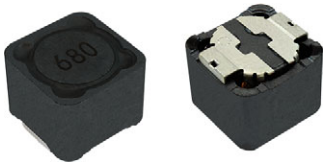
Ferrite Power Inductor, Shielded Drum Core



LINKS TO ADDITIONAL RESOURCES

Product Page

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 µH to 1200 µH
- 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
- Noise suppression and filtering

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)

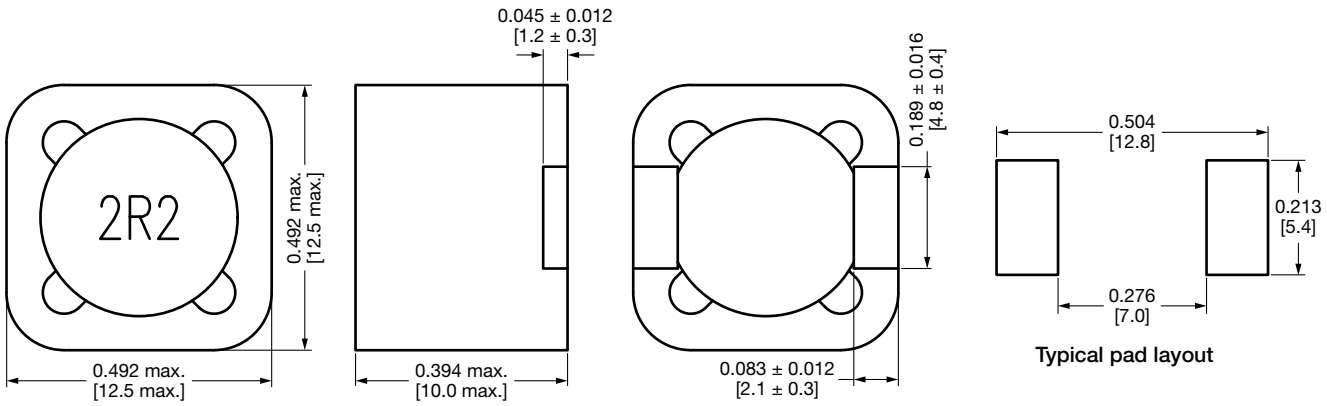
STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	L_0 INDUCTANCE (µH)	INDUCTANCE TOLERANCE (%)	DCR MAX. (mΩ)	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 µH and below, and 1 kHz, 0.3 V for 10 µH 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 L_0 drop no greater than 35 %

DIMENSIONS in inches [millimeters]



Typical pad layout

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 %

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