Vishay Dale

IFLS-1616AE

## Low Profile Shielded 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

### **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 <sub>0</sub> 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) <sup>(3)</sup>	SATURATION CURRENT DC TYP. (A) <sup>(4)</sup>	MARKING	
IFLS1616AEER1R0N	1.0	30	43	52	2.30	2.30	А	
IFLS1616AEER1R5N	1.5	30	50	60	2.05	2.00	С	
IFLS1616AEER2R2N	2.2	30	57	68	1.85	1.70	E	
IFLS1616AEER3R3N	3.3	30	80	96	1.60	1.30	G	
IFLS1616AEER4R7M	4.7	20	99	119	1.25	1.10	I	
IFLS1616AEER5R6M	5.6	20	120	144	1.20	1.00	J	
IFLS1616AEER6R8M	6.8	20	140	168	1.15	1.00	К	
IFLS1616AEER100M	10	20	190	228	1.00	0.78	М	
IFLS1616AEER150M	15	20	280	336	0.88	0.63	0	
IFLS1616AEER220M	22	20	390	468	0.80	0.57	Q	
IFLS1616AEER330M	33	20	560	672	0.56	0.44	S	
IFLS1616AEER470M	47	20	880	1056	0.40	0.35	U	
IFLS1616AEER101M	100	20	1730	2076	0.30	0.27	Y	

### Notes

<sup>(1)</sup> All test data is referenced to 25 °C ambient

<sup>(2)</sup> Operating and Storage temperature range -40 °C to +105 °C

DC current (A) that will cause an approximate  $\Delta T$  of 40 °C (3)

(4) DC current (A) that will cause L<sub>0</sub> to drop approximately 30 %

The part temperature (ambient + temp. rise) should not exceed 105 °C under worst case operating conditions. Circuit design, component (5) 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

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#### **DIMENSIONS** in inches [millimeters] 0.157 ± 0.008 [4.0 ± 0.2] $\begin{array}{c} 0.038 \pm 0.004 \ 0.083 \pm 0.008 \ 0.038 \pm 0.004 \\ [0.96 \pm 0.1] \ \ [2.1 \pm 0.2] \ \ \ [0.96 \pm 0.1] \end{array}$ Recommended PCB Pattern 0.165 OR [4.2] 0.173 [4.4] 0.063 ± 0.006 [1.6 ± 0.15] 0.157 ± 0.008 [4.0 ± 0.2] 0.079 0.169 [4.3] ŧ [2.0] 0.079 Marking (Black) 0.039 0.043 ± 0.006 [1.1 ± 0.15] [1.0] 0.059 [1.5] Max. F.F. 为 ]\_\_\_\_

DESCRIPTION								
IFLS-1616AE	4.7 μH ± 20 %		ER	e3				
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC <sup>®</sup> LEAD (Pb)-FREE STANDARD				

GLOBAL PART NUMBER								
I F L S   PRODUCT FAMILY	1 6	1 6 SIZE	AE		R KAGE DDE	4 R INDUCTAN VALUE	7 CE	M TOL.



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