# **IDC-2512**

Vishay Dale

FREE





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#### **ELECTRICAL SPECIFICATIONS**

Inductance Range: 1.0 µH to 1000 µH, tested at 0.1 V<sub>BMS</sub> Inductance Tolerance: 20 %, tighter tolerance available upon request

Operating Temperature: -40 °C to +125 °C Resistance to Solder Heat: 260 °C for 10 s

### STANDADD ELECTRICAL SDECIEICATIONS

### **FEATURES**

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

### **MECHANICAL SPECIFICATIONS**

Core: ferrite Wire: enamelled copper wire Base: ceramic Terminals: gold over nickel Adhesive: epoxy resin

| INDUCTANCE (µH) | TOLERANCE | TEST FREQUENCY L (kHz) | DCR MAX. (Ω) | I <sub>SAT</sub> (A) | I <sub>RMS</sub> (A) |  |
|-----------------|-----------|------------------------|--------------|----------------------|----------------------|--|
| 1.0             | ± 20 %    | 100                    | 0.05         | 2.9                  | 2.9                  |  |
| 1.5             | ± 20 %    | 100                    | 0.05         | 2.6                  | 2.8                  |  |
| 2.2             | ± 20 %    | 100                    | 0.07         | 2.3                  | 2.4                  |  |
| 3.3             | ± 20 %    | 100                    | 0.08         | 2.0                  | 2.0                  |  |
| 4.7             | ± 20 %    | 100                    | 0.09         | 1.5                  | 1.5                  |  |
| 6.8             | ± 20 %    | 100                    | 0.13         | 1.2                  | 1.4                  |  |
| 10              | ± 20 %    | 100                    | 0.16         | 1.1                  | 1.1                  |  |
| 15              | ± 20 %    | 100                    | 0.23         | 0.90                 | 1.2                  |  |
| 22              | ± 20 %    | 100                    | 0.37         | 0.70                 | 0.80                 |  |
| 33              | ± 20 %    | 100                    | 0.51         | 0.58                 | 0.60                 |  |
| 47              | ± 20 %    | 100                    | 0.64         | 0.50                 | 0.50                 |  |
| 68              | ± 20 %    | 100                    | 0.86         | 0.40                 | 0.40                 |  |
| 100             | ± 20 %    | 100                    | 1.27         | 0.31                 | 0.30                 |  |
| 150             | ± 20 %    | 100                    | 2.00         | 0.27                 | 0.25                 |  |
| 220             | ± 20 %    | 100                    | 3.11         | 0.22                 | 0.20                 |  |
| 330             | ± 20 %    | 100                    | 3.80         | 0.18                 | 0.16                 |  |
| 470             | ± 20 %    | 100                    | 5.06         | 0.16                 | 0.15                 |  |
| 680             | ± 20 %    | 100                    | 9.20         | 0.14                 | 0.12                 |  |
| 1000            | ± 20 %    | 100                    | 13.8         | 0.10                 | 0.07                 |  |

#### Notes

Inductance drop = 10 % typ. at I<sub>SAT</sub>

 $\Delta T = 15 \ ^{\circ}C \text{ typ. at } I_{RMS}$ 

| DIMENSIONS in inches [millimeters] |                            |              |                               |              |                       |                      |              |                 |  |  |  |  |
|------------------------------------|----------------------------|--------------|-------------------------------|--------------|-----------------------|----------------------|--------------|-----------------|--|--|--|--|
|                                    | Max.                       |              | D<br>Max                      | ۲.           |                       | <u>↓</u><br>E<br>_ ↓ |              | J<br>J<br>I → H |  |  |  |  |
| A (Max.)                           | B (Max.)                   | D (Max.)     | E                             | F            | G                     | н                    | I            | J               |  |  |  |  |
| 0.260 [6.60]                       | 0.175 [4.45]               | 0.115 [2.92] | 0.050 [1.27]                  | 0.040 [1.02] | 0.170 [4.32]          | 0.055 [1.40]         | 0.160 [4.06] | 0.140 [3.56]    |  |  |  |  |
| DESCRIPTION                        |                            |              |                               |              |                       |                      |              |                 |  |  |  |  |
| IDC-2512<br>MODEL                  | <b>10 μH</b><br>INDUCTANCE | VALUE INC    | ± <b>20 %</b><br>DUCTANCE TOL | FRANCE F     | ER<br>PACKAGE CODE    |                      |              | STANDARD        |  |  |  |  |
| GLOBAL PART NUMBER                 |                            |              |                               |              |                       |                      |              |                 |  |  |  |  |
| GLOBAL                             | PART NUM                   | BER          |                               |              |                       |                      |              |                 |  |  |  |  |
|                                    | PART NUM                   | 2            | 5 1<br>SIZE                   | 2            | E R<br>ACKAGE<br>CODE | I 0<br>INDUCTA       |              | M<br>TOL.       |  |  |  |  |

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