Filter Inductors, High Current, Axial 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

Dielectric Rating: 2500 V_{RMS} between winding and outer circumference to within 0.250" [6.35 mm] 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

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
- Compliant to RoHS Directive 2002/95/EC

Pb-free
RoHS COMPLIANT

MECHANICAL SPECIFICATIONS

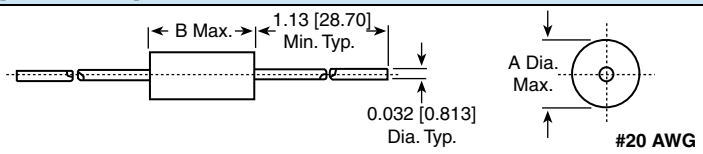
Wire: Solid soft copper

Terminals: 20 AWG tinned copper leads

Core Material: Ferrite

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

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]

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	IND. AT 1 kHz (µH)	TOL. (%)	DCR MAX. (Ω)	RATED DC CURRENT MAX. (A)	INCREMENTAL CURRENT APPROX. (A)
IHD-1	1	± 15 %	0.009	5.3	7.00
IHD-1	1.2	± 15 %	0.010	5.0	6.40
IHD-1	1.5	± 15 %	0.011	4.8	5.70
IHD-1	1.8	± 15 %	0.012	4.6	5.20
IHD-1	2.2	± 15 %	0.013	4.4	4.70
IHD-1	2.7	± 15 %	0.014	4.2	4.30
IHD-1	3.3	± 15 %	0.016	4.0	3.90
IHD-1	3.9	± 15 %	0.017	3.8	3.60
IHD-1	4.7	± 15 %	0.022	3.4	3.30
IHD-1	5.6	± 15 %	0.024	3.2	3.00
IHD-1	6.8	± 15 %	0.026	3.1	2.70
IHD-1	8.2	± 15 %	0.028	3.0	2.50
IHD-1	10	± 15 %	0.033	2.8	2.30
IHD-1	12	± 15 %	0.037	2.6	2.10
IHD-1	15	± 15 %	0.040	2.5	1.90
IHD-1	18	± 15 %	0.044	2.4	1.70
IHD-1	22	± 15 %	0.050	2.2	1.50
IHD-1	27	± 15 %	0.070	1.9	1.40
IHD-1	33	± 15 %	0.075	1.8	1.30
IHD-1	39	± 15 %	0.084	1.7	1.20
IHD-1	47	± 15 %	0.104	1.6	1.10
IHD-1	56	± 15 %	0.130	1.4	0.97
IHD-1	68	± 15 %	0.145	1.3	0.88
IHD-1	82	± 15 %	0.152	1.3	0.80
IHD-1	100	± 15 %	0.208	1.1	0.73
IHD-1	120	± 15 %	0.283	0.94	0.66
IHD-1	150	± 15 %	0.330	0.87	0.60
IHD-1	180	± 15 %	0.362	0.83	0.54
IHD-1	220	± 15 %	0.505	0.70	0.49
IHD-1	270	± 15 %	0.557	0.67	0.45
IHD-1	330	± 15 %	0.650	0.62	0.40
IHD-1	390	± 15 %	0.770	0.57	0.37
IHD-1	470	± 15 %	1.030	0.49	0.34
IHD-1	560	± 15 %	1.140	0.47	0.31

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STANDARD ELECTRICAL SPECIFICATIONS

MODEL	IND. AT 1 kHz (µH)	TOL. (%)	DCR MAX. (Ω)	RATED DC CURRENT MAX. (A)	INCREMENTAL CURRENT APPROX. (A)
IHD-1	680	± 15 %	1.500	0.41	0.28
IHD-1	820	± 15 %	1.980	0.36	0.26
IHD-1	1000	± 15 %	2.300	0.33	0.23
IHD-1	1200	± 15 %	2.550	0.31	0.21
IHD-1	1500	± 15 %	3.000	0.29	0.19
IHD-1	1800	± 15 %	4.000	0.25	0.18
IHD-1	2200	± 15 %	4.400	0.24	0.16
IHD-1	2700	± 15 %	5.800	0.21	0.14
IHD-1	3300	± 15 %	6.560	0.20	0.13
IHD-1	3900	± 15 %	8.630	0.17	0.12
IHD-1	4700	± 15 %	10.100	0.16	0.11
IHD-1	5600	± 15 %	11.200	0.15	0.10
IHD-1	6800	± 15 %	15.000	0.13	0.09
IHD-1	8200	± 15 %	20.800	0.11	0.08
IHD-1	10 000	± 15 %	23.400	0.10	0.08
IHD-1	12 000	± 15 %	26.000	0.10	0.07
IHD-1	15 000	± 15 %	36.000	0.08	0.06
IHD-1	18 000	± 15 %	40.000	0.08	0.06
IHD-3	3.9	± 15 %	0.007	4.0	8.20
IHD-3	4.7	± 15 %	0.008	4.0	7.50
IHD-3	5.6	± 15 %	0.011	4.0	6.90
IHD-3	6.8	± 15 %	0.011	4.0	6.30
IHD-3	8.2	± 15 %	0.013	4.0	5.70
IHD-3	10	± 15 %	0.016	4.0	5.20
IHD-3	12	± 15 %	0.018	4.0	4.70
IHD-3	15	± 15 %	0.020	4.0	4.30
IHD-3	18	± 15 %	0.022	4.0	3.90
IHD-3	22	± 15 %	0.024	4.0	3.50
IHD-3	27	± 15 %	0.025	4.0	3.20
IHD-3	33	± 15 %	0.028	4.0	2.90
IHD-3	39	± 15 %	0.031	4.0	2.70
IHD-3	47	± 15 %	0.034	4.0	2.50
IHD-3	56	± 15 %	0.043	3.2	2.30
IHD-3	68	± 15 %	0.059	2.5	2.10
IHD-3	82	± 15 %	0.066	2.0	1.90
IHD-3	100	± 15 %	0.084	1.6	1.70
IHD-3	120	± 15 %	0.113	1.6	1.60
IHD-3	150	± 15 %	0.129	1.6	1.40
IHD-3	180	± 15 %	0.150	1.6	1.30
IHD-3	220	± 15 %	0.162	1.6	1.20
IHD-3	270	± 15 %	0.226	1.6	1.10
IHD-3	330	± 15 %	0.257	1.6	0.95
IHD-3	390	± 15 %	0.288	1.6	0.88
IHD-3	470	± 15 %	0.393	1.2	0.80
IHD-3	560	± 15 %	0.504	1.0	0.74
IHD-3	680	± 15 %	0.570	1.0	0.67
IHD-3	820	± 15 %	0.643	0.8	0.61
IHD-3	1000	± 15 %	0.844	0.8	0.56
IHD-3	1200	± 15 %	0.977	0.6	0.51
IHD-3	1500	± 15 %	1.180	0.6	0.46
IHD-3	1800	± 15 %	1.500	0.6	0.42
IHD-3	2200	± 15 %	1.760	0.5	0.38
IHD-3	2700	± 15 %	2.130	0.4	0.34
IHD-3	3300	± 15 %	2.530	0.4	0.31
IHD-3	3900	± 15 %	2.840	0.4	0.29
IHD-3	4700	± 15 %	3.790	0.4	0.26
IHD-3	5600	± 15 %	4.240	0.32	0.24
IHD-3	6800	± 15 %	5.750	0.25	0.22
IHD-3	8200	± 15 %	6.440	0.25	0.20
IHD-3	10 000	± 15 %	7.300	0.25	0.18
IHD-3	12 000	± 15 %	9.340	0.20	0.17
IHD-3	15 000	± 15 %	10.700	0.20	0.15
IHD-3	18 000	± 15 %	14.800	0.16	0.14
IHD-3	22 000	± 15 %	18.000	0.13	0.12
IHD-3	27 000	± 15 %	22.700	0.13	0.11
IHD-3	33 000	± 15 %	25.700	0.13	0.10
IHD-3	39 000	± 15 %	29.700	0.10	0.09
IHD-3	47 000	± 15 %	33.700	0.10	0.09
IHD-3	56 000	± 15 %	38.000	0.10	0.08
IHD-3	68 000	± 15 %	52.800	0.08	0.07
IHD-3	82 000	± 15 %	67.300	0.07	0.07
IHD-3	100 000	± 15 %	76.000	0.07	0.06

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Filter Inductors, High Current, Axial Leaded

MARKING

- Vishay Dale
- Model
- Inductance value
- Date code

ORDERING INFORMATION

IHD-1	3.9 µH	± 15 %	ER	e2
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	H	D	1	E	R	3	R	9	L
MODEL				PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE

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