

High Current, Encapsulated Surface-Mount Ferrite Inductors


RoHS
COMPLIANT

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

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

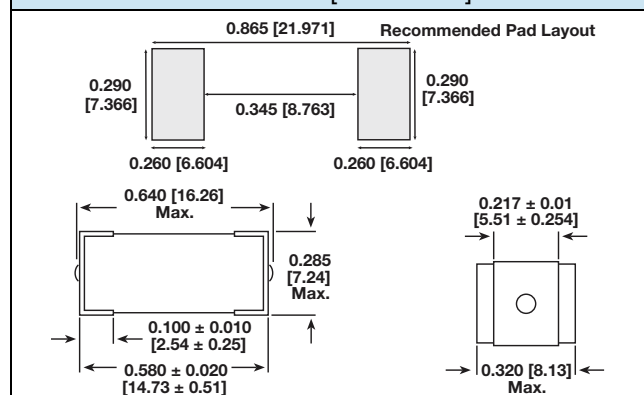
Terminals: 100 % Sn over Ni

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 L₀ 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



DESCRIPTION				
IHSM-5832	3.9 μ H	$\pm 15\%$	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

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



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 [View IHSM5832ER100L on WIN SOURCE](#)

 [Vishay Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management