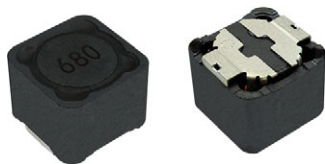




Ferrite Power Inductor, Shielded Drum Core



LINKS TO ADDITIONAL RESOURCES



Product Page

ELECTRICAL SPECIFICATIONS

Operating temperature:

-40 °C to +105 °C (temperature rise included)

Resistance to solder heat:

255 °C for 10 s (2 times max. through reflow)

FEATURES

- 12.5 mm x 12.5 mm x 10.0 mm max. SMD package
- Shielded drum core ferrite construction for reduced leakage flux
- Inductance range: 1 μ H to 1200 μ H
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

APPLICATIONS

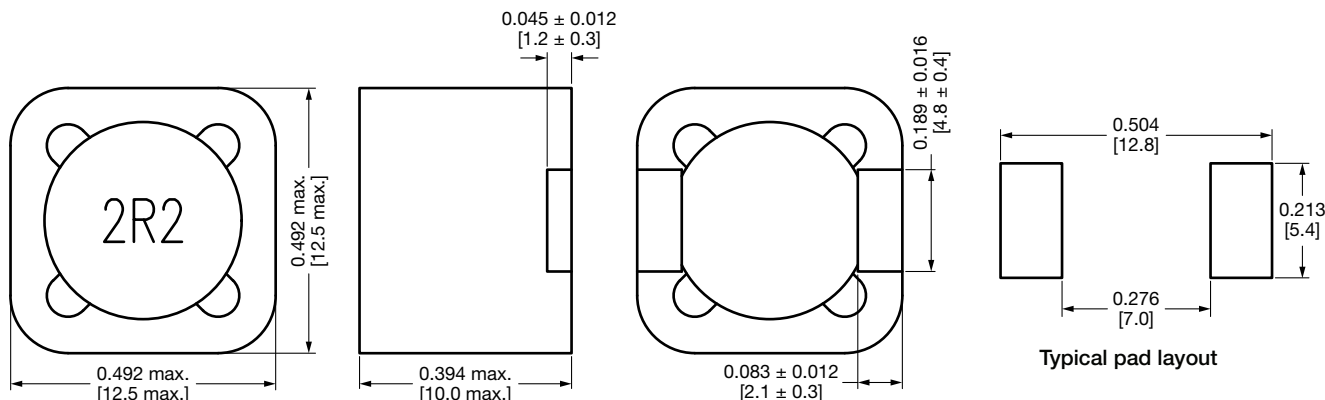
- DC/DC power supplies
- Noise suppression and filtering

STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	L ₀ INDUCTANCE (μ H)	INDUCTANCE TOLERANCE (%)	DCR MAX. (m Ω)	HEAT RATING CURRENT DC TYP. (A) ⁽¹⁾	SATURATION CURRENT DC TYP. (A) ⁽²⁾
IFDC5050JZER1R0N	1.0	30	6	11.00	11.00
IFDC5050JZER1R8N	1.8	30	8	10.20	10.20
IFDC5050JZER2R2N	2.2	30	9	9.50	9.50
IFDC5050JZER3R3N	3.3	30	10	9.00	9.00
IFDC5050JZER4R7N	4.7	30	12	8.50	8.50
IFDC5050JZER5R6N	5.6	30	14	8.00	8.00
IFDC5050JZER6R8N	6.8	30	15	7.90	7.90
IFDC5050JZER8R2N	8.2	30	17	7.30	7.30
IFDC5050JZER100M	10	20	18	6.50	6.50
IFDC5050JZER120M	12	20	22	6.30	6.30
IFDC5050JZER150M	15	20	32	5.80	5.80
IFDC5050JZER180M	18	20	35	5.50	5.50
IFDC5050JZER220M	22	20	38	5.20	5.20
IFDC5050JZER270M	27	20	40	5.00	5.00
IFDC5050JZER330M	33	20	52	4.40	4.40
IFDC5050JZER390M	39	20	66	4.20	4.20
IFDC5050JZER470M	47	20	72	3.80	3.80
IFDC5050JZER560M	56	20	90	3.40	3.40
IFDC5050JZER680M	68	20	102	3.00	3.00
IFDC5050JZER820M	82	20	112	2.80	2.80
IFDC5050JZER850M	85	20	125	2.60	2.60
IFDC5050JZER101M	100	20	135	2.50	2.50
IFDC5050JZER121M	120	20	170	2.30	2.30
IFDC5050JZER151M	150	20	190	2.20	2.20
IFDC5050JZER181M	180	20	250	1.90	1.90
IFDC5050JZER221M	220	20	315	1.70	1.70
IFDC5050JZER271M	270	20	410	1.50	1.50
IFDC5050JZER331M	330	20	450	1.40	1.40
IFDC5050JZER391M	390	20	600	1.30	1.30
IFDC5050JZER471M	470	20	820	1.20	1.20
IFDC5050JZER561M	560	20	900	1.10	1.10
IFDC5050JZER681M	680	20	1200	1.00	1.00
IFDC5050JZER821M	820	20	1320	0.85	0.85
IFDC5050JZER102M	1000	20	1350	0.78	0.78
IFDC5050JZER122M	1200	20	1400	0.75	0.75

Notes

- All test data is referenced to 25 °C ambient
 - Test condition: 100 kHz, 0.3 V for 8.2 μ H and below, and 1 kHz, 0.3 V for 10 μ H and above
 - Storage condition: -40 °C to +105 °C (on board); and -10 °C to +40 °C and < 70 % RH (in component packaging)
- (1) DC current (A) that will result in ΔT no greater than 40 °C
 (2) DC current (A) that will result in L₀ drop no greater than 35 %

DIMENSIONS in inches [millimeters]

DESCRIPTION

IFDC5050JZ	2.2 µH	± 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 J Z	E R	2 R 2	N
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE
		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.