High Current, Encapsulated Surface-Mount Ferrite Inductors



FEATURES

- Wirewound ferrite core with flame retardant epoxy encapsulant (UL 94 V-0)
- Superior environmental protection and moisture resistance
- Tin-lead (SnPb) terminations available (see package code options)
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

APPLICATIONS

Power line noise filters, filters for switching regulated power supplies, DC/DC converters, SCR, and triac controls and RFI suppression.

MECHANICAL SPECIFICATIONS

Core: high resistivity ferrite core

Encapsulant: epoxy

Terminals: 100 % Sn over Ni

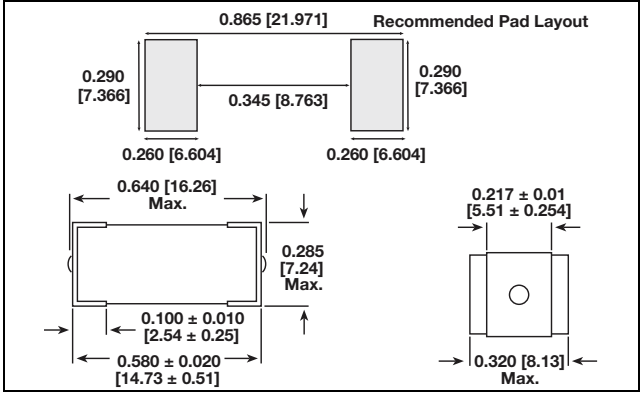
STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	L_0 IND. ± 15 % AT 0 A (µH)	DCR MAX. (Ω)	HEAT RATING CURRENT DC MAX. (A)	SATURATION CURRENT DC (A) (1)
IHSM5832ER1R0L	1.0	0.01	9.0	6.2
IHSM5832ER1R2L	1.2	0.011	8.8	5.6
IHSM5832ER1R5L	1.5	0.012	8.7	5.0
IHSM5832ER1R8L	1.8	0.013	8.6	4.4
IHSM5832ER2R2L	2.2	0.015	8.5	4.0
IHSM5832ER2R7L	2.7	0.017	8.4	3.7
IHSM5832ER3R3L	3.3	0.02	8.3	3.4
IHSM5832ER3R9L	3.9	0.021	7.9	3.1
IHSM5832ER4R7L	4.7	0.023	7.4	2.8
IHSM5832ER5R6L	5.6	0.024	7.0	2.6
IHSM5832ER6R8L	6.8	0.038	6.1	2.3
IHSM5832ER8R2L	8.2	0.047	5.1	2.0
IHSM5832ER100L	10	0.053	4.3	1.8
IHSM5832ER120L	12	0.068	3.9	1.7
IHSM5832ER150L	15	0.078	3.5	1.6
IHSM5832ER180L	18	0.083	3.2	1.5
IHSM5832ER220L	22	0.12	2.8	1.3
IHSM5832ER270L	27	0.14	2.3	1.2
IHSM5832ER330L	33	0.17	1.9	1.1
IHSM5832ER390L	39	0.19	1.8	1.0
IHSM5832ER470L	47	0.215	1.8	0.9
IHSM5832ER560L	56	0.236	1.71	0.9
IHSM5832ER680L	68	0.305	1.43	0.82
IHSM5832ER820L	82	0.357	1.14	0.75
IHSM5832ER101L	100	0.452	0.95	0.68
IHSM5832ER121L	120	0.53	0.88	0.63
IHSM5832ER151L	150	0.609	0.82	0.58
IHSM5832ER181L	180	0.809	0.75	0.54
IHSM5832ER221L	220	1.1	0.69	0.48
IHSM5832ER271L	270	1.27	0.64	0.43
IHSM5832ER331L	330	1.42	0.59	0.38
IHSM5832ER391L	390	1.89	0.54	0.34
IHSM5832ER471L	470	2.21	0.49	0.31
IHSM5832ER561L	560	2.42	0.46	0.28
IHSM5832ER681L	680	2.73	0.43	0.25
IHSM5832ER821L	820	3.78	0.4	0.23
IHSM5832ER102L	1000	4.2	0.37	0.21
IHSM5832ER122L	1200	5.51	0.32	0.19
IHSM5832ER152L	1500	7.35	0.29	0.17
IHSM5832ER182L	1800	8.66	0.25	0.16
IHSM5832ER222L	2200	9.71	0.22	0.14
IHSM5832ER272L	2700	11.29	0.2	0.13
IHSM5832ER332L	3300	15.6	0.18	0.12
IHSM5832ER392L	3900	20.74	0.16	0.11
IHSM5832ER472L	4700	23.1	0.14	0.1

Notes
- All test data is referenced to 25 °C ambient
- Test condition: 1 kHz, 1 V
- Operating temperature range -55 °C to +125 °C

(1) DC current (A) that will cause L_0 to drop approximately 5 %

DIMENSIONS in inches [millimeters]



PART MARKING

- Model
- Inductance value
- Date code

PACKAGE CODE OPTIONS

ER = pure tin terminal plating (RoHS-compliant) with tape and reel packaging

EB = pure tin terminal plating (RoHS-compliant) with bulk packaging

RF = tin-lead terminal plating (non-RoHS) with tape and reel packaging

PJ = tin-lead terminal plating (non-RoHS) with bulk packaging

For technical questions, contact: magnetics@vishay.com

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DESCRIPTION

IHSM-5832	3.9 µH	± 15 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	H	S	M	5	8	3	2	E	R	3	R	9	L
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.

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