



High Current, Surface Mount Inductors





ELECTRICAL SPECIFICATIONS

Inductance Range: 1.0 μH to 1000 μH , tested at 1.0 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

FEATURES

- High energy storage
- Low resistance
- Tape and reel packaging for automatic handling
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition



COMPLIANT HALOGEN FREE

MECHANICAL SPECIFICATIONS

Core: Ferrite

Wire: Enamelled copper wire

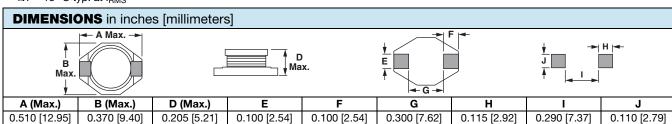
Base: LCP

Terminals: Nickel bronze Adhesive: Epoxy resin

TANDARD ELECTRICAL SPECIFICATIONS						
INDUCTANCE (µH)	TOLERANCE	TEST FREQUENCY L (kHz)	DCR MAX. (Ω)	I _{SAT} (A)	I _{RMS} (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} ΔT = 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									
I D C	5 0 2 0 SIZE	E R	1 0 0	M TOL					
FAMILY	SIZL	CODE	VALUE	IOL					



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Vishay

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