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

Pb-free

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

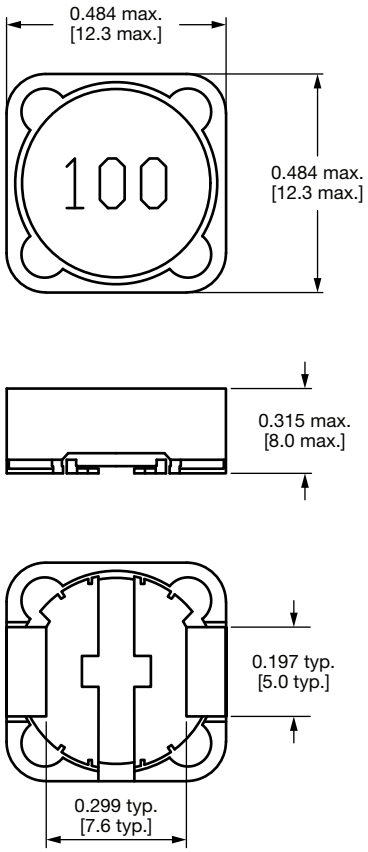
(1) DC current (A) that will cause an approximate ΔT of 40 °C

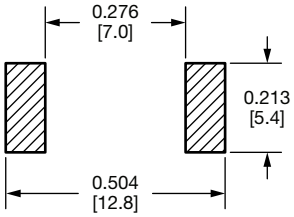
(2) DC current (A) that will cause L_0 to drop approximately 20 % and 30 %

For technical questions, contact: magnetics@vishay.com

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DIMENSIONS in inches [millimeters]





Typical pad layout

DESCRIPTION

IFDC-5050HZ	4.7 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 H Z	E R	4 R 7	N
PRODUCT FAMILY	SIZE	PACKAGE CODE	IMPEDANCE VALUE	INDUCTANCE TOLERANCE
		ER = tape and reel	**4R7** = 4.7 µH	**M** = ± 20 % **N** = ± 30 %

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