High Current, Surface Mount Inductors - Wirewound Molded



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
- Tape and reel packaging for automatic handling
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

Pb-free 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

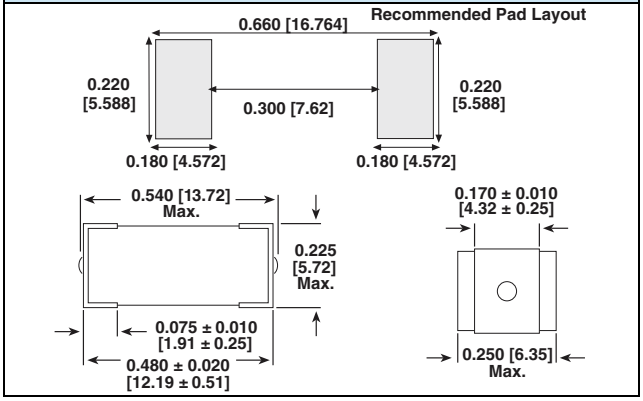
Encapsulant: Epoxy

Terminals: 100 % Sn over Ni

STANDARD ELECTRICAL SPECIFICATIONS

IND. AT 1 kHz (µH)	DCR MAX. (Ω)	RATED CURRENT MAX. (A)	INCREMENTAL CURRENT APPROX. (A)
1.0	0.013	8.6	4.1
1.2	0.018	7.6	3.8
1.5	0.02	6.9	3.5
1.8	0.021	6.5	3.2
2.2	0.029	5.7	2.9
2.7	0.034	5.1	2.6
3.3	0.038	4.6	2.4
3.9	0.042	4.3	2.2
4.7	0.047	4.0	2.0
5.6	0.051	3.8	1.9
6.8	0.058	3.5	1.7
8.2	0.063	3.3	1.5
10.0	0.071	3.1	1.4
12.0	0.079	2.7	1.3
15.0	0.089	2.3	1.2
18.0	0.119	1.9	1.1
22.0	0.152	1.7	1.02
27.0	0.179	1.6	0.95
33.0	0.222	1.3	0.88
39.0	0.315	1.19	0.8
47.0	0.362	1.07	0.74
56.0	0.397	0.95	0.68
68.0	0.446	0.87	0.62
82.0	0.604	0.8	0.56
100.0	0.672	0.73	0.5
120.0	0.735	0.66	0.45
150.0	0.998	0.58	0.4
180.0	1.37	0.5	0.35
220.0	1.58	0.46	0.32
270.0	1.77	0.41	0.3
330.0	2.51	0.37	0.28
390.0	2.73	0.34	0.26
470.0	3.36	0.32	0.24
560.0	3.75	0.3	0.23
680.0	4.31	0.28	0.2
820.0	6.04	0.26	0.17
1000.0	6.9	0.24	0.15

DIMENSIONS in inches [millimeters]



PART MARKING

- Model
- Inductance value
- Date code

DESCRIPTION

IHSM-4825	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	4	8	2	5	E	R	3	R	9	L
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.

For technical questions, contact: magnetics@vishay.com

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