

High Current, Surface-Mount Inductors - Non-Shielded





ELECTRICAL SPECIFICATIONS

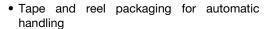
Inductance Range: 1.0 μH to 1000 μH , tested at 0.1 V_{RMS} Inductance Tolerance: 20 %, tighter tolerance available

upon request

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

FEATURES

- High energy storage
- Low resistance



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



ROHS COMPLIANT HALOGEN FREE

MECHANICAL SPECIFICATIONS

Core: ferrite

Wire: enamelled copper wire

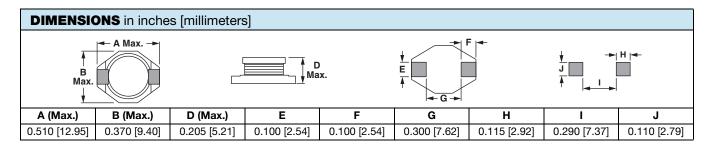
Base: LCP

Terminals: nickel bronze **Adhesive:** epoxy resin

STANDARD ELECTRICAL SPECIFICATIONS									
PART NUMBER	INDUCTANCE (µH)	TOLERANCE	TEST FREQUENCY L (kHz)	DCR MAX. (Ω)	I _{SAT} (A)	I _{RMS} (A)			
IDC5020ER1R0M	1.0	± 20 %	100	0.009	9.0	6.8			
IDC5020ER1R5M	1.5	± 20 %	100	0.010	8.0	6.4			
IDC5020ER2R2M	2.2	± 20 %	100	0.012	7.0	6.1			
IDC5020ER3R3M	3.3	± 20 %	100	0.015	6.4	5.4			
IDC5020ER4R7M	4.7	± 20 %	100	0.018	5.4	4.8			
IDC5020ER6R8M	6.8	± 20 %	100	0.027	4.6	4.4			
IDC5020ER100M	10	± 20 %	100	0.038	3.8	3.9			
IDC5020ER150M	15	± 20 %	100	0.046	3.0	3.1			
IDC5020ER220M	22	± 20 %	100	0.085	2.6	2.7			
IDC5020ER330M	33	± 20 %	100	0.10	2.0	2.1			
IDC5020ER470M	47	± 20 %	100	0.14	1.6	1.8			
IDC5020ER680M	68	± 20 %	100	0.20	1.4	1.5			
IDC5020ER101M	100	± 20 %	100	0.28	1.2	1.3			
IDC5020ER151M	150	± 20 %	100	0.40	1.0	1.0			
IDC5020ER221M	220	± 20 %	100	0.61	0.8	0.8			
IDC5020ER331M	330	± 20 %	100	1.02	0.6	0.6			
IDC5020ER471M	470	± 20 %	100	1.27	0.5	0.5			
IDC5020ER681M	680	± 20 %	100	2.02	0.4	0.4			
IDC5020ER102M	1000	± 20 %	100	3.00	0.3	0.3			

Notes

- Inductance drop = 10 % typ. at I_{SAT}
- ΔT = 15 °C typ. at I_{RMS}





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Vishay Dale

DESCRIPTION	V			
IDC-5020	10 μΗ	± 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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