

IHSM3825RE102K Datasheet



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DiGi Electronics Part Number	IHSM3825RE102K-DG
Manufacturer	Vishay Dale
Manufacturer Product Number	IHSM3825RE102K
Description	FIXED IND 1MH 160MA 12.97OHM SMD
Detailed Description	1 mH Unshielded Inductor 160 mA 12.97Ohm Max Nonstandard

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



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Purchase and inquiry

Manufacturer Product Number:

IHSM3825RE102K

Series:

IHSM-3825

Type:

-

Inductance:

1 mH

Current Rating (Amps):

160 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:

±10%

Current - Saturation (Isat):

130mA

DC Resistance (DCR):

12.970hm 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



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

MECHANICAL SPECIFICATIONS

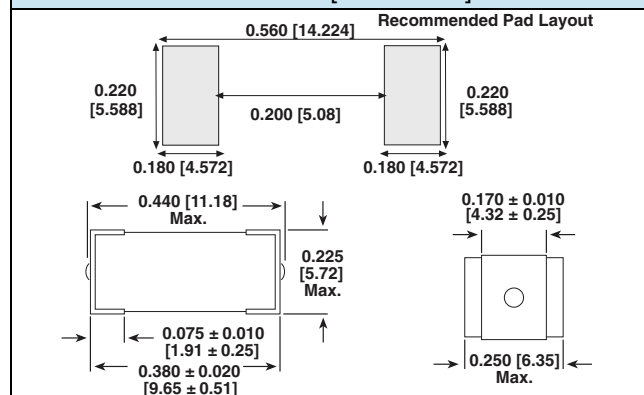
Core: High resistivity ferrite core

Encapsulant: Epoxy

Terminals: 100 % Sn over Ni

STANDARD ELECTRICAL SPECIFICATIONS			
IND. AT 1 kHz (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

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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