

High Current, Surface Mount Inductor



RoHS
COMPLIANT

FEATURES

- Flame retardant encapsulant (UL 94V-0)
- Completely encapsulated winding provides superior environmental protection and moisture resistance
- High current unit in surface mount package printed with model, inductance value and date code
- Compatible with infrared or conventional reflow soldering methods
- Pick and place compatible

APPLICATIONS

Excellent power line noise filters, filters for switching regulated power supplies, DC/DC converters, SCR and Triac controls and RFI suppression.

ELECTRICAL SPECIFICATIONS

Inductance: Measured at 1 volt with no DC current

Inductance Tolerance: $\pm 15\%$

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 + 85 °C (at full rated current)

MATERIAL SPECIFICATIONS

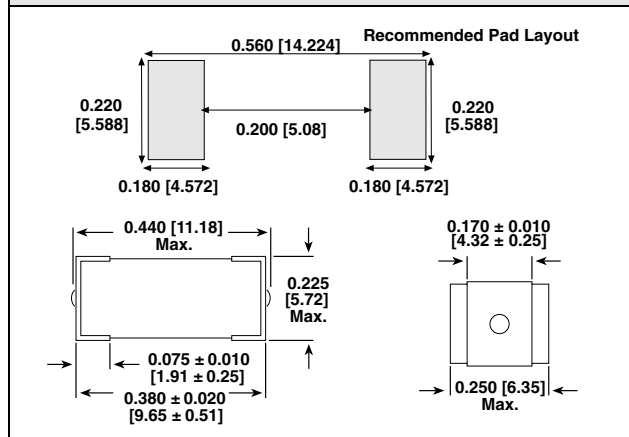
Core: High resistivity ferrite core

Encapsulant: Epoxy

Terminals: 100 % Sn over Ni

STANDARD ELECTRICAL SPECIFICATIONS			
IND. at 1 kHz (μ H)	DCR MAX. (Ohms)	RATED CURRENT (Max. Amps)	INCREMENTAL CURRENT (Amps Approx.)
1.0	0.015	5.11	4.41
1.2	0.016	4.93	4.11
1.5	0.017	4.63	3.66
1.8	0.022	4.27	3.22
2.2	0.031	3.61	2.62
2.7	0.038	3.18	2.40
3.3	0.045	2.94	2.13
3.9	0.062	2.57	2.05
4.7	0.083	2.17	1.93
5.6	0.091	2.08	1.79
6.8	0.101	1.94	1.62
8.2	0.118	1.83	1.50
10.0	0.126	1.74	1.36
12.0	0.170	1.50	1.26
15.0	0.228	1.29	1.11
18.0	0.306	1.13	1.05
22.0	0.336	1.05	0.96
27.0	0.389	0.98	0.86
33.0	0.440	0.92	0.75
39.0	0.490	0.86	0.72
47.0	0.646	0.74	0.68
56.0	0.845	0.65	0.64
68.0	1.040	0.61	0.58
82.0	1.240	0.56	0.51
100.0	1.440	0.48	0.42
120.0	2.180	0.45	0.40
150.0	2.900	0.38	0.37
180.0	3.280	0.36	0.33
220.0	3.650	0.34	0.28
270.0	4.400	0.29	0.26
330.0	5.070	0.27	0.23
390.0	5.900	0.23	0.20
470.0	7.670	0.22	0.19
560.0	8.850	0.21	0.17
680.0	10.20	0.18	0.15
820.0	11.58	0.17	0.14
1000.0	12.97	0.16	0.13

DIMENSIONS in inches [millimeters]



PART MARKING

- Model
- Inductance value
- Date code

DESCRIPTION

IHSM-3825	3.9 μ H	$\pm 15\%$	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

SAP PART NUMBERING GUIDELINES (INTERNAL)

I	H	S	M	3	8	2	5	E	R	3	R	9	L
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.



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