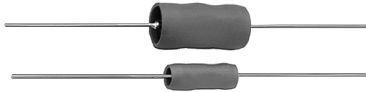


# Filter Inductors

## High Current



### FEATURES

- Printed circuit mounting (axial leads).
- Protected by polyolefin tubing.
- High saturation bobbin used allowing high inductance with low DC resistance.
- Pre-tinned leads.
- High resistivity core offers very high parallel resistance, resulting in maximum coil performance.
- 20 sleeveless models available at reduced cost.

STANDARD ELECTRICAL SPECIFICATIONS									
MODEL IHD-1					MODEL IHD-3				
IND. @ 1kHz (μH)	TOL.	DCR MAX. (Ohms)	RATED CURRENT (Max. Amps)	INCREMENTAL CURRENT (Amps Approx.)	IND. @ 1kHz (μH)	TOL.	DCR MAX. (Ohms)	RATED CURRENT (Max. Amps)	INCREMENTAL CURRENT (Amps Approx.)
1.0	±15%	0.009	5.3	7.0	3.9	±15%	0.007	4.0	8.2
1.2	±15%	0.010	5.0	6.4	4.7	±15%	0.008	4.0	7.5
1.5	±15%	0.011	4.8	5.7	5.6	±15%	0.011	4.0	6.9
1.8	±15%	0.012	4.6	5.2	6.8	±15%	0.011	4.0	6.3
2.2	±15%	0.013	4.4	4.7	8.2	±15%	0.013	4.0	5.7
2.7	±15%	0.014	4.2	4.3	10.0	±15%	0.016	4.0	5.2
3.3	±15%	0.016	4.0	3.9	12.0	±15%	0.018	4.0	4.7
3.9	±15%	0.017	3.8	3.6	15.0	±15%	0.020	4.0	4.3
4.7	±15%	0.022	3.4	3.3	18.0	±15%	0.022	4.0	3.9
5.6	±15%	0.024	3.2	3.0	22.0	±15%	0.024	4.0	3.5
6.8	±15%	0.026	3.1	2.7	27.0	±15%	0.025	4.0	3.2
8.2	±15%	0.028	3.0	2.5	33.0	±15%	0.028	4.0	2.9
10	±15%	0.033	2.8	2.3	39.0	±15%	0.031	4.0	2.7
12	±15%	0.037	2.6	2.1	47.0	±15%	0.034	4.0	2.5
15	±15%	0.040	2.5	1.9	56.0	±15%	0.043	3.2	2.3
18	±15%	0.044	2.4	1.7	68.0	±15%	0.059	2.5	2.1
22	±15%	0.050	2.2	1.5	82.0	±15%	0.066	2.0	1.9
27	±15%	0.070	1.9	1.4	100.0	±15%	0.084	1.6	1.7
33	±15%	0.075	1.8	1.3	120.0	±15%	0.113	1.6	1.6
39	±15%	0.084	1.7	1.2	150.0	±15%	0.129	1.6	1.4
47	±15%	0.104	1.6	1.1	180.0	±15%	0.150	1.6	1.3
56	±15%	0.130	1.4	0.97	220.0	±15%	0.162	1.6	1.2
68	±15%	0.145	1.3	0.88	270.0	±15%	0.226	1.6	1.1
82	±15%	0.152	1.3	0.80	330.0	±15%	0.257	1.6	0.95
100	±15%	0.208	1.1	0.73	390.0	±15%	0.288	1.6	0.88
120	±15%	0.283	0.94	0.66	470.0	±15%	0.393	1.2	0.80
150	±15%	0.330	0.87	0.60	560.0	±15%	0.504	1.0	0.74
180	±15%	0.362	0.83	0.54	680.0	±15%	0.570	1.0	0.67
220	±15%	0.505	0.70	0.49	820.0	±15%	0.643	0.80	0.61
270	±15%	0.557	0.67	0.45	1000.0	±15%	0.844	0.80	0.56
330	±15%	0.650	0.62	0.40	1200.0	±15%	0.977	0.60	0.51
390	±15%	0.770	0.57	0.37	1500.0	±15%	1.18	0.60	0.46
470	±15%	1.03	0.49	0.34	1800.0	±15%	1.50	0.60	0.42
560	±15%	1.14	0.47	0.31	2200.0	±15%	1.76	0.50	0.38
680	±15%	1.50	0.41	0.28	2700.0	±15%	2.13	0.40	0.34
820	±15%	1.98	0.36	0.26	3300.0	±15%	2.53	0.40	0.31
1000	±15%	2.30	0.33	0.23	3900.0	±15%	2.84	0.40	0.29
1200	±15%	2.55	0.31	0.21	4700.0	±15%	3.79	0.40	0.26
1500	±15%	3.0	0.29	0.19	5600.0	±15%	4.24	0.32	0.24
1800	±15%	4.0	0.25	0.18	6800.0	±15%	5.75	0.25	0.22
2200	±15%	4.40	0.24	0.16	8200.0	±15%	6.44	0.25	0.20
2700	±15%	5.80	0.21	0.14	10000.0	±15%	7.30	0.25	0.18
3300	±15%	6.56	0.20	0.13	12000.0	±15%	9.34	0.20	0.17
3900	±15%	8.63	0.17	0.12	15000.0	±15%	10.7	0.20	0.15
4700	±15%	10.1	0.16	0.11	18000.0	±15%	14.8	0.16	0.14
5600	±15%	11.2	0.15	0.10	22000.0	±15%	18.0	0.13	0.12
6800	±15%	15.0	0.13	0.09	27000.0	±15%	22.7	0.13	0.11
8200	±15%	20.8	0.11	0.08	33000.0	±15%	25.7	0.13	0.10
10000	±15%	23.4	0.10	0.08	39000.0	±15%	29.7	0.10	0.09
12000	±15%	26.0	0.10	0.07	47000.0	±15%	33.7	0.10	0.09
15000	±15%	36.0	0.08	0.06	56000.0	±15%	38.0	0.10	0.08
18000	±15%	40.0	0.08	0.06	68000.0	±15%	52.8	0.08	0.07
					82000.0	±15%	67.3	0.07	0.07
					100000.0	±15%	76.0	0.07	0.06

### ELECTRICAL SPECIFICATIONS

**Inductance:** Measured at 1V with no DC current.

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

**Dielectric Rating:** 2500VRMS between winding and outer circumference to within 0.250" [6.35mm] of the insulating sleeve edge.

**Operating Temperature:**

- 55°C to + 125°C (no load).

- 55°C to + 85°C (at full rated current).

**Current Rating:** Maximum continuous.

Operating current (DC or RMS) based on a 40°C temperature rise.

### MECHANICAL SPECIFICATIONS

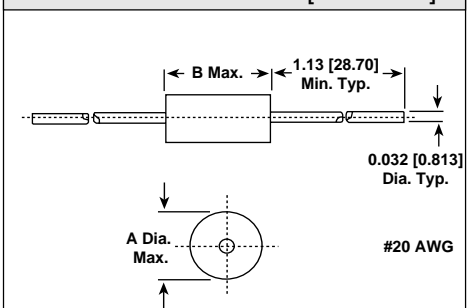
**Wire:** Solid soft copper.

**Terminals:** 20 AWG tinned copper leads.

**Coating:** Polyolefin tubing - flame retardant UL type VW-1 per MIL-I-23053/5, Class 3 requirements.

**Core Material:** Ferrite.

### DIMENSIONS in inches [millimeters]



MODEL	A (Max.)	B (Max.)
IHD-1	0.270 [6.85]	0.700 [17.78]
IHD-3	0.460 [11.68]	0.900 [22.86]

### MARKING

- Vishay Dale
- Model
- Value
- Date code

### ORDERING INFORMATION

MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE
IHD-1	3.9μH	±15%