### IHSM-5832



Vishay Dale

### 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	0.010	9.0	6.2		
1.2	0.011	8.8	5.6		
1.5	0.012	8.7	5.0		
1.8	0.013	8.6	4.4		
2.2	0.015	8.5	4.0		
2.7	0.017	8.4	3.7		
3.3	0.020	8.3	3.4		
3.9	0.021	7.9	3.1		
4.7	0.023	7.4	2.8		
5.6	0.024	7.0	2.6		
6.8	0.038	6.1	2.3		
8.2	0.047	5.1	2.0		
10.0	0.053	4.3	1.8		
12.0	0.068	3.9	1.7		
15.0	0.078	3.5	1.6		
18.0	0.083	3.2	1.5		
22.0	0.12	2.8	1.3		
27.0	0.14	2.3	1.2		
33.0	0.17	1.9	1.1		
39.0	0.19	1.8	1.03		
47.0	0.215	1.77	0.93		
56.0	0.236	1.71	0.90		
68.0	0.305	1.43	0.82		
82.0	0.357	1.14	0.75		
100.0	0.452	0.95	0.68		
120.0	0.530	0.88	0.63		
150.0	0.609	0.82	0.58		
180.0	0.809	0.75	0.54		
220.0	1.10	0.69	0.48		
270.0	1.27	0.64	0.43		
330.0	1.42	0.59	0.38		
390.0	1.89	0.54	0.34		
470.0	2.21	0.49	0.31		
560.0	2.42	0.46	0.28		
680.0	2.73	0.43	0.25		
820.0	3.78	0.40	0.23		
1000.0	4.20	0.37	0.20		
1200.0	5.51	0.32	0.19		
1500.0	7.35	0.29	0.17		
1800.0	8.66	0.25	0.16		
2200.0	9.71	0.22	0.10		
2700.0	11.29	0.20	0.13		
3300.0	15.60	0.18	0.10		
3900.0	20.74	0.16	0.12		
4700.0	23.10	0.10	0.10		

Note

Contact factory for values above 47 000 µH

### 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 compliant 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 <u>www.vishay.com/doc?99912</u>

#### APPLICATIONS

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

#### ELECTRICAL SPECIFICATIONS

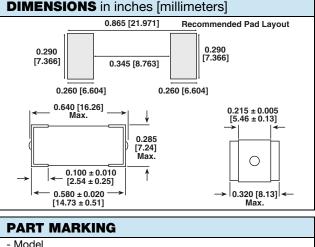
Inductance: Measured at 1 V with no DC current Inductance Tolerance:  $\pm$  15 %

**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)

#### **MECHANICAL SPECIFICATIONS**

**Core:** High resistivity ferrite core **Encapsulant:** Epoxy **Terminals:** 100 % Sn over Ni



- Inductance value
- Date code

DESCRIPTION						
IHSM-5832	3.9 µH	± 15 %	ER	e3		
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD		
GLOBAL P	ART NUMBER					
I PRC	H S M DUCT FAMILY	5 8 3 2 SIZE	E R PACKAGE CODE	3 R 9 L INDUCTANCE TOL. VALUE		

Revision: 20-Sep-13

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Document Number: 34020

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