

# IHSM4825ER102L Datasheet

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DiGi Electronics Part Number	IHSM4825ER102L-DG
Manufacturer	<a href="#">Vishay Dale</a>
Manufacturer Product Number	IHSM4825ER102L
Description	FIXED IND 1MH 240MA 6.9 OHM SMD
Detailed Description	1 mH Unshielded Inductor 240 mA 6.90hm Max No nstandard



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## Purchase and inquiry

Manufacturer Product Number:

IHSM4825ER102L

Series:

IHSM-4825

Type:

-

Inductance:

1 mH

Current Rating (Amps):

240 mA

Shielding:

Unshielded

Q @ Freq:

-

Ratings:

-

Inductance Frequency - Test:

1 kHz

Package / Case:

Nonstandard

Size / Dimension:

0.540" L x 0.250" W (13.72mm x 6.35mm)

Manufacturer:

Vishay Dale

Product Status:

Active

Material - Core:

Ferrite

Tolerance:

±15%

Current - Saturation (Isat):

150mA

DC Resistance (DCR):

6.90hm Max

Frequency - Self Resonant:

-

Operating Temperature:

-55°C ~ 125°C

Mounting Type:

Surface Mount

Supplier Device Package:

-

Height - Seated (Max):

0.225" (5.72mm)

## Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.4000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



www.vishay.com

**IHSM-4825**

Vishay Dale

## High Current, Surface Mount Inductors - Wirewound Molded

**RoHS**

COMPLIANT

### 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](http://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:**  $\pm 15\%$

**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

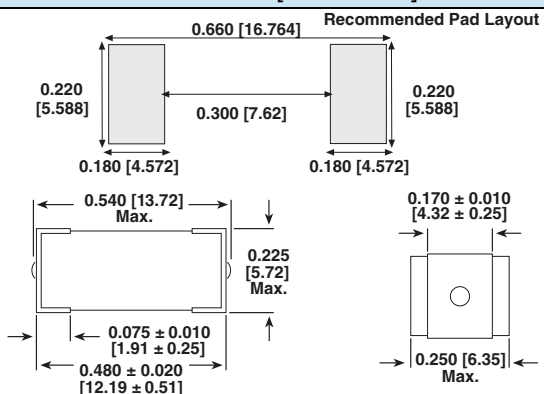
**Core:** High resistivity ferrite core

**Encapsulant:** Epoxy

**Terminals:** 100 % Sn over Ni

STANDARD ELECTRICAL SPECIFICATIONS			
IND. AT 1 kHz ( $\mu$ H)	DCR MAX. ( $\Omega$ )	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

<b>IHSM-4825</b>	<b>3.9 <math>\mu</math>H</b>	<b><math>\pm 15\%</math></b>	<b>ER</b>	<b>e3</b>
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

### GLOBAL PART NUMBER

<b>I</b>	<b>H</b>	<b>S</b>	<b>M</b>	<b>4</b>	<b>8</b>	<b>2</b>	<b>5</b>	<b>E</b>	<b>R</b>	<b>3</b>	<b>R</b>	<b>9</b>	<b>L</b>
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.



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