSIONS in inches [millimeters]



| A | B | C |
|--------------------------------------|-------------------------------------|-------------------------------------|
| 0.394 \pm 0.01 [10.0 \pm 0.3] | 0.158 \pm 0.02 [4.0 \pm 0.5] | 0.355 \pm 0.01 [9.0 \pm 0.3] |
| D | E | F |
| 0.374 [9.5] | 0.148 [3.75] | 0.099 [2.5] |

| DESCRIPTION | | | | |
|-------------|------------------|----------------------|--------------|--------------------------------|
| IDCP-3916 | 10 μ H | \pm 20 % | ER | e1 |
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC® LEAD (Pb)-FREE STANDARD |

| GLOBAL PART NUMBER | | | | | | | | | | | | | |
|--------------------|---|---|---|------|---|---|---|--------------|---|------------------|---|---|----------------------|
| I | D | C | P | 3 | 9 | 1 | 6 | E | R | 1 | 0 | 0 | M |
| PRODUCT FAMILY | | | | SIZE | | | | PACKAGE CODE | | INDUCTANCE VALUE | | | INDUCTANCE TOLERANCE |



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