

## 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  |  |  |   |
|---|--|--|---|
| <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">I</div> <div style="border: 1px solid black; padding: 2px;">H</div> <div style="border: 1px solid black; padding: 2px;">0</div> <div style="border: 1px solid black; padding: 2px;">5</div> </div> <p>MODEL</p> | <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">E</div> <div style="border: 1px solid black; padding: 2px;">B</div> </div> <p>PACKAGE CODE</p> | <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">1</div> <div style="border: 1px solid black; padding: 2px;">0</div> <div style="border: 1px solid black; padding: 2px;">0</div> </div> <p>INDUCTANCE VALUE</p> | <div style="border: 1px solid black; padding: 2px;">K</div> <p>INDUCTANCE TOLERANCE</p> |



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