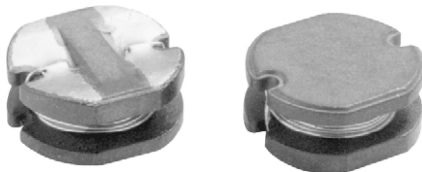


# High Current, Surface Mount Inductors - Non-Shielded



## ELECTRICAL SPECIFICATIONS

**Inductance Range:** 10  $\mu$ H to 220  $\mu$ 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

| STANDARD ELECTRICAL SPECIFICATIONS |                        |                          |   |
|------------------------------------|------------------------|--------------------------|---|
| INDUCTANCE<br>( $\mu$ H)           | TEST<br>FREQUENCY<br>L | DCR MAX.<br>( $\Omega$ ) | RATED DC<br>CURRENT<br>(A) <sup>(1)</sup> |
| 10.0                               | 2.52 MHz               | 0.10                     | 1.44                                      |
| 12.0                               | 2.52 MHz               | 0.12                     | 1.40                                      |
| 15.0                               | 2.52 MHz               | 0.14                     | 1.30                                      |
| 18.0                               | 2.52 MHz               | 0.15                     | 1.23                                      |
| 22.0                               | 2.52 MHz               | 0.18                     | 1.11                                      |
| 27.0                               | 2.52 MHz               | 0.20                     | 0.97                                      |
| 33.0                               | 2.52 MHz               | 0.23                     | 0.88                                      |
| 39.0                               | 2.52 MHz               | 0.32                     | 0.80                                      |
| 47.0                               | 2.52 MHz               | 0.37                     | 0.72                                      |
| 56.0                               | 2.52 MHz               | 0.42                     | 0.68                                      |
| 68.0                               | 2.52 MHz               | 0.46                     | 0.61                                      |
| 82.0                               | 2.52 MHz               | 0.60                     | 0.58                                      |
| 100.0                              | 1 kHz                  | 0.70                     | 0.52                                      |
| 120.0                              | 1 kHz                  | 0.93                     | 0.48                                      |
| 150.0                              | 1 kHz                  | 1.10                     | 0.40                                      |
| 180.0                              | 1 kHz                  | 1.38                     | 0.38                                      |
| 220.0                              | 1 kHz                  | 1.57                     | 0.35                                      |

### Note

<sup>(1)</sup> 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

## 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](http://www.vishay.com/doc?99912)



**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**

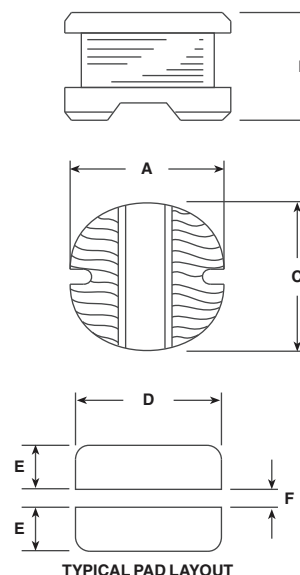
## MATERIALS

**Core:** ferrite

**Wire:** enamelled copper wire

**Terminals:** Ni and Sn / Ag / Cu

## DIMENSIONS in inches [millimeters]



| A                                   | B                                   | C                                   |
|-------------------------------------|-------------------------------------|-------------------------------------|
| 0.229 $\pm$ 0.01<br>[5.8 $\pm$ 0.3] | 0.177 $\pm$ 0.01<br>[4.5 $\pm$ 0.3] | 0.205 $\pm$ 0.01<br>[5.2 $\pm$ 0.3] |
| D                                   | E                                   | F                                   |
| 0.217 [5.5]                         | 0.085 [2.15]                        | 0.067 [1.7]                         |

## DESCRIPTION

|                  |                             |                              |              |                                |
|------------------|-----------------------------|------------------------------|--------------|--------------------------------|
| <b>IDCP-2218</b> | <b>10 <math>\mu</math>H</b> | <b><math>\pm</math> 20 %</b> | <b>ER</b>    | <b>e1</b>                      |
| MODEL            | INDUCTANCE VALUE            | INDUCTANCE TOLERANCE         | PACKAGE CODE | JEDEC® LEAD (Pb)-FREE STANDARD |

## GLOBAL PART NUMBER

|                |          |          |          |          |          |          |          |              |          |                  |          |          |                      |
|----------------|----------|----------|----------|----------|----------|----------|----------|--------------|----------|------------------|----------|----------|----------------------|
| <b>I</b>       | <b>D</b> | <b>C</b> | <b>P</b> | <b>2</b> | <b>2</b> | <b>1</b> | <b>8</b> | <b>E</b>     | <b>R</b> | <b>1</b>         | <b>0</b> | <b>0</b> | <b>M</b>             |
| PRODUCT FAMILY |          |          |          | SIZE     |          |          |          | PACKAGE CODE |          | INDUCTANCE VALUE |          |          | INDUCTANCE TOLERANCE |



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