# 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:** 10 µH to 330 µH

**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

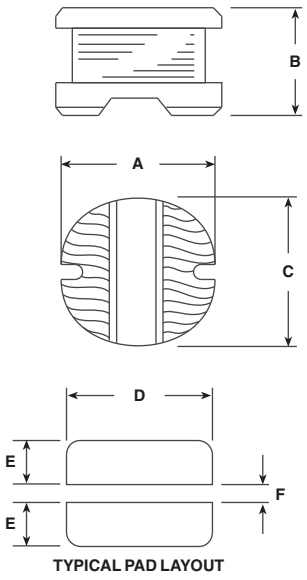
## STANDARD ELECTRICAL SPECIFICATIONS

| INDUCTANCE (µH) | TEST FREQUENCY L | DCR MAX. (Ω) | RATED DC CURRENT (A) (1) |
|---|---|---|---|
| 10.0 | 2.52 MHz | 0.08 | 1.44 |
| 12.0 | 2.52 MHz | 0.09 | 1.39 |
| 15.0 | 2.52 MHz | 0.10 | 1.24 |
| 18.0 | 2.52 MHz | 0.11 | 1.12 |
| 22.0 | 2.52 MHz | 0.13 | 1.07 |
| 27.0 | 2.52 MHz | 0.15 | 0.94 |
| 33.0 | 2.52 MHz | 0.17 | 0.85 |
| 39.0 | 2.52 MHz | 0.22 | 0.74 |
| 47.0 | 2.52 MHz | 0.25 | 0.68 |
| 56.0 | 2.52 MHz | 0.28 | 0.64 |
| 68.0 | 2.52 MHz | 0.33 | 0.59 |
| 82.0 | 2.52 MHz | 0.41 | 0.54 |
| 100.0 | 1 kHz | 0.48 | 0.51 |
| 120.0 | 1 kHz | 0.54 | 0.49 |
| 150.0 | 1 kHz | 0.75 | 0.40 |
| 180.0 | 1 kHz | 1.02 | 0.36 |
| 220.0 | 1 kHz | 1.20 | 0.31 |
| 270.0 | 1 kHz | 1.31 | 0.29 |
| 330.0 | 1 kHz | 1.50 | 0.28 |

**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]




TYPICAL PAD LAYOUT

| A | B | C |
|---|---|---|
| 0.307 ± 0.01 [7.8 ± 0.3] | 0.138 ± 0.02 [3.5 ± 0.5] | 0.276 ± 0.01 [7.0 ± 0.3] |
| **D** | **E** | **F** |
| 0.296 [7.5] | 0.118 [3.0] | 0.079 [2.0] |

## DESCRIPTION

| IDCP-3114 | 10 µH | ± 20 % | ER | e1 |
|---|---|---|---|---|
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC® LEAD (Pb)-FREE STANDARD |

## GLOBAL PART NUMBER

| I | D | C | P | 3 | 1 | 1 | 4 | E | R | 1 | 0 | 0 | M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PRODUCT FAMILY | | | | SIZE | | | | PACKAGE CODE | | INDUCTANCE VALUE | | | INDUCTANCE TOLERANCE |

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