

## Filter Inductors, High Current, Axial Leaded



### FEATURES

- Printed circuit mounting (axial leads)
- Pre-tinned leads
- Low cost construction
- Protected by polyolefin tubing - flame retardant UL type VW-1 per MIL-I-23053/8, class 3 requirements
- Material categorization: For definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)


**RoHS**  
COMPLIANT

### ELECTRICAL SPECIFICATIONS

**Inductance:** Measured at 1.0 V with zero DC current

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

**Dielectric Rating:** 2500 V<sub>RMS</sub>, 60 Hz, applied for one minute between winding and outer circumference to within 0.250" [6.35 mm] of the insulation sleeve edge

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

### APPLICATIONS

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

### MECHANICAL SPECIFICATIONS

**Winding:** Layered solenoid type

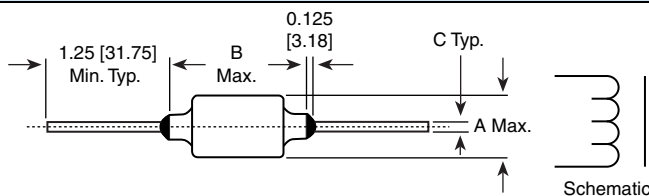
**Wire:** Solid soft copper

**Terminals:** Tinned copper leads

**Encapsulant:** Polyolefin tubing

**Core Material:** Ferrite

### DIMENSIONS in inches [millimeters]



| MODEL   | A (MAX.)      | B (MAX.)      | C ± 0.002 [0.050] |
|---------|---------------|---------------|-------------------|
| IHA-101 | 0.475 [12.07] | 0.800 [20.32] | 0.032 [0.813]     |
| IHA-102 | 0.475 [12.07] | 0.800 [20.32] | 0.032 [0.813]     |
| IHA-103 | 0.475 [12.07] | 1.050 [26.67] | 0.032 [0.813]     |
| IHA-104 | 0.550 [13.97] | 1.050 [26.67] | 0.032 [0.813]     |
| IHA-105 | 0.550 [13.97] | 1.175 [29.85] | 0.032 [0.813]     |
| IHA-201 | 0.500 [12.70] | 0.800 [20.32] | 0.032 [0.813]     |
| IHA-202 | 0.500 [12.70] | 0.800 [20.32] | 0.032 [0.813]     |
| IHA-203 | 0.500 [12.70] | 0.920 [23.37] | 0.032 [0.813]     |
| IHA-204 | 0.600 [15.24] | 0.920 [23.37] | 0.032 [0.813]     |
| IHA-205 | 0.750 [19.05] | 1.050 [26.67] | 0.032 [0.813]     |
| IHA-301 | 0.475 [12.07] | 0.800 [20.32] | 0.032 [0.813]     |
| IHA-302 | 0.475 [12.07] | 0.920 [23.37] | 0.032 [0.813]     |
| IHA-303 | 0.550 [13.97] | 0.800 [20.32] | 0.032 [0.813]     |
| IHA-304 | 0.550 [13.97] | 0.920 [23.37] | 0.032 [0.813]     |
| IHA-305 | 0.550 [13.97] | 1.175 [29.85] | 0.032 [0.813]     |
| IHA-501 | 0.475 [12.07] | 1.050 [26.67] | 0.040 [1.02]      |
| IHA-502 | 0.475 [12.07] | 1.050 [26.67] | 0.040 [1.02]      |
| IHA-503 | 0.700 [17.78] | 1.050 [26.67] | 0.040 [1.02]      |
| IHA-504 | 0.700 [17.78] | 1.050 [26.67] | 0.040 [1.02]      |
| IHA-505 | 0.700 [17.78] | 1.300 [33.02] | 0.040 [1.02]      |

### STANDARD ELECTRICAL SPECIFICATIONS

| MODEL   | IND. AT 1 kHz (μH) | TOL. (%) | DCR MAX. (Ω) | RATED DC CURRENT (mA) |
|---------|--------------------|----------|--------------|-----------------------|
| IHA-101 | 50                 | ± 10 %   | 0.120        | 2500                  |
| IHA-102 | 100                | ± 10 %   | 0.160        | 2100                  |
| IHA-103 | 250                | ± 10 %   | 0.280        | 1800                  |
| IHA-104 | 500                | ± 10 %   | 0.420        | 1600                  |
| IHA-105 | 1000               | ± 10 %   | 0.600        | 1400                  |

**STANDARD ELECTRICAL SPECIFICATIONS**

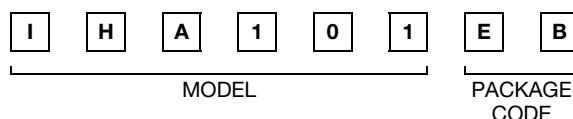
| MODEL   | IND. AT 1 kHz ( $\mu$ H) | TOL. (%)   | DCR MAX. ( $\Omega$ ) | RATED DC CURRENT (mA) |
|---------|--------------------------|------------|-----------------------|-----------------------|
| IHA-201 | 27                       | $\pm 10\%$ | 0.060                 | 3700                  |
| IHA-202 | 50                       | $\pm 10\%$ | 0.085                 | 3100                  |
| IHA-203 | 100                      | $\pm 10\%$ | 0.120                 | 2700                  |
| IHA-204 | 250                      | $\pm 10\%$ | 0.200                 | 2400                  |
| IHA-205 | 500                      | $\pm 10\%$ | 0.320                 | 2300                  |
| IHA-301 | 5                        | $\pm 10\%$ | 0.015                 | 6800                  |
| IHA-302 | 10                       | $\pm 10\%$ | 0.021                 | 6100                  |
| IHA-303 | 27                       | $\pm 10\%$ | 0.040                 | 4800                  |
| IHA-304 | 50                       | $\pm 10\%$ | 0.050                 | 4300                  |
| IHA-305 | 100                      | $\pm 10\%$ | 0.070                 | 4200                  |
| IHA-501 | 5                        | $\pm 10\%$ | 0.010                 | 9300                  |
| IHA-502 | 10                       | $\pm 10\%$ | 0.015                 | 8300                  |
| IHA-503 | 27                       | $\pm 10\%$ | 0.030                 | 6500                  |
| IHA-504 | 50                       | $\pm 10\%$ | 0.040                 | 6100                  |
| IHA-505 | 100                      | $\pm 10\%$ | 0.060                 | 5900                  |

**MARKING**

- Vishay Dale
- Model
- Date code

**ORDERING INFORMATION**

|                |                             |                              |              |                               |
|----------------|-----------------------------|------------------------------|--------------|-------------------------------|
| <b>IHA-101</b> | <b>50 <math>\mu</math>H</b> | <b><math>\pm 10\%</math></b> | <b>EB</b>    | <b>e2</b>                     |
| MODEL          | INDUCTANCE VALUE            | INDUCTANCE TOLERANCE         | PACKAGE CODE | JEDEC LEAD (Pb)-FREE STANDARD |

**GLOBAL PART NUMBER**



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