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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	0.015	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			

## **FEATURES**

- Flame retardant encapsulant (UL 94 V-0)
- · Completely encapsulated winding provides superior environmental protection and moisture RoHS

COMPLIANT

- · 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

### 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

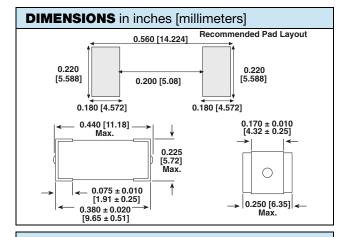
Operating Temperature: -55 °C to +125 °C (no load); -55 °C to +85 °C (at full rated current)

## **MECHANICAL SPECIFICATIONS**

Core: High resistivity ferrite core

Encapsulant: Epoxy

Terminals: 100 % Sn over Ni



## PART MARKING

- Model
- Inductance value
- Date code

#### **DESCRIPTION** IHSM-3825 3.9 µH ± 15 % **ER MODEL** INDUCTANCE VALUE INDUCTANCE TOLERANCE PACKAGE CODE JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER						
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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# Vishay:

 IHSM3825ER5R6L
 IHSM3825RE4R7L
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 IHSM3825ER220L

 IHSM3825ER100L
 IHSM3825ER101L
 IHSM3825ER102L
 IHSM3825ER221L
 IHSM3825ER330L
 IHSM3825ER471L

 IHSM3825ER4R7L
 IHSM-3825 1 15%TR
 IHSM-3825 180 15%TR
 IHSM-3825 1K 15%TR
 IHSM-3825 2.2 15%TR

 IHSM-3825 5.6 15%TR
 IHSM3825ER150L
 IHSM3825ER331L
 IHSM3825ER2R2L
 IHSM3825PJ2R2L

 IHSM3825RE181L
 IHSM3825RE102L
 IHSM3825RE5R6L
 IHSM3825RE1R0L
 IHSM3825ER391L