Low Profile, High Current Inductors



FEATURES

- Shielded construction
- Frequency range up to 5.0 MHz
- Handles high transient current spikes without saturation
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

HALOGEN FREE

APPLICATIONS

- PDA/notebook/desktop/server applications
- High current POL converters
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for field programmable gate array (FPGA)

STANDARD ELECTRICAL SPECIFICATIONS

L_0 INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (µH)	DCR 25 °C (mΩ)		HEAT RATING CURRENT DC I_{DC} (A) (3)		SATURATION CURRENT DC I_{SAT} (A) (4)	
	TYP.	MAX.	TYP.	MAX.	TYP.	MAX.
0.47	15	18	5.5	5.00	5.70	5.10
0.56	17	22	5.40	4.90	5.60	5.05
0.68	19	25	5.00	4.50	5.50	5.00
1.0	20	25	4.30	3.80	3.85	3.50
1.2	25	30	3.80	3.40	3.70	3.30
1.5	33	40	3.40	3.05	3.60	3.20
1.8	34	41	3.20	2.85	3.20	2.90
2.2	35	45	3.10	2.80	3.10	2.80
3.3	45	56	2.75	2.50	2.45	2.20
4.7	69	89	2.30	2.07	2.05	1.85
6.8	90	115	2.10	1.90	1.75	1.60
8.2	105	132	1.80	1.60	1.65	1.44
10.0	134	169	1.50	1.35	1.55	1.40
15.0	185	222	1.45	1.30	1.10	1.00
22.0	250	315	1.20	1.08	0.95	0.85
33.0	405	486	0.90	0.81	0.70	0.63
47.0	495	594	0.80	0.72	0.58	0.52
68.0	885	1062	0.58	0.52	0.48	0.43
100.0	1545	1854	0.52	0.47	0.46	0.41
220.0	3150	3780	0.30	0.27	0.33	0.30
330.0	4200	5040	0.29	0.26	0.26	0.23

Notes

(1) All test data is referenced to 25 °C ambient

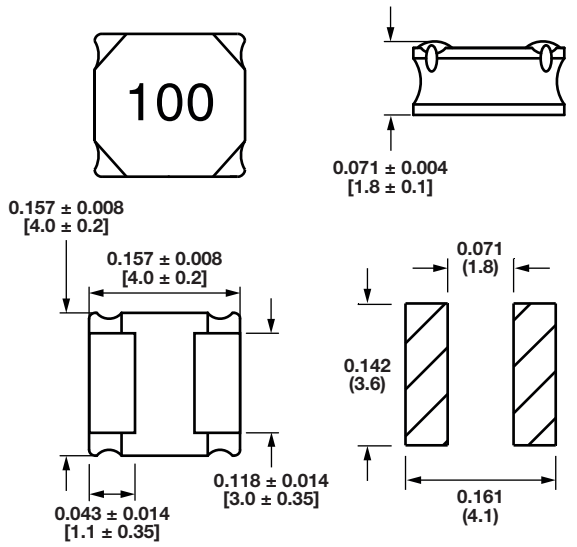
(2) Operating temperature range -55 °C to +125 °C

(3) DC current (A) that will cause an approximate ΔT of 40 °C

(4) DC current (A) that will cause L_0 to drop approximately 30 %

(5) The part temperature (ambient + temp. rise) should not exceed 125 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application

DIMENSIONS in inches [millimeters]



DESCRIPTION

IFSC-1515AH-01	3.3 µH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	F	S	C	1	5	1	5	A	H	E	R	3	R	3	M	0	1
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

For technical questions, contact: magnetics@vishay.com

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