

# High Current, Surface Mount Inductor



## 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).

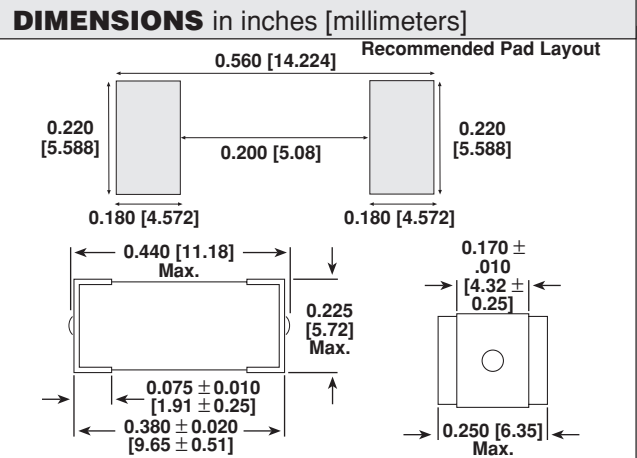
## MATERIAL SPECIFICATIONS

**Core:** High resistivity ferrite core.

**Encapsulant:** Epoxy.

**Terminals:** 60/40 solder coated copper.

STANDARD ELECTRICAL SPECIFICATIONS			
IND. @ 1kHz ( $\mu\text{H}$ )	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



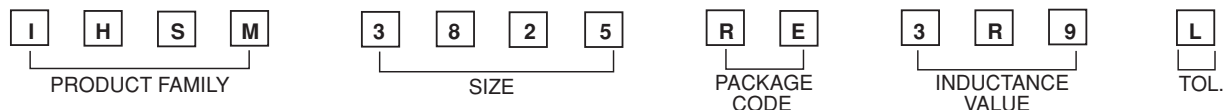
## PART MARKING

- Model
- Inductance value
- Date code

## DESCRIPTION

IHSM-3825	3.9 $\mu\text{H}$	$\pm 15\%$
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE

## SAP PART NUMBERING GUIDELINES (INTERNAL)



See the end of this data book for conversion tables