

## Filter Inductors, High Current, Radial Leaded



### 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)

### 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](http://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

DIMENSIONS in inches [millimeters]					
MODEL	IND. (μH)	A (MAX.)	B (MAX.)	C ± 0.062 [± 1.57]	D ± 0.005 [± 0.127]
IH-3	5	0.875 [22.23]	0.600 [15.24]	0.500 [12.70]	0.042 [1.067]
IH-3	10	1.125 [28.58]	0.625 [15.88]	0.687 [17.45]	0.042 [1.067]
IH-3	27	0.875 [22.23]	0.800 [20.32]	0.437 [11.10]	0.042 [1.067]
IH-3	50	0.875 [22.23]	0.800 [20.32]	0.750 [19.05]	0.042 [1.067]
IH-3	100	1.125 [28.58]	0.800 [20.32]	0.937 [23.80]	0.042 [1.067]
IH-3	150	1.375 [34.93]	0.800 [20.32]	1.062 [26.97]	0.042 [1.067]
IH-3	250	1.625 [41.28]	0.800 [20.32]	1.312 [33.32]	0.042 [1.067]
IH-5	5	0.875 [22.23]	0.625 [15.88]	0.750 [19.05]	0.053 [1.35]
IH-5	10	1.125 [28.58]	0.625 [15.88]	1.000 [25.40]	0.053 [1.35]
IH-5	27	0.875 [22.23]	0.840 [21.34]	0.562 [14.27]	0.053 [1.35]
IH-5	50	1.125 [28.58]	0.840 [21.34]	0.750 [19.05]	0.053 [1.35]
IH-5	68	1.125 [28.58]	0.860 [21.84]	0.875 [22.23]	0.053 [1.35]
IH-5	100	1.375 [34.93]	0.860 [21.84]	1.000 [25.40]	0.053 [1.35]
IH-5	150	1.625 [41.28]	0.860 [21.84]	1.250 [31.75]	0.053 [1.35]
IH-10	5	1.125 [28.58]	0.635 [16.13]	0.812 [20.62]	0.065 [1.65]
IH-10	10	1.375 [34.93]	0.635 [16.13]	1.218 [30.94]	0.065 [1.65]
IH-10	27	1.125 [28.58]	0.935 [23.75]	0.687 [17.45]	0.065 [1.65]
IH-10	50	1.375 [34.93]	0.935 [23.75]	0.937 [23.80]	0.065 [1.65]
IH-10	68	1.375 [34.93]	0.935 [23.75]	1.125 [28.58]	0.065 [1.65]
IH-10	100	1.625 [41.28]	0.935 [23.75]	1.312 [33.32]	0.065 [1.65]
IH-15	5	1.375 [34.93]	0.700 [17.78]	0.937 [23.80]	0.082 [2.08]
IH-15	10	1.687 [42.85]	0.700 [17.78]	1.500 [38.10]	0.082 [2.08]
IH-15	27	1.375 [34.93]	1.000 [25.40]	0.937 [23.80]	0.082 [2.08]
IH-15	50	1.625 [41.28]	1.000 [25.40]	1.125 [28.58]	0.082 [2.08]



STANDARD ELECTRICAL SPECIFICATIONS					
MODEL	IND. AT 1 kHz (μH)	TOL. (%)	DCR MAX. (Ω)	RATED DC CURRENT (mA)	INCREMENTAL CURRENT (mA)
IH-3	5	± 10	0.015	10 000	25 000
IH-3	10	± 10	0.018	9000	19 000
IH-3	27	± 10	0.035	7000	12 000
IH-3	50	± 10	0.050	5600	8000
IH-3	100	± 10	0.065	5200	6000
IH-3	150	± 10	0.075	5000	5000
IH-3	250	± 10	0.090	5000	4000
IH-5	5	± 10	0.012	14 000	25 000
IH-5	10	± 10	0.015	12 000	19 000
IH-5	27	± 10	0.025	9000	13 000
IH-5	50	± 10	0.030	8000	10 000
IH-5	68	± 10	0.035	7500	9000
IH-5	100	± 10	0.050	7500	7000
IH-5	150	± 10	0.060	7000	5000
IH-10	5	± 10	0.010	19 000	25 000
IH-10	10	± 10	0.012	16 000	19 000
IH-10	27	± 10	0.018	12 500	12 000
IH-10	50	± 10	0.025	11 000	10 000
IH-10	68	± 10	0.027	10 000	8000
IH-10	100	± 10	0.030	10 000	7000
IH-15	5	± 10	0.008	24 000	25 000
IH-15	10	± 10	0.010	20 000	19 000
IH-15	27	± 10	0.015	16 000	14 000
IH-15	50	± 10	0.020	15 000	10 000

MARKING
<ul style="list-style-type: none"> <li>- Vishay Dale</li> <li>- Model</li> <li>- Inductance value</li> <li>- Date code</li> </ul>

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

GLOBAL PART NUMBER													
<table border="1"> <tr><td>I</td><td>H</td><td>0</td><td>5</td></tr> </table> MODEL	I	H	0	5	<table border="1"> <tr><td>E</td><td>B</td></tr> </table> PACKAGE CODE	E	B	<table border="1"> <tr><td>1</td><td>0</td><td>0</td></tr> </table> INDUCTANCE VALUE	1	0	0	<table border="1"> <tr><td>K</td></tr> </table> INDUCTANCE TOLERANCE	K
I	H	0	5										
E	B												
1	0	0											
K													



## **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.

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.