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Vishay Dale

**RoHS** COMPLIANT

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(5-2008)

# Shielded, SMD, Ferrite Power Inductors



### LINKS TO ADDITIONAL RESOURCES



### FEATURES

- 8.0 mm x 8.0 mm x 4.2 mm max. SMD package
- Magnetically shielded construction due to iron-embedded epoxy encapsulation over wirewound ferrite core
- Inductance range: 0.82 µH to 470 µH
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

#### **APPLICATIONS**

- DC/DC power supplies
- · Noise suppression and filtering
- Computer, industrial, consumer electronics

PART NUMBER			DCR TYP. 25 °C	DCR MAX. 25 °C	HEAT RATING CURRENT DC TYP. I <sub>DC</sub> (A) <sup>(1)</sup>	SATURATION CURRENT DC TYP. I <sub>SAT</sub> (A) <sup>(2)</sup>	SRF MIN.
	(µH)	(%)	(mΩ)	(mΩ)			(MHz)
IFSC3232DBERR82N02	0.82	30.0	8	10	6.9	16	94
IFSC3232DBER1R0N02	1	30.0	8	10	6.9	14	89
IFSC3232DBER1R2N02	1.2	30.0	10	13	6.2	14	59
IFSC3232DBER1R5N02	1.5	30.0	10	13	6.2	11	67
IFSC3232DBER2R0N02	2	30.0	12	16	5.6	10	43
IFSC3232DBER2R2N02	2.2	30.0	12	16	5.6	8	41
IFSC3232DBER3R0N02	3	30.0	14	18	5.2	7	32
IFSC3232DBER3R3N02	3.3	30.0	17	22	4.8	7	27
IFSC3232DBER3R6N02	3.6	30.0	17	22	4.8	8.5	30
IFSC3232DBER3R9N02	3.9	30.0	17	22	4.8	6.5	26
IFSC3232DBER4R7N02	4.7	30.0	19	25	4.5	6.5	24
IFSC3232DBER5R1N02	5.1	30.0	19	25	4.4	5.4	22
IFSC3232DBER5R6N02	5.6	30.0	21	27	4.2	6.9	24
IFSC3232DBER6R2N02	6.2	30.0	21	27	4.2	5.1	20
IFSC3232DBER6R8M02	6.8	20.0	24	31	4	5.2	20
IFSC3232DBER8R2M02	8.2	20.0	26	34	3.8	4.8	17
IFSC3232DBER100M02	10	20.0	29	38	3.6	4.1	15
IFSC3232DBER120M02	12	20.0	41	53	3	4	13
IFSC3232DBER150M02	15	20.0	47	61	2.8	3.4	12
IFSC3232DBER180M02	18	20.0	53	69	2.6	3.1	11
IFSC3232DBER220M02	22	20.0	69	90	2.3	2.7	9.5
IFSC3232DBER270M02	27	20.0	78	101	2.2	2.5	9.2
IFSC3232DBER330M02	33	20.0	97	126	2	2.4	7.8
IFSC3232DBER360M02	36	20.0	102	133	1.9	2.3	7.8
IFSC3232DBER390M02	39	20.0	107	139	1.9	2.2	7.8
IFSC3232DBER430M02	43	20.0	113	147	1.8	2.2	7.8
IFSC3232DBER470M02	47	20.0	136	177	1.7	2	6.4
IFSC3232DBER510M02	51	20.0	142	185	1.6	1.9	6.4
IFSC3232DBER560M02	56	20.0	148	192	1.6	1.7	6.4
IFSC3232DBER620M02	62	20.0	140	237	1.6	1.6	6.4
IFSC3232DBER680M02	68	20.0	196	255	1.4	1.6	4.9

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1 For technical questions, contact: <u>magnetics@vishay.com</u> Document Number: 34640

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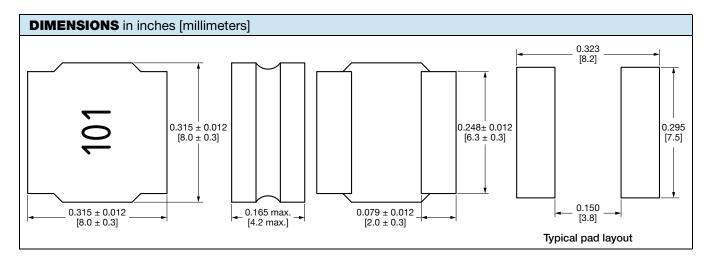
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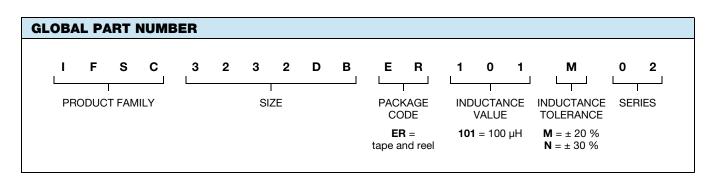
STANDARD ELECTRICAL SPECIFICATIONS							
PART NUMBER	L₀ INDUCTANCE (µH)	INDUCTANCE TOLERANCE (%)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. I <sub>DC</sub> (A) <sup>(1)</sup>	SATURATION CURRENT DC TYP. I <sub>SAT</sub> (A) <sup>(2)</sup>	SRF MIN. (MHz)
IFSC3232DBER750M02	75	20.0	211	274	1.3	1.5	4.9
IFSC3232DBER820M02	82	20.0	225	293	1.2	1.4	4.9
IFSC3232DBER910M02	91	20.0	272	354	1.1	1.3	4.9
IFSC3232DBER101M02	100	20.0	290	377	1.1	1.3	4.2
IFSC3232DBER121M02	120	20.0	334	434	1	1.1	3.5
IFSC3232DBER151M02	150	20.0	410	533	0.94	1.2	3.5
IFSC3232DBER181M02	180	20.0	520	676	0.92	1.15	3.5
IFSC3232DBER221M02	220	20.0	599	779	0.88	0.94	3.5
IFSC3232DBER331M02	330	20.0	889	1156	0.7	0.75	2.8
IFSC3232DBER471M02	470	20.0	1250	1625	0.6	0.7	2.1

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  $\Delta T$  of 40 °C
- $^{(2)}$  DC current (A) that will cause  $L_0$  to drop approximately 30 %



DESCRIPTION	1			
IFSC3232DB-02	100 µH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC <sup>®</sup> LEAD (Pb)-FREE STANDARD



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