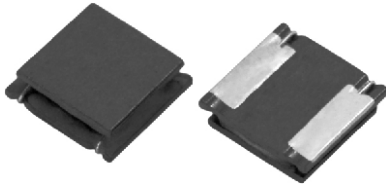


## Low Profile, High Current Inductors



### FEATURES

- Shielded construction
- Frequency range up to 5.0 MHz
- Handles high transient current spikes without saturation
- Compliant to RoHS Directive 2011/65/EU


**RoHS**  
COMPLIANT

### APPLICATIONS

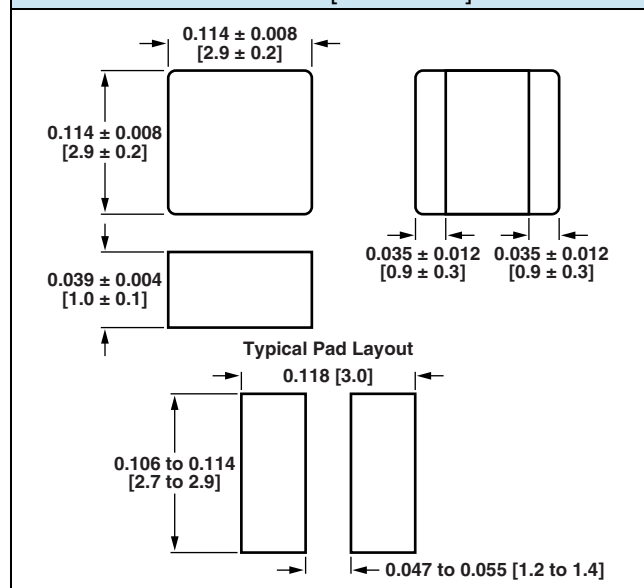
- PDA/notebook/desktop/server applications
- High current POL converters
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for field programmable gate array (FPGA)

STANDARD ELECTRICAL SPECIFICATIONS				
$L_0$ INDUCTANCE $\pm 20\%$ AT 100 kHz, 0.25 V, 0 A ( $\mu\text{H}$ )	DCR TYP. 25 °C (m $\Omega$ )	DCR MAX. 25 °C (m $\Omega$ )	HEAT RATING CURRENT DC TYP. (A) <sup>(3)</sup>	SATURATION CURRENT DC TYP. (A) <sup>(4)</sup>
1.0	55	68	2.00	1.50
1.5	65	75	1.45	1.35
2.2	90	105	1.30	1.10
3.3	130	150	1.20	0.90
4.7	170	200	1.00	0.75
6.8	200	230	0.90	0.65
10.0	300	340	0.80	0.52
15.0	500	570	0.65	0.40
22.0	650	750	0.50	0.35
33.0	1000	1250	0.40	0.30
47.0	1800	2050	0.35	0.235

#### 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.

### DIMENSIONS in inches [millimeters]



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

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 VALUE			TOL.		SERIES		



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