

Filter Inductors, High Current, Radial Leaded



FEATURES

- Printed circuit mounting
- Pre-tinned leads
- Protected by polyolefin tubing - flame retardant UL type VW-1 per MIL-I-23053/5, class 3 requirements
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912


RoHS
COMPLIANT

APPLICATIONS

Noise filtering for switching regulators, power amplifiers, power supplies and SCR and Triac control circuits

Current Rating: Maximum continuous operating current (DC or RMS) based on a 50 °C temperature rise

MECHANICAL SPECIFICATIONS

Wire: Solid soft copper

Terminals: Extensions of the winding

Core Material: Ferrite

Coating: Polyolefin tubing

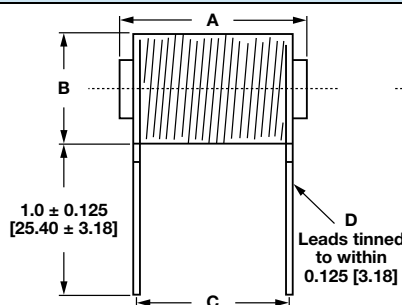
ELECTRICAL SPECIFICATIONS

Inductance: Measured at 1.0 V with zero DC current

Incremental Current: The typical current at which the inductance will be decreased by 5 % from its initial zero DC value

Operating Temperature: -55 °C to +125 °C (no load), -55 °C to +75 °C (at full rated current)

DIMENSIONS in inches [millimeters]



Schematic

PART NUMBER	IND. (μH)	A (MAX.)	B (MAX.)	C ± 0.062 [± 1.57]	D ± 0.005 [± 0.127]
IH03EB5R0K	5	0.875 [22.23]	0.600 [15.24]	0.500 [12.70]	0.042 [1.067]
IH03EB100K	10	1.125 [28.58]	0.625 [15.88]	0.687 [17.45]	0.042 [1.067]
IH03EB270K	27	0.875 [22.23]	0.800 [20.32]	0.437 [11.10]	0.042 [1.067]
IH03EB500K	50	0.875 [22.23]	0.800 [20.32]	0.750 [19.05]	0.042 [1.067]
IH03EB101K	100	1.125 [28.58]	0.800 [20.32]	0.937 [23.80]	0.042 [1.067]
IH03EB151K	150	1.375 [34.93]	0.800 [20.32]	1.062 [26.97]	0.042 [1.067]
IH03EB251K	250	1.625 [41.28]	0.800 [20.32]	1.312 [33.32]	0.042 [1.067]
IH05EB5R0K	5	0.875 [22.23]	0.625 [15.88]	0.750 [19.05]	0.053 [1.35]
IH05EB100K	10	1.125 [28.58]	0.625 [15.88]	1.000 [25.40]	0.053 [1.35]
IH05EB270K	27	0.875 [22.23]	0.840 [21.34]	0.562 [14.27]	0.053 [1.35]
IH05EB500K	50	1.125 [28.58]	0.840 [21.34]	0.750 [19.05]	0.053 [1.35]
IH05EB680K	68	1.125 [28.58]	0.860 [21.84]	0.875 [22.23]	0.053 [1.35]
IH05EB101K	100	1.375 [34.93]	0.860 [21.84]	1.000 [25.40]	0.053 [1.35]
IH05EB151K	150	1.625 [41.28]	0.860 [21.84]	1.250 [31.75]	0.053 [1.35]
IH10EB5R0K	5	1.125 [28.58]	0.635 [16.13]	0.812 [20.62]	0.065 [1.65]
IH10EB100K	10	1.375 [34.93]	0.635 [16.13]	1.218 [30.94]	0.065 [1.65]
IH10EB270K	27	1.125 [28.58]	0.935 [23.75]	0.687 [17.45]	0.065 [1.65]
IH10EB500K	50	1.375 [34.93]	0.935 [23.75]	0.937 [23.80]	0.065 [1.65]
IH10EB680K	68	1.375 [34.93]	0.935 [23.75]	1.125 [28.58]	0.065 [1.65]
IH10EB101K	100	1.625 [41.28]	0.935 [23.75]	1.312 [33.32]	0.065 [1.65]
IH15EB5R0K	5	1.375 [34.93]	0.700 [17.78]	0.937 [23.80]	0.082 [2.08]
IH15EB100K	10	1.687 [42.85]	0.700 [17.78]	1.500 [38.10]	0.082 [2.08]
IH15EB270K	27	1.375 [34.93]	1.000 [25.40]	0.937 [23.80]	0.082 [2.08]
IH15EB500K	50	1.625 [41.28]	1.000 [25.40]	1.125 [28.58]	0.082 [2.08]

**STANDARD ELECTRICAL SPECIFICATIONS**

PART NUMBER	IND. AT 1 kHz (μ H)	TOL. (%)	DCR MAX. (Ω)	RATED DC CURRENT (mA)	INCREMENTAL CURRENT (mA)
IH03EB5R0K	5	± 10	0.015	10 000	25 000
IH03EB100K	10	± 10	0.018	9000	19 000
IH03EB270K	27	± 10	0.035	7000	12 000
IH03EB500K	50	± 10	0.050	5600	8000
IH03EB101K	100	± 10	0.065	5200	6000
IH03EB151K	150	± 10	0.075	5000	5000
IH03EB251K	250	± 10	0.090	5000	4000
IH05EB5R0K	5	± 10	0.012	14 000	25 000
IH05EB100K	10	± 10	0.015	12 000	19 000
IH05EB270K	27	± 10	0.025	9000	13 000
IH05EB500K	50	± 10	0.030	8000	10 000
IH05EB680K	68	± 10	0.035	7500	9000
IH05EB101K	100	± 10	0.050	7500	7000
IH05EB151K	150	± 10	0.060	7000	5000
IH10EB5R0K	5	± 10	0.010	19 000	25 000
IH10EB100K	10	± 10	0.012	16 000	19 000
IH10EB270K	27	± 10	0.018	12 500	12 000
IH10EB500K	50	± 10	0.025	11 000	10 000
IH10EB680K	68	± 10	0.027	10 000	8000
IH10EB101K	100	± 10	0.030	10 000	7000
IH15EB5R0K	5	± 10	0.008	24 000	25 000
IH15EB100K	10	± 10	0.010	20 000	19 000
IH15EB270K	27	± 10	0.015	16 000	14 000
IH15EB500K	50	± 10	0.020	15 000	10 000

MARKING

- Vishay Dale
- Model
- Inductance value
- Date code

ORDERING INFORMATION

IH-5	10 μ H	± 10 %	EB	e2
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I H 0 5	E B	1 0 0	K
MODEL	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE



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.

Vishay products are not designed for use in life-saving or life-sustaining applications or any application in which the failure of the Vishay product could result in personal injury or death unless specifically qualified in writing by Vishay. 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.