Shielded, SMD, Ferrite Power Inductors

FEATURES

- 5.0 mm x 5.0 mm x 4.0 mm max. SMD package
- Magnetically shielded construction due to iron-embedded epoxy encapsulation over wirewound ferrite core
- Inductance range: 0.22 µH to 10 µH
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free
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
- Computer, industrial, consumer electronics

STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	L_0 INDUCTANCE (µH)	INDUCTANCE TOLERANCE (%)	DCR TYP. (mΩ)	DCR MAX. (mΩ)	HEAT RATING CURRENT DC TYP. (A) (1)	SATURATION CURRENT DC TYP. (A) (2)	SRF MIN. (MHz)
IFSC2020DZERR22M01	0.22	20.0	6	8	7.50	20	289
IFSC2020DZERR24N01	0.24	30.0	6	8	7.40	18	251
IFSC2020DZERR47M01	0.47	20.0	7	9	7.60	11.5	171
IFSC2020DZER1R0N01	1.0	30.0	12	16	5.10	8.2	117
IFSC2020DZER1R2N01	1.2	30.0	16	21	4.30	7.1	110
IFSC2020DZER1R5N01	1.5	30.0	15	21	4.80	7.3	86
IFSC2020DZER1R8M01	1.8	20.0	16	21	4.30	6.4	55
IFSC2020DZER2R2N01	2.2	30.0	19	25	4.30	5.6	50
IFSC2020DZER2R7N01	2.7	30.0	22	29	4.10	5.1	37
IFSC2020DZER3R0N01	3.0	30.0	22	29	4.20	4.8	37
IFSC2020DZER3R3N01	3.3	30.0	24	31	3.90	4.6	32
IFSC2020DZER3R6M01	3.6	20.0	26	31	3.70	4.4	30
IFSC2020DZER3R9N01	3.9	30.0	27	35	3.70	4.2	29
IFSC2020DZER4R7N01	4.7	30.0	30	39	3.30	3.9	28
IFSC2020DZER5R6M01	5.6	20.0	35	46	3.10	4.1	27
IFSC2020DZER6R8M01	6.8	20.0	43	56	2.80	3.5	21
IFSC2020DZER8R2M01	8.2	20.0	48	62	2.60	3	20
IFSC2020DZER100M01	10	20.0	64	83	2.40	2.9	18
IFSC2020DZER120M01	12	20.0	77	100	2.10	2.5	14
IFSC2020DZER150M01	15	20.0	86	112	2.10	2.3	13
IFSC2020DZER180M01	18	20.0	119	155	1.65	2	12
IFSC2020DZER220M01	22	20.0	129	168	1.60	1.9	11
IFSC2020DZER270M01	27	20.0	188	244	1.25	1.75	9.8
IFSC2020DZER330M01	33	20.0	188	244	1.40	1.5	9
IFSC2020DZER470M01	47	20.0	272	354	1.10	1.3	7
IFSC2020DZER510M01	51	20.0	380	494	1.10	1.2	6
IFSC2020DZER560M01	56	20.0	380	494	0.90	1.2	6
IFSC2020DZER680M01	68	20.0	400	520	0.90	1.1	6

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IFSC2020DZER750M01	75	20.0	450	585	0.80	0.95	6
IFSC2020DZER101M01	100	20.0	560	728	0.80	0.9	5
IFSC2020DZER151M01	150	20.0	750	975	0.70	0.67	3.7
IFSC2020DZER221M01	220	20.0	1400	1820	0.50	0.55	3
IFSC2020DZER301M01	300	20.0	2000	2600	0.40	0.58	2.7
IFSC2020DZER331M01	330	20.0	2100	2730	0.50	0.47	2.7
IFSC2020DZER471M01	470	20.0	3000	3900	0.40	0.43	2.7
IFSC2020DZER561M01	560	20.0	3780	4920	0.35	0.36	1.5
IFSC2020DZER681M01	680	20.0	3900	5070	0.30	0.35	1.6

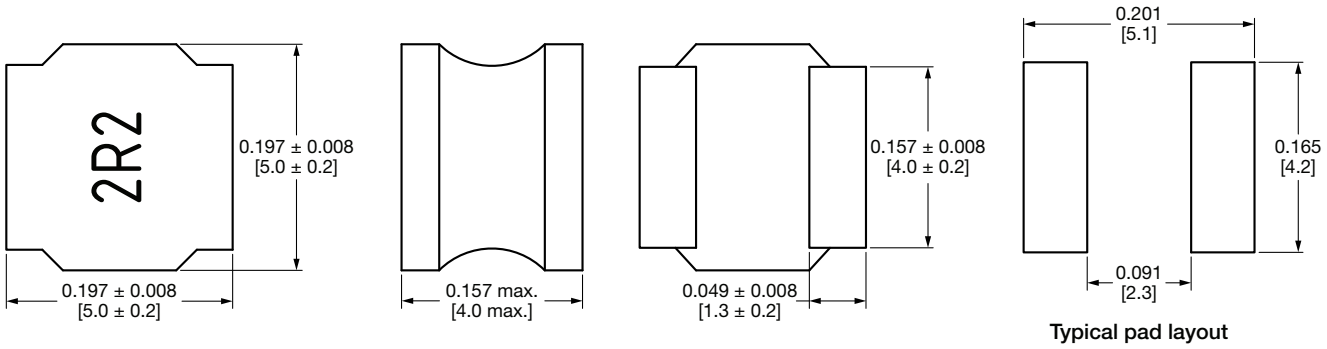
Notes

- All test data is referenced to 25 °C ambient
- Test condition: 100 kHz, 1 V
- Operating temperature range -40 °C to +125 °C

(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 %

DIMENSIONS in inches [millimeters]



Typical pad layout

DESCRIPTION

IFSC2020DZ-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	2	0	2	0	D	Z	E	R	2	R	2	N	0	1
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE	SERIES	

ER = tape and reel

2R2 = 2.2 µH

M = ± 20 %
N = ± 30 %

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