

## Shielded, Low-Profile, SMD Ferrite Power Inductors



### FEATURES

- 4.0 mm x 4.0 mm x 1.8 mm max. SMD package
- Low profile inductors from 0.33  $\mu$ H to 330  $\mu$ H
- Wirewound ferrite core encapsulated with iron embedded epoxy for magnetic shielding
- Material categorization:  
for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**  
**GREEN**  
(5-2008)

### LINKS TO ADDITIONAL RESOURCES


[Product Page](#)

### APPLICATIONS

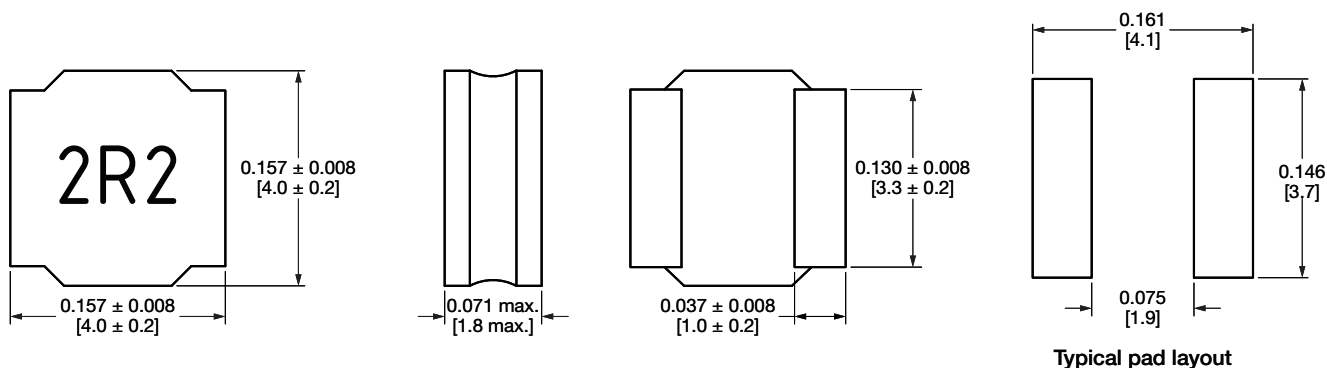
- DC/DC power supplies
- Noise suppression and filtering
- Portable and hand held devices
- HDD and SSD storage

### STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	L <sub>0</sub> INDUCTANCE ( $\mu$ H)	INDUCTANCE TOLERANCE (%)	DCR TYP. 25 °C (m $\Omega$ )	DCR MAX. 25 °C (m $\Omega$ )	HEAT RATING CURRENT DC TYP. I <sub>DC</sub> (A) <sup>(1)</sup>	SATURATION CURRENT DC TYP. I <sub>SAT</sub> (A) <sup>(2)</sup>	SRF MIN. (MHz)
IFSC1616AHERR33N01	0.33	30	12	16	4.7	8	230
IFSC1616AHERR47N01	0.47	30	17	20	4	7.2	220
IFSC1616AHER1R0N01	1	30	27	32	3.7	4.8	90
IFSC1616AHER1R5N01	1.5	30	31	37	3.3	4.3	70
IFSC1616AHER2R2M01	2.2	20	42	50	2.9	3.4	60
IFSC1616AHER3R3M01	3.3	20	55	66	2.5	2.9	45
IFSC1616AHER4R7M01	4.7	20	70	84	2.1	2.2	35
IFSC1616AHER6R8M01	6.8	20	98	118	1.7	1.8	30
IFSC1616AHER100M01	10	20	150	180	1.5	1.5	25
IFSC1616AHER150M01	15	20	210	252	1.2	1.2	18
IFSC1616AHER220M01	22	20	290	348	1	1.1	15
IFSC1616AHER330M01	33	20	460	552	0.82	0.9	12
IFSC1616AHER470M01	47	20	620	744	0.66	0.7	11
IFSC1616AHER680M01	68	20	810	972	0.6	0.62	7.1
IFSC1616AHER101M01	100	20	1200	1560	0.47	0.57	5.2
IFSC1616AHER151M01	150	20	2600	3120	0.33	0.47	5.1
IFSC1616AHER221M01	220	20	3200	3840	0.29	0.38	4.2
IFSC1616AHER331M01	330	20	4900	5880	0.23	0.31	3.2

#### Notes

- All test data is referenced to 25 °C ambient
- Test condition: 100 kHz, 1 V
- Operating temperature range -40 °C to +125 °C
- Resistance to solder heat: 260 °C for 5 s (2 times max. through reflow)
- (1) DC current (A) that will cause an approximate  $\Delta T$  of 40 °C
- (2) DC current (A) that will cause L<sub>0</sub> to drop approximately 30 %

**DIMENSIONS** in inches [millimeters]

**DESCRIPTION**

<b>IFSC1616AH-01</b>	<b>2.2 <math>\mu</math>H</b>	<b>± 30 %</b>	<b>ER</b>	<b>e3</b>
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

**GLOBAL PART NUMBER**

<b>I F S C</b>	<b>1 6 1 6 A H</b>	<b>E R</b>	<b>2 R 2</b>	<b>M</b>	<b>0 1</b>
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	SERIES
		<b>ER</b> = tape and reel	<b>2R2</b> = 2.2 $\mu$ H	<b>M</b> = ± 20 % <b>N</b> = ± 30 %	



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