

# IHSM7832EB3R3L Datasheet



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DiGi Electronics Part Number	IHSM7832EB3R3L-DG
Manufacturer	<a href="#">Vishay Dale</a>
Manufacturer Product Number	IHSM7832EB3R3L
Description	FIXED IND 3.3UH 8.1A 17 MOHM SMD
Detailed Description	3.3 $\mu$ H Unshielded Inductor 8.1 A 17mOhm Max No nstandard

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



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## Purchase and inquiry

Manufacturer Product Number:

IHSM7832EB3R3L

Series:

IHSM-7832

Type:

-

Inductance:

3.3  $\mu$ H

Current Rating (Amps):

8.1 A

Shielding:

Unshielded

Q @ Freq:

-

Ratings:

-

Inductance Frequency - Test:

1 kHz

Package / Case:

Nonstandard

Size / Dimension:

0.840" L x 0.320" W (21.34mm x 8.13mm)

Manufacturer:

Vishay Dale

Product Status:

Active

Material - Core:

Ferrite

Tolerance:

$\pm$ 15%

Current - Saturation (Isat):

2.8A

DC Resistance (DCR):

17mOhm Max

Frequency - Self Resonant:

-

Operating Temperature:

-55°C ~ 125°C

Mounting Type:

Surface Mount

Supplier Device Package:

-

Height - Seated (Max):

0.285" (7.24mm)

## 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-7832

Vishay Dale

## High Current, Surface Mount Inductors - Wirewound Molded



RoHS COMPLIANT

STANDARD ELECTRICAL SPECIFICATIONS			
IND. AT 1 kHz (μH)	DCR MAX. (Ω)	RATED CURRENT MAX. (A)	INCREMENTAL CURRENT APPROX. (A)
1.0	0.011	9.0	5.3
1.2	0.012	8.8	4.8
1.5	0.012	8.6	4.4
1.8	0.013	8.5	4.0
2.2	0.014	8.4	3.6
2.7	0.016	8.2	3.2
3.3	0.017	8.1	2.8
3.9	0.02	7.3	2.6
4.7	0.023	6.7	2.4
5.6	0.025	6.0	2.3
6.8	0.028	5.6	2.1
8.2	0.032	5.3	1.9
10.0	0.036	5.0	1.7
12.0	0.04	4.8	1.5
15.0	0.043	4.5	1.4
18.0	0.047	4.2	1.3
22.0	0.054	3.8	1.2
27.0	0.074	3.4	1.1
33.0	0.084	3.0	0.99
39.0	0.095	2.8	0.93
47.0	0.12	2.6	0.87
56.0	0.14	2.4	0.82
68.0	0.16	2.1	0.76
82.0	0.184	1.9	0.72
100.0	0.226	1.7	0.68
120.0	0.305	1.5	0.61
150.0	0.362	1.4	0.54
180.0	0.399	1.3	0.48
220.0	0.536	1.1	0.44
270.0	0.599	0.95	0.4
330.0	0.714	0.86	0.36
390.0	0.819	0.8	0.33
470.0	1.1	0.74	0.31
560.0	1.2	0.68	0.29
680.0	1.58	0.63	0.26
820.0	2.08	0.573	0.23
1000.0	2.42	0.51	0.21
1200.0	2.68	0.46	0.19
1500.0	3.15	0.4	0.17
1800.0	4.2	0.34	0.15
2200.0	4.62	0.31	0.135
2700.0	6.3	0.29	0.12
3300.0	7.09	0.27	0.11
3900.0	9.14	0.25	0.1
4700.0	10.6	0.23	0.09
5600.0	11.8	0.21	0.08
6800.0	15.8	0.19	0.0775
8200.0	21.8	0.17	0.0725
10 000.0	24.6	0.16	0.07
12 000.0	28.4	0.14	0.0625
15 000.0	37.8	0.12	0.055
18 000.0	44.1	0.11	0.05

### 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](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:** ± 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)

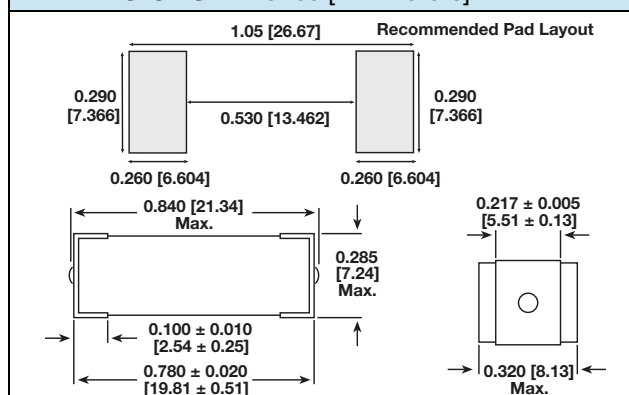
### MECHANICAL SPECIFICATIONS

**Core:** High resistivity ferrite core

**Encapsulant:** Epoxy

**Terminals:** 100 % Sn over Ni

### DIMENSIONS in inches [millimeters]



### PART MARKING

- Model
- Inductance value
- Date code

### DESCRIPTION

IHSM-7832	3.9 μH	± 15 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

### GLOBAL PART NUMBER

I	H	S	M	7	8	3	2	E	R	3	R	9	L
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.



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