

## 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](http://www.vishay.com/doc?99912)



**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**

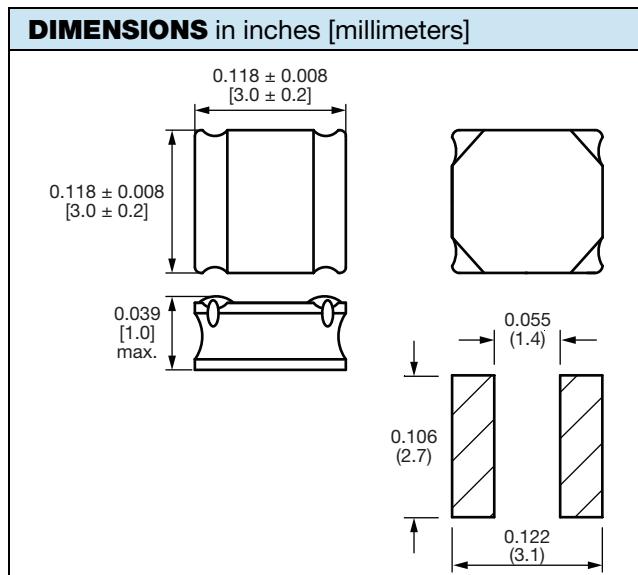
STANDARD ELECTRICAL SPECIFICATIONS						
$L_0$ INDUCTANCE $\pm 20\%$ AT 100 kHz, 0.25 V, 0 A ( $\mu$ H)	DCR 25 °C ( $m\Omega$ )		HEAT RATING CURRENT DC		SATURATION CURRENT DC	
	TYP.	MAX.	TYP.	MAX.	TYP.	MAX.
4.7	166	199	1.30	1.17	1.00	0.90
6.8	249	299	1.05	0.95	0.85	0.75
10.0	365	438	0.85	0.77	0.75	0.68
15.0	672	807	0.72	0.64	0.58	0.52
22.0	879	1055	0.52	0.44	0.47	0.43
33.0	1410	1692	0.41	0.35	0.38	0.34
47.0	1990	2388	0.30	0.27	0.33	0.30

### 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  $\Delta T$  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.

### 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)



DESCRIPTION					
IFSC-1111AZ-01	4.7 $\mu$ H	$\pm 20\%$	ER	e3	
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD	

GLOBAL PART NUMBER																	
I	F	S	C	1	1	1	1	A	Z	E	R	4	R	7	M	0	1
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE			TOLERANCE		SERIES

4R7 = 4.7  $\mu$ H      M = 20 %

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