

IHSM3825RE680L Datasheet



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DiGi Electronics Part Number	IHSM3825RE680L-DG
Manufacturer	Vishay Dale
Manufacturer Product Number	IHSM3825RE680L
Description	FIXED IND 68UH 610MA 1.04OHM SMD
Detailed Description	68 μ H Unshielded Inductor 610 mA 1.04Ohm Max Nonstandard

<https://www.DiGi-Electronics.com>



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Purchase and inquiry

Manufacturer Product Number:

IHSM3825RE680L

Series:

IHSM-3825

Type:

-

Inductance:

68 μ H

Current Rating (Amps):

610 mA

Shielding:

Unshielded

Q @ Freq:

-

Ratings:

-

Inductance Frequency - Test:

1 kHz

Package / Case:

Nonstandard

Size / Dimension:

0.440" L x 0.250" W (11.18mm x 6.35mm)

Manufacturer:

Vishay Dale

Product Status:

Active

Material - Core:

Ferrite

Tolerance:

\pm 15%

Current - Saturation (Isat):

580mA

DC Resistance (DCR):

1.040hm 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:

RoHS non-compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.4000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



www.vishay.com

IHSM-3825

Vishay Dale

High Current, Surface Mount Inductors - Wirewound Molded

RoHS
COMPLIANT

STANDARD ELECTRICAL SPECIFICATIONS

IND. AT 1 kHz (μ H)	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 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

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: $-55\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$ (no load); $-55\text{ }^{\circ}\text{C}$ to $+85\text{ }^{\circ}\text{C}$ (at full rated current)

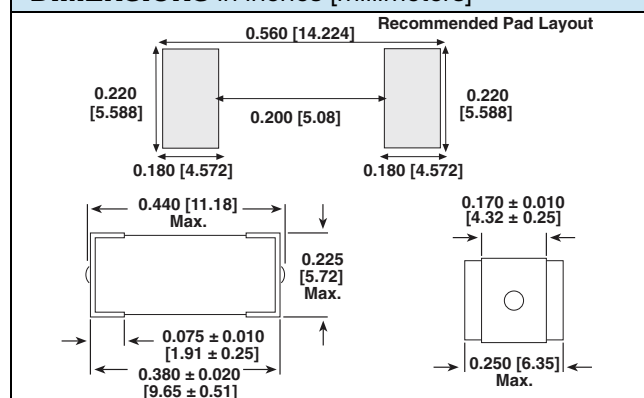
MECHANICAL SPECIFICATIONS

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-3825	3.9 μ H	$\pm 15\%$	ER	e3
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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