

## High Current, Surface Mount Inductor



### FEATURES

- Flame retardant encapsulant (UL 94V-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



### 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 volt 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)

### MATERIAL SPECIFICATIONS

**Core:** High resistivity ferrite core

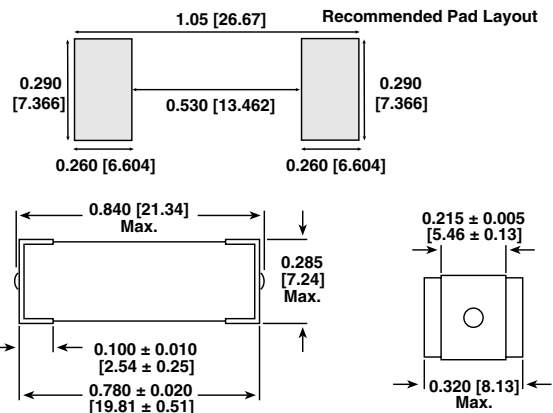
**Encapsulant:** Epoxy

**Terminals:** 100 % Sn over Ni

### STANDARD ELECTRICAL SPECIFICATIONS

IND. at 1 kHz ( $\mu\text{H}$ )	DCR MAX. (Ohms)	RATED CURRENT (Max. Amps)	INCREMENTAL CURRENT (Amps Approx.)
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

### DIMENSIONS in inches [millimeters]



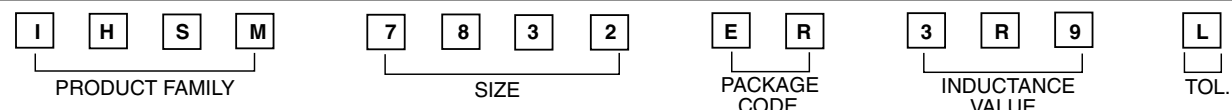
### PART MARKING

- Model - Inductance value - Date code

### DESCRIPTION

IHSM-7832	3.9 $\mu\text{H}$	$\pm 15\%$	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

### SAP PART NUMBERING GUIDELINES (INTERNAL)





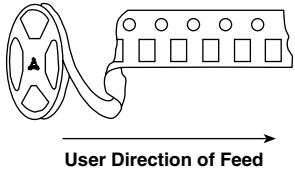
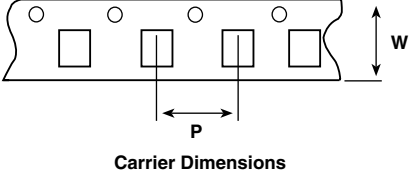
## Notice

Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc., or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.

## SMD Magnetics Packaging Methods

TAPE AND REEL in inches [millimeters]											
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>User Direction of Feed</p> </div> <div style="text-align: center;">  <p>Carrier Dimensions</p> </div> </div>											
MODEL	PACKAGE CODE			REEL SIZE	CARRIER TAPE WIDTH (W)	COMPONENT PITCH (P)	UNITS/ REEL	PACKAGE CODE			UNITS/ BULK
	PREVIOUS CODE	GLOBAL CODE LEAD BEARING	GLOBAL CODE LEAD (Pb)-FREE					PREVIOUS CODE	GLOBAL CODE LEAD BEARING	GLOBAL CODE LEAD (Pb)-FREE	
IHLP-1616AB-01	-	-	ER	13	0.630 [16.0]	0.315 [8.0]	4000	-	-	EB	100
IHLP-1616AB-11	-	-	ER	13	0.630 [16.0]	0.315 [8.0]	4000	-	-	EB	100
IHLP-1616BZ-01	-	-	ER	13	0.630 [16.0]	0.315 [8.0]	4000	-	-	EB	100
IHLP-1616BZ-11	-	-	ER	13	0.630 [16.0]	0.315 [8.0]	4000	-	-	EB	100
IHLP-2525AH	-	-	ER	13	0.630 [16.0]	0.315 [8.0]	2000	-	-	EB	100
IHLP-2525BD	-	-	ER	13	0.630 [16.0]	0.315 [8.0]	2000	-	-	EB	100
IHLP-2525CZ	-	-	ER	13	0.630 [16.0]	0.315 [8.0]	2000	-	-	EB	100
IHLP-2525EZ	-	-	ER	13	0.630 [16.0]	0.472 [12.0]	500	-	-	EB	100
IHLP-4040DZ	-	-	ER	13	0.945 [24.0]	0.630 [16.0]	500	-	-	EB	100
IHLP-5050CE	-	-	ER	13	0.945 [24.0]	0.630 [16.0]	500	-	-	EB	100
IHLP-5050EZ	-	-	ER	13	0.945 [24.0]	0.630 [16.0]	250	-	-	EB	100
IHLP-5050FD	-	-	ER	13	0.945 [24.0]	0.630 [16.0]	250	-	-	EB	100
IHLM-2525CZ	-	-	ER	13	0.630 [16.0]	0.315 [8.0]	2000	-	-	EB	100
IHSM-3825	RC2	RE	ER	13	0.945 [24.0]	0.472 [12.0]	750	P09	PJ	EB	100
IHSM-4825	RC2	RE	ER	13	0.945 [24.0]	0.472 [12.0]	750	P09	PJ	EB	100
IHSM-5832	RC3	RF	ER	13	1.26 [32.0]	0.472 [12.0]	500	P09	PJ	EB	100
IHSM-7832	RC4	RG	ER	13	1.73 [44.0]	0.472 [12.0]	500	P09	PJ	EB	100
IDC-2512	R96	NB	ER	13	0.630 [16.0]	0.315 [8.0]	2000	-	-	-	-
IDC-5020	R96	NB	ER	13	0.630 [16.0]	0.472 [12.0]	500	-	-	-	-
IDC-7328	R96	NB	ER	13	0.945 [24.0]	0.945 [24.0]	250	-	-	-	-
IDCS-2512	R96	NB	ER	13	0.630 [16.0]	0.315 [8.0]	2000	-	-	-	-
IDCS-5020	R96	NB	ER	13	0.630 [16.0]	0.472 [12.0]	500	-	-	-	-
IDCS-7328	R96	NB	ER	13	0.945 [24.0]	0.945 [24.0]	250	-	-	-	-
IDCP-1813	R96	NB	ER	13	0.472 [12.0]	0.315 [8.0]	2000	-	-	-	-
IDCP-2218	R96	NB	ER	13	0.472 [12.0]	0.315 [8.0]	1500	-	-	-	-
IDCP-3114	R96	NB	ER	13	0.630 [16.0]	0.472 [12.0]	1000	-	-	-	-
IDCP-3020	R96	NB	ER	13	0.630 [16.0]	0.472 [12.0]	1000	-	-	-	-
IDCP-3722	R96	NB	ER	13	0.945 [24.0]	0.472 [12.0]	800	-	-	-	-
IDCP-3916	R96	NB	ER	13	0.945 [24.0]	0.472 [12.0]	800	-	-	-	-
IFC-0603	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	5000	-	-	-	-
IFC-0805	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	5000	-	-	-	-
IFCB-0402	-	-	ER	7	0.315 [8.0]	0.079 [2.0]	10 000	-	-	-	-
IFCB-0603	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	5000	-	-	-	-
ILC-0402	-	-	ER	7	0.315 [8.0]	0.079 [2.0]	10 000	-	-	-	-
ILC-0603	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	4000	-	-	-	-
IMC-0402	-	-	ER	7	0.315 [8.0]	0.079 [2.0]	10 000	-	-	-	-
IMC-0402-01	-	-	ER	7	0.315 [8.0]	0.079 [2.0]	10 000	-	-	-	-
IMC-0603	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	3000	-	-	-	-
IMC-0603-01	-	-	ER	7	0.315 [8.0]	0.079 [2.0]	3000	-	-	-	-
IMC-0805	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	3000	-	-	-	-
IMC-0805-01	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	2000	-	-	-	-

TAPE AND REEL in inches [millimeters]											
MODEL	PACKAGE CODE			REEL SIZE	CARRIER TAPE WIDTH (W)	COMPONENT PITCH (P)	UNITS/ REEL	PACKAGE CODE			UNITS/ BULK
	PREVIOUS CODE	GLOBAL CODE LEAD BEARING	GLOBAL CODE LEAD FREE					PREVIOUS CODE	GLOBAL CODE LEAD BEARING	GLOBAL CODE LEAD FREE	
IMC-1008	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	2000	-	-	-	-
IMC-1210	R98/RB3	SY/AN	ER/ET	7	0.315 [8.0]	0.157 [4.0]	2000	B13	BN	EB	500
	R99/RB4	SZ/R9	ES/EU	13	0.315 [8.0]	0.157 [4.0]	7500				
IMC-1210-100	R98/RB3	SY/AN	ER/ET	7	0.315 [8.0]	0.157 [4.0]	2000	B13	BN	EB	500
	R99/RB4	SZ/R9	ES/EU	13	0.315 [8.0]	0.157 [4.0]	7500				
IMC-1812	R73/R92	RV/RX	ER/ET	7	0.472 [12.0]	0.315 [8.0]	500	B13	BN	EB	500
	R13/R91	RQ/RW	ES/EU	13	0.472 [12.0]	0.315 [8.0]	2000				
IMCH-1812	-	-	ER	7	0.472 [12.0]	0.315 [8.0]	500	-	-	-	-
IMC-2220	-	-	ER	13	0.630 [16.0]	0.472 [12.0]	1000	-	-	-	-
ISC-1008	-	-	ER	13	0.472 [12.0]	0.157 [4.0]	750	-	-	-	-
ISC-1210	R98/RB3	SY/AN	ER/ET	7	0.315 [8.0]	0.157 [4.0]	2000	B13	BN	EB	500
	R99/RB4	SZ/R9	ES/EU	13	0.315 [8.0]	0.157 [4.0]	7500				
ISC-1812	R73/R92	RV/RX	ER/ET	7	0.472 [12.0]	0.315 [8.0]	500	B13	BN	EB	500
	R13/R91	RQ/RW	ES/EU	13	0.472 [12.0]	0.315 [8.0]	2000				
ICM-0805	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	2000	-	-	-	-
ICM-1206	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	2000	-	-	-	-
ILSB-0603	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	4000	-	-	-	-
ILSB-0805 (0.047 - 2.2 μH)	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	4000	-	-	-	-
ILSB-0805 (2.7 - 33 μH)	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	3000	-	-	-	-
ILSB-1206	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	3000	-	-	-	-
ILBB-0402	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	10 000	-	-	-	-
ILBB-0603	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	4000	-	-	-	-
ILBB-0805	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	4000	-	-	-	-
ILB-1206	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	3000	-	-	-	-
	RT4	ND	ES	13	0.315 [8.0]	0.157 [4.0]	10 000				
ILBB-1210	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	2000	-	-	-	-
ILBB-1806	RC8	RK	ER	7	0.472 [12.0]	0.157 [4.0]	2000	-	-	-	-
ILBB-1812	RC8	RK	ER	7	0.472 [12.0]	0.157 [4.0]	1000	-	-	-	-
ILHB-0603	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	4000	-	-	-	-
ILHB-0805	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	4000	-	-	-	-
ILHB-1206	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	3000	-	-	-	-
ILHB-1806	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	2000	-	-	-	-
ILHB-1812	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	1000	-	-	-	-
ILAS-1206	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	3000	-	-	-	-
LPE-3325	R94	RY	ER	13	0.945 [24.0]	0.472 [12.0]	1000	S51	SM	EB	10
LPE-4841	R94	RY	ER	13	0.945 [24.0]	0.630 [16.0]	600	S51	SM	EB	10
LPE-5047	R94	RY	ER	13	0.945 [24.0]	0.630 [16.0]	600	S51	SM	EB	10
LPE-6562	R94	RY	ER	13	1.26 [32.0]	0.787 [20.0]	300	S51	SM	EB	10
LPE-6855	R94	RY	ER	13	1.26 [32.0]	0.787 [20.0]	450	S51	SM	EB	10
LPE-3325-CST	-	-	ER	13	0.945 [24.0]	0.472 [12.0]	1000	-	-	EB	10
LPT-3535	RC5	RH	ER	13	0.945 [24.0]	0.630 [16.0]	600	S51	SM	EB	10
LPT-4545	RC5	RH	ER	13	0.945 [24.0]	0.630 [16.0]	600	S51	SM	EB	10