



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



### **ELECTRICAL SPECIFICATIONS**

Inductance Range: 1.0  $\mu H$  to 1000  $\mu H$ , tested at 0.1  $V_{RMS}$  Inductance Tolerance: 20 %, tighter tolerance available

upon request

Operating Temperature: -40  $^{\circ}$ C to +125  $^{\circ}$ C Resistance to Solder Heat: 260  $^{\circ}$ C for 10 s

#### **FEATURES**

- High energy storage
- Low resistance



 Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

**INDUCTANCE** 

**VALUE** 

TOL.



COMPLIANT HALOGEN

#### **MECHANICAL SPECIFICATIONS**

Core: ferrite

Wire: enamelled copper wire

Base: ceramic

**Terminals:** gold over nickel **Adhesive:** epoxy resin

STANDARD ELECTRICAL SPECIFICATIONS						
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

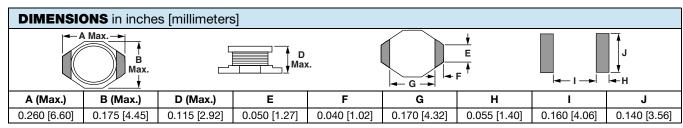
Inductance drop = 10 % typ. at I<sub>SAT</sub>

**PRODUCT** 

**FAMILY** 

•  $\Delta T = 15$  °C typ. at I<sub>RMS</sub>

**DESCRIPTION** 



IDC-2512	10 μH	± 20 %	ER	e4				
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD				
GLOBAL PART NUMBER								
I	D C	2 5 1 2	E R	1 0 0 M				

**PACKAGE** 

CODE

SIZE



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