IDC-5020



Vishay Dale

High Current, Surface Mount Inductors - Non-Shielded



ELECTRICAL SPECIFICATIONS

Inductance Range: 1.0 µH to 1000 µH, tested at 0.1 V_{BMS} 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
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>



COMPLIANT HALOGEN FREE

MECHANICAL SPECIFICATIONS Core: ferrite Wire: enamelled copper wire Base: LCP Terminals: nickel bronze Adhesive: epoxy resin

STANDARD ELECTRICAL SPECIFICATIONS									
INDUCTANCE (µH) TOLERANCI		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}

DIMENSIONS in inches [millimeters]											
A B Max. ↓	A Max.		D Ma					H			
A (Max.)	B (Max.)	D (Max.)	E	F	G	н	I	J			
0.510 [12.95]	0.370 [9.40]	0.205 [5.21]	0.100 [2.54]	0.100 [2.54]	0.300 [7.62]	0.115 [2.92]	0.290 [7.37]	0.110 [2.79]			
DESCRIPT IDC-5020 MODEL		10 μH ΓANCE VALUE		0 % E TOLERANCE	ER PACKAGE C	ODE JEDEC	e3 ® LEAD (Pb)-FR	EE STANDARD			
GLOBAL PART NUMBER											
	D C RODUCT FAMILY	5	0 2 SIZE		E R PACKAGE CODE	1 0 INDUCTA VALU		M TOL.			
Bevision: 21-Ap	r_17			1			Document	Number: 34007			

Revision: 21-Apr-17

Document Number: 3400

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