

Vishay Dale

# **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



RoHS COMPLIANT HALOGEN FREE

#### **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 °C to +125 °C Resistance to Solder Heat: 260 °C for 10 s

#### **MECHANICAL SPECIFICATIONS**

Core: ferrite

Wire: enamelled copper wire

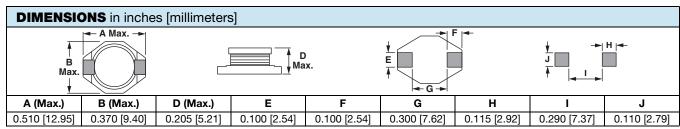
Base: LCP

Terminals: nickel bronze 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	0.009	9.0	6.8			
1.5	± 20 %	100	0.010	8.0	6.4			
2.2	± 20 %	100	0.012	7.0	6.1			
3.3	± 20 %	100	0.015	6.4	5.4			
4.7	± 20 %	100	0.018	5.4	4.8			
6.8	± 20 %	100	0.027	4.6	4.4			
10	± 20 %	100	0.038	3.8	3.9			
15	± 20 %	100	0.046	3.0	3.1			
22	± 20 %	100	0.085	2.6	2.7			
33	± 20 %	100	0.10	2.0	2.1			
47	± 20 %	100	0.14	1.6	1.8			
68	± 20 %	100	0.20	1.4	1.5			
100	± 20 %	100	0.28	1.2	1.3			
150	± 20 %	100	0.40	1.0	1.0			
220	± 20 %	100	0.61	0.8	0.8			
330	± 20 %	100	1.02	0.6	0.6			
470	± 20 %	100	1.27	0.5	0.5			
680	± 20 %	100	2.02	0.4	0.4			
1000	± 20 %	100	3.00	0.3	0.3			

#### **Notes**

- Inductance drop = 10 % typ. at  $I_{SAT}$   $\Delta T$  = 15 °C typ. at  $I_{RMS}$



DESCRIPTION								
IDC-5020	10 μH	± 20 %	ER	e3				
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD				

GLOBAL PART NUMBER									
PRODUCT FAMILY	5 0 2 0 SIZE	PACKAGE CODE	1 0 0 INDUCTANCE VALUE	M TOL.					



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Vishay

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