

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
- Compliant to RoHS directive 2002/95/EC



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

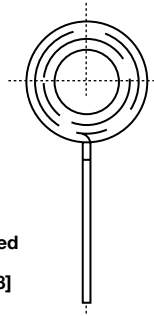
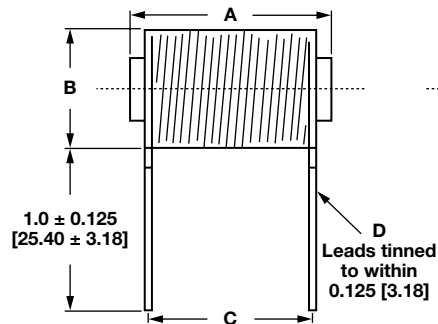
Wire: Solid soft copper

Terminals: Extensions of the winding

Core Material: Ferrite

Coating: Polyolefin tubing

DIMENSIONS in inches [millimeters]



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

- Vishay Dale
- Model
- Inductance value
- Date code

ORDERING INFORMATION

| IH-5 MODEL | 10 μH INDUCTANCE VALUE | $\pm 10\%$ INDUCTANCE TOLERANCE | EB PACKAGE CODE | e2 JEDEC LEAD (Pb)-FREE STANDARD |
|---------------|---|---------------------------------------|-----------------------|--|
|---------------|---|---------------------------------------|-----------------------|--|

GLOBAL PART NUMBER

| | | | |
|--|---|---|--|
| <div style="display: flex; justify-content: space-around; width: 100%;"> <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; width: 100%;"> <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; width: 100%;"> <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; width: 30px; margin: 0 auto;">K</div> <p>INDUCTANCE TOLERANCE</p> |
|--|---|---|--|



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