



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

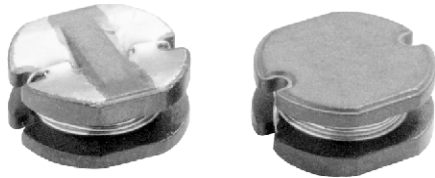
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## High Current, Surface Mount Inductors - Non-Shielded



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



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

### ELECTRICAL SPECIFICATIONS

**Inductance Range:** 1.0  $\mu$ H to 68  $\mu$ H

**Inductance Tolerance:** 20 %

**Operating Temperature:** -25 °C to +105 °C

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

**Resistance to Solder Heat:** 260 °C for 10 s

### MATERIALS

**Core:** Ferrite

**Wire:** Enamelled copper wire

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

| STANDARD ELECTRICAL SPECIFICATIONS |                  |                       |                                     |
|------------------------------------|------------------|-----------------------|-------------------------------------|
| INDUCTANCE ( $\mu$ H)              | TEST FREQUENCY L | DCR MAX. ( $\Omega$ ) | RATED DC CURRENT (A) <sup>(1)</sup> |
| 1.0                                | 7.96 MHz         | 0.033                 | 3.80                                |
| 1.4                                | 7.96 MHz         | 0.038                 | 3.30                                |
| 1.8                                | 7.96 MHz         | 0.042                 | 2.91                                |
| 2.2                                | 7.96 MHz         | 0.047                 | 2.60                                |
| 2.7                                | 7.96 MHz         | 0.052                 | 2.43                                |
| 3.3                                | 7.96 MHz         | 0.058                 | 2.15                                |
| 3.9                                | 7.96 MHz         | 0.076                 | 1.98                                |
| 4.7                                | 7.96 MHz         | 0.094                 | 1.70                                |
| 5.6                                | 7.96 MHz         | 0.101                 | 1.60                                |
| 6.8                                | 7.96 MHz         | 0.117                 | 1.41                                |
| 8.2                                | 7.96 MHz         | 0.132                 | 1.26                                |
| 10.0                               | 2.52 MHz         | 0.182                 | 1.15                                |
| 12.0                               | 2.52 MHz         | 0.210                 | 1.05                                |
| 15.0                               | 2.52 MHz         | 0.235                 | 0.92                                |
| 18.0                               | 2.52 MHz         | 0.338                 | 0.84                                |
| 22.0                               | 2.52 MHz         | 0.378                 | 0.76                                |
| 27.0                               | 2.52 MHz         | 0.522                 | 0.71                                |
| 33.0                               | 2.52 MHz         | 0.540                 | 0.64                                |
| 39.0                               | 2.52 MHz         | 0.587                 | 0.59                                |
| 47.0                               | 2.52 MHz         | 0.844                 | 0.54                                |
| 56.0                               | 2.52 MHz         | 0.937                 | 0.50                                |
| 68.0                               | 2.52 MHz         | 1.117                 | 0.46                                |

#### 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.

| DIMENSIONS in inches [millimeters]  |                                     |                                     |
|-------------------------------------|-------------------------------------|-------------------------------------|
| <p>TYPICAL PAD LAYOUT</p>           |                                     |                                     |
| A                                   | B                                   | C                                   |
| 0.178 $\pm$ 0.01<br>[4.5 $\pm$ 0.3] | 0.126 $\pm$ 0.01<br>[3.2 $\pm$ 0.3] | 0.158 $\pm$ 0.01<br>[4.0 $\pm$ 0.3] |
| D                                   | E                                   | F                                   |
| 0.178 [4.5]                         | 0.069 [1.75]                        | 0.059 [1.5]                         |

| DESCRIPTION      |                             |                              |              |                               |
|------------------|-----------------------------|------------------------------|--------------|-------------------------------|
| <b>IDCP-1813</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 |   |   |                      |  |
|--------------------|---|---|----------------------|--|
| I                  | D | C | P                    |  |
| PRODUCT FAMILY     |   |   |                      |  |
| 1                  | 8 | 1 | 3                    |  |
| SIZE               |   |   |                      |  |
| E                  | R |   |                      |  |
| PACKAGE CODE       |   |   |                      |  |
| 1                  | 0 | 0 |                      |  |
| INDUCTANCE VALUE   |   |   |                      |  |
|                    |   |   | M                    |  |
|                    |   |   | INDUCTANCE TOLERANCE |  |



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