

# High Current, Surface Mount Inductors - Wirewound Molded



STANDARD ELECTRICAL SPECIFICATIONS			
IND. AT 1 kHz (μH)	DCR MAX. (Ω)	RATED CURRENT MAX. (A)	INCREMENTAL CURRENT APPROX. (A)
1.0	0.011	9.0	5.3
1.2	0.012	8.8	4.8
1.5	0.012	8.6	4.4
1.8	0.013	8.5	4.0
2.2	0.014	8.4	3.6
2.7	0.016	8.2	3.2
3.3	0.017	8.1	2.8
3.9	0.02	7.3	2.6
4.7	0.023	6.7	2.4
5.6	0.025	6.0	2.3
6.8	0.028	5.6	2.1
8.2	0.032	5.3	1.9
10.0	0.036	5.0	1.7
12.0	0.04	4.8	1.5
15.0	0.043	4.5	1.4
18.0	0.047	4.2	1.3
22.0	0.054	3.8	1.2
27.0	0.074	3.4	1.1
33.0	0.084	3.0	0.99
39.0	0.095	2.8	0.93
47.0	0.12	2.6	0.87
56.0	0.14	2.4	0.82
68.0	0.16	2.1	0.76
82.0	0.184	1.9	0.72
100.0	0.226	1.7	0.68
120.0	0.305	1.5	0.61
150.0	0.362	1.4	0.54
180.0	0.399	1.3	0.48
220.0	0.536	1.1	0.44
270.0	0.599	0.95	0.4
330.0	0.714	0.86	0.36
390.0	0.819	0.8	0.33
470.0	1.1	0.74	0.31
560.0	1.2	0.68	0.29
680.0	1.58	0.63	0.26
820.0	2.08	0.573	0.23
1000.0	2.42	0.51	0.21
1200.0	2.68	0.46	0.19
1500.0	3.15	0.4	0.17
1800.0	4.2	0.34	0.15
2200.0	4.62	0.31	0.135
2700.0	6.3	0.29	0.12
3300.0	7.09	0.27	0.11
3900.0	9.14	0.25	0.1
4700.0	10.6	0.23	0.09
5600.0	11.8	0.21	0.08
6800.0	15.8	0.19	0.0775
8200.0	21.8	0.17	0.0725
10 000.0	24.6	0.16	0.07
12 000.0	28.4	0.14	0.0625
15 000.0	37.8	0.12	0.055
18 000.0	44.1	0.11	0.05

## FEATURES

- Flame retardant encapsulant (UL 94 V-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
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



RoHS COMPLIANT

## 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 V with no DC current

**Inductance Tolerance:** ± 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)

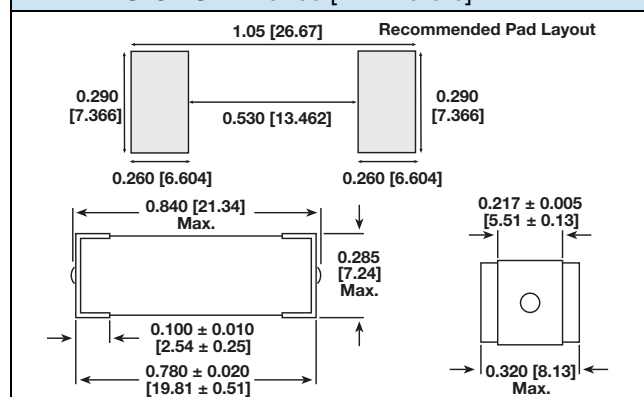
## MECHANICAL SPECIFICATIONS

**Core:** High resistivity ferrite core

**Encapsulant:** Epoxy

**Terminals:** 100 % Sn over Ni

## DIMENSIONS in inches [millimeters]



## PART MARKING

- Model
- Inductance value
- Date code

DESCRIPTION				
IHSM-7832	3.9 μH	± 15 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER				
I	H	S	M	
PRODUCT FAMILY				
7	8	3	2	
SIZE				
E	R			
PACKAGE CODE				
3	R	9		
INDUCTANCE VALUE				
			L	
				TOL.



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