Low Profile, High Current Inductors

FEATURES

- Frequency range up to 5 MHz
- Ferrite core with polyurethane enameled copper wire
- Epoxy resin used for adhesive
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

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

PART NUMBER	L_0 INDUCTANCE AT 100 kHz, 1 V, 0 A (µH)	TOLERANCE (%)	DCR NOM. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) (3)	SATURATION CURRENT DC TYP. (A) (4)	MARKING
IFL1616AEER1R0N	1.0	30	48	58	1.85	3.60	A
IFL1616AEER1R5N	1.5	30	57	68	1.70	2.90	C
IFL1616AEER2R2N	2.2	30	66	79	1.60	2.50	E
IFL1616AEER3R3N	3.3	30	94	113	1.45	2.20	G
IFL1616AEER4R7M	4.7	20	120	144	1.30	1.90	I
IFL1616AEER5R6M	5.6	20	140	168	1.20	1.60	J
IFL1616AEER6R8M	6.8	20	170	204	1.10	1.40	K
IFL1616AEER8R2M	8.2	20	210	252	1.00	1.20	L
IFL1616AEER100M	10	20	230	276	0.95	1.10	M
IFL1616AEER150M	15	20	350	420	0.75	0.90	O
IFL1616AEER220M	22	20	490	588	0.63	0.80	Q
IFL1616AEER330M	33	20	710	852	0.58	0.60	S
IFL1616AEER470M	47	20	1080	1296	0.50	0.55	U
IFL1616AEER680M	68	20	1650	1980	0.40	0.40	W
IFL1616AEER820M	82	20	1880	2256	0.30	0.35	X
IFL1616AEER101M	100	20	2460	2952	0.25	0.33	Y

Notes

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

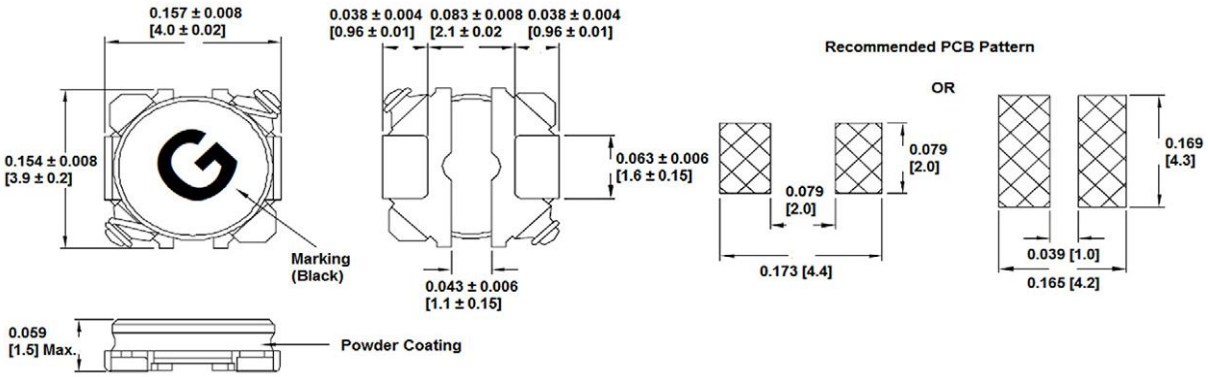
(2) Operating and Storage temperature range -40 °C to +105 °C

(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 105 °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

IFL-1616AE	4.7 µH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	F	L	1	6	1	6	A	E	E	R	4	R	7	M
PRODUCT FAMILY			SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.

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