

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 μH to 330 μH
- Wirewound ferrite core encapsulated with iron embedded epoxy for magnetic shielding
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

LINKS TO ADDITIONAL RESOURCES



Product Page

APPLICATIONS

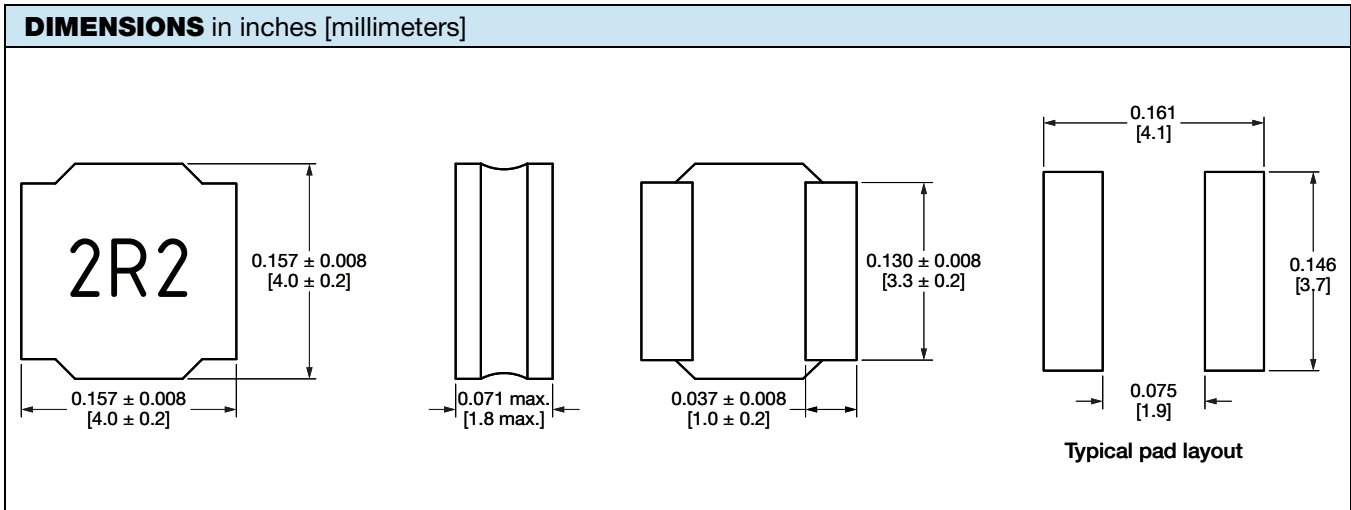
- DC/DC power supplies
- Noise suppression and filtering
- Portable and hand held devices
- HDD and SSD storage

STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	L_0 INDUCTANCE (μH)	INDUCTANCE TOLERANCE (%)	DCR TYP. 25 °C ($\text{m}\Omega$)	DCR MAX. 25 °C ($\text{m}\Omega$)	HEAT RATING CURRENT DC TYP. I_{DC} (A) ⁽¹⁾	SATURATION CURRENT DC TYP. I_{SAT} (A) ⁽²⁾	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
 - Storage condition: -40 °C to +125 °C (on board); and -10 °C to +40 °C and < 70 % RH (in component packaging)
 - Resistance to solder heat: 260 °C for 5 s (2 times max. through reflow)
- (1) DC current (A) that will cause an approximate ΔT of 40 °C
 (2) DC current (A) that will cause L_0 to drop approximately 30 %



DESCRIPTION					
IFSC1616AH-01	2.2 μH	± 30 %	ER	e3	
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD	

GLOBAL PART NUMBER					
I F S C	1 6 1 6 A H	E R	2 R 2	M	0 1
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	SERIES
		ER = tape and reel	2R2 = 2.2 μH	M = ± 20 % N = ± 30 %	



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Vishay products are not designed for use in life-saving or life-sustaining applications or any application in which the failure of the Vishay product could result in personal injury or death unless specifically qualified in writing by Vishay. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.