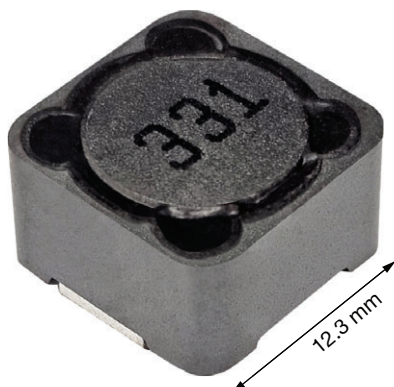


Shielded SMD Power Inductor



FEATURES

- 12.3 mm x 12.3 mm x 8.0 mm SMD package
- Shielded ferrite construction
- Material categorization:
for definitions of compliance please see
www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

APPLICATIONS

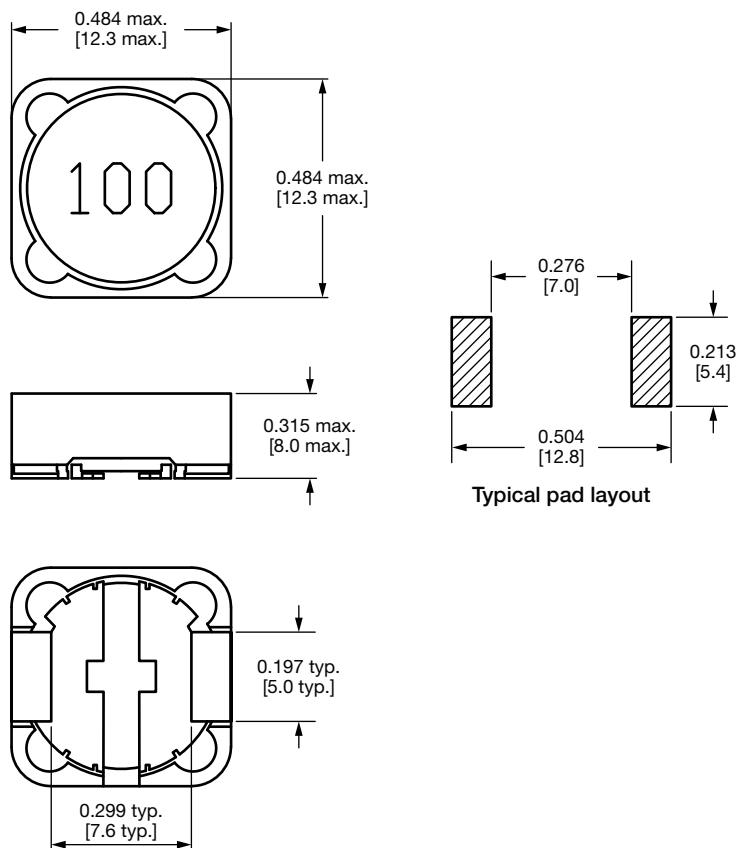
- DC/DC power supplies
- LCD displays
- Noise suppression and filtering
- Lighting drivers

STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	L ₀ INDUCTANCE AT 0 A (μH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) ⁽¹⁾	SATURATION CURRENT DC TYP. (A) ⁽²⁾		SRF TYP. (MHz)
					20 % DROP	30 % DROP	
IFDC5050HZER3R3N	3.3	11	13	10.3	7.8	14	35
IFDC5050HZER4R7N	4.7	13	16	10.1	6.8	13	30
IFDC5050HZER6R1N	6.1	16	18	9.6	6.6	11	24
IFDC5050HZER6R8N	6.8	18	23	8.7	6.4	10	21
IFDC5050HZER100M	10	20	25	7.8	5.4	8.4	17
IFDC5050HZER150M	15	23	27	7.1	4.5	6.8	13
IFDC5050HZER180M	18	30	39	6.6	3.9	6.7	12
IFDC5050HZER220M	22	40	43	6.3	3.6	5.8	11
IFDC5050HZER270M	27	44	46	5.7	3.4	5.4	10
IFDC5050HZER330M	33	60	65	5.1	3	4.8	9.5
IFDC5050HZER390M	39	69	73	4.5	2.75	4.4	8.5
IFDC5050HZER470M	47	80	100	4.1	2.5	4.1	7.5
IFDC5050HZER560M	56	105	110	3.6	2.35	3.6	7
IFDC5050HZER680M	68	132	140	3.2	2.1	3.4	6.5
IFDC5050HZER820M	82	150	160	2.95	1.95	2.86	5
IFDC5050HZER101M	100	165	220	2.6	1.7	2.7	4.5
IFDC5050HZER121M	120	200	250	2.4	1.6	2.6	4.3
IFDC5050HZER151M	150	240	280	2.15	1.42	2.15	4.1
IFDC5050HZER181M	180	300	350	1.9	1.3	2.05	4
IFDC5050HZER221M	220	320	390	1.75	1.16	1.9	3.4
IFDC5050HZER271M	270	400	560	1.6	1.06	1.6	3.1
IFDC5050HZER331M	330	560	640	1.5	0.95	1.45	2.9
IFDC5050HZER391M	390	620	700	1.4	0.88	1.4	2.7
IFDC5050HZER471M	470	755	980	1.25	0.79	1.3	2.2
IFDC5050HZER561M	560	876	1070	1.1	0.73	1.12	2
IFDC5050HZER681M	680	1300	1460	1.0	0.67	1.1	1.7
IFDC5050HZER821M	820	1422	1640	0.9	0.6	0.9	1.4
IFDC5050HZER102M	1000	1640	1820	0.9	0.55	0.9	1.3

Notes

- All test data is referenced to 25 °C ambient
- Test condition: 100 kHz, 0.25 V for 6.8 μH and below, and 1 kHz, 0.25 V for 10 μH and above
- Operating temperature range -40 °C to +125 °C
- Rated operating voltage = 120 V
- ⁽¹⁾ DC current (A) that will cause an approximate ΔT of 40 °C
- ⁽²⁾ DC current (A) that will cause L₀ to drop approximately 20 % and 30 %

DIMENSIONS in inches [millimeters]

DESCRIPTION

IFDC-5050HZ	4.7 μH	$\pm 30 \%$	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I F D C	5 0 5 0 H Z	E R	4 R 7	N
PRODUCT FAMILY	SIZE	PACKAGE CODE	IMPEDANCE VALUE	INDUCTANCE TOLERANCE
		ER = tape and reel	4R7 = 4.7 μ H	M = $\pm 20 \%$ N = $\pm 30 \%$



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.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. 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.