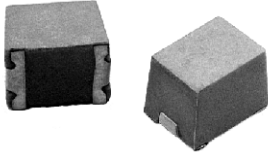


## Surface Mount, Wirewound, Molded Inductors



**RoHS**  
COMPLIANT

### FEATURES

- Molded construction provides superior strength and moisture resistance
- Tape and reel packaging for automatic handling, 2000/reel, EIA 481
- Printed marking
- Compatible with vapor phase and infrared reflow soldering
- Compliant to RoHS directive 2002/95/EC

### ELECTRICAL SPECIFICATIONS

**Inductance Range:** 0.010  $\mu$ H to 1000  $\mu$ H

**Inductance Tolerance:**  $\pm 20\%$  for 0.010  $\mu$ H to 0.39  $\mu$ H  
 $\pm 10\%$  for 0.47  $\mu$ H to 1000  $\mu$ H standard  
 $\pm 10\%$ ,  $\pm 5\%$ ,  $\pm 3\%$  available

**Temperature Range:** - 55  $^{\circ}$ C to + 125  $^{\circ}$ C

**Coilform Material:** Non-magnetic for 0.010  $\mu$ H to 0.82  $\mu$ H  
 Powdered iron for 1.0  $\mu$ H to 120  $\mu$ H. Ferrite for 150  $\mu$ H to 1000  $\mu$ H

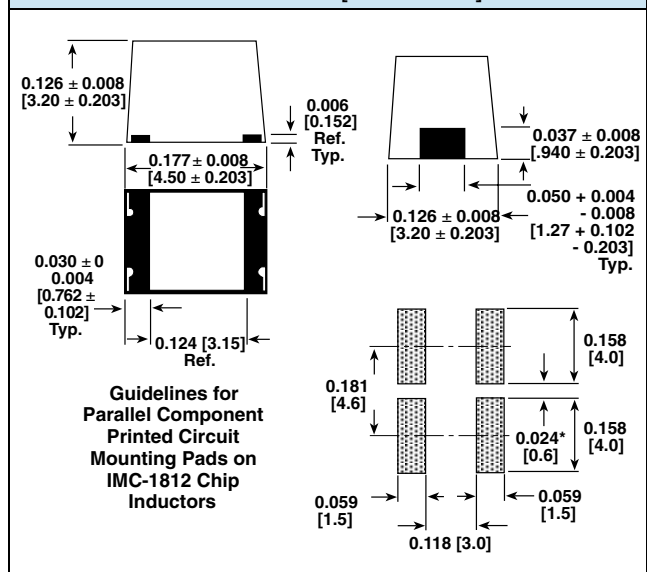
### TEST EQUIPMENT

- H/P 4342A Q meter with Vishay Dale test fixture or equivalent
- H/P 4191A RF Impedance Analyzer (for SRF measurements)
- Wheatstone bridge

STANDARD ELECTRICAL SPECIFICATIONS						
IND. ( $\mu$ H)	TOL.	Q MIN.	TEST FREQ. L & Q (MHz)	SELF-RESONANT FREQ. MIN. (MHz)	DCR MAX. ( $\Omega$ )	RATED* DC CURRENT (mA)
0.010	$\pm 20\%$	50	50.0	1000	0.20	450
0.012	$\pm 20\%$	50	50.0	1000	0.20	450
0.018	$\pm 20\%$	50	50.0	1000	0.20	450
0.022	$\pm 20\%$	50	50.0	1000	0.20	450
0.027	$\pm 20\%$	50	50.0	1000	0.20	450
0.033	$\pm 20\%$	50	50.0	1000	0.30	450
0.039	$\pm 20\%$	50	50.0	1000	0.30	450
0.047	$\pm 20\%$	50	50.0	1000	0.30	450
0.056	$\pm 20\%$	40	50.0	900	0.35	450
0.068	$\pm 20\%$	40	50.0	800	0.35	450
0.082	$\pm 20\%$	40	50.0	700	0.40	450
0.10	$\pm 20\%$	30	25.2	650	0.32	450
0.12	$\pm 20\%$	30	25.2	600	0.30	450
0.15	$\pm 20\%$	30	25.2	500	0.30	450
0.18	$\pm 20\%$	30	25.2	400	0.35	450
0.22	$\pm 20\%$	30	25.2	350	0.40	450
0.27	$\pm 20\%$	30	25.2	300	0.45	450
0.33	$\pm 20\%$	30	25.2	250	0.55	430
0.39	$\pm 20\%$	30	25.2	220	0.70	380
0.47	$\pm 10\%$	30	25.2	190	0.80	355
0.56	$\pm 10\%$	30	25.2	170	1.20	285
0.68	$\pm 10\%$	30	25.2	150	1.40	270
0.82	$\pm 10\%$	30	25.2	140	1.60	250
1.0	$\pm 10\%$	50	7.96	100	0.50	450
1.2	$\pm 10\%$	50	7.96	80.0	0.55	430
1.5	$\pm 10\%$	50	7.96	70.0	0.60	410
1.8	$\pm 10\%$	50	7.96	60.0	0.65	390
2.2	$\pm 10\%$	50	7.96	55.0	0.70	380
2.7	$\pm 10\%$	50	7.96	50.0	0.75	370
3.3	$\pm 10\%$	50	7.96	45.0	0.80	355
3.9	$\pm 10\%$	50	7.96	40.0	0.90	330
4.7	$\pm 10\%$	50	7.96	35.0	1.00	315
5.6	$\pm 10\%$	50	7.96	33.0	1.10	300
6.8	$\pm 10\%$	50	7.96	27.0	1.20	285
8.2	$\pm 10\%$	50	7.96	25.0	1.40	270
10.0	$\pm 10\%$	50	2.52	20.0	1.60	250
12.0	$\pm 10\%$	50	2.52	18.0	2.00	225
15.0	$\pm 10\%$	50	2.52	17.0	2.50	200
18.0	$\pm 10\%$	50	2.52	15.0	2.80	190
22.0	$\pm 10\%$	50	2.52	13.0	3.20	180
27.0	$\pm 10\%$	50	2.52	12.0	3.60	170
33.0	$\pm 10\%$	50	2.52	11.0	4.00	160
39.0	$\pm 10\%$	50	2.52	11.0	4.50	150
47.0	$\pm 10\%$	50	2.52	10.0	5.00	140
56.0	$\pm 10\%$	50	2.52	9.0	5.50	135
68.0	$\pm 10\%$	50	2.52	9.0	6.00	130
82.0	$\pm 10\%$	50	2.52	8.0	7.00	120
100.0	$\pm 10\%$	40	0.79	8.0	8.00	110
120.0	$\pm 10\%$	40	0.79	6.0	8.00	110
150.0	$\pm 10\%$	40	0.79	5.0	9.00	105
180.0	$\pm 10\%$	40	0.79	5.0	9.50	102
220.0	$\pm 10\%$	40	0.79	4.0	10.0	100
270.0	$\pm 10\%$	40	0.79	4.0	12.0	92
330.0	$\pm 10\%$	40	0.79	3.5	14.0	85
390.0	$\pm 10\%$	40	0.79	3.0	16.0	80
470.0	$\pm 10\%$	40	0.79	3.0	26.0	62
560.0	$\pm 10\%$	30	0.79	3.0	30.0	50
680.0	$\pm 10\%$	30	0.79	3.0	30.0	50
820.0	$\pm 10\%$	30	0.79	2.5	35.0	30
1000.0	$\pm 10\%$	30	0.25	2.5	40.0	30

\*Rated DC Current based on the maximum temperature rise, not to exceed 40  $^{\circ}$ C at + 85  $^{\circ}$ C ambient.

### DIMENSIONS in inches [millimeters]



\* Recommended minimum spacing between components

### PART MARKING

- Vishay Dale
- Inductance value
- Date code



**ORDERING INFORMATION**

<b>IMC-1812</b>	<b>10 <math>\mu</math>H</b>	<b><math>\pm 10\%</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>M</b>	<b>C</b>	<b>1</b>	<b>8</b>	<b>1</b>	<b>2</b>	<b>E</b>	<b>R</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>K</b>
PRODUCT FAMILY			SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.



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