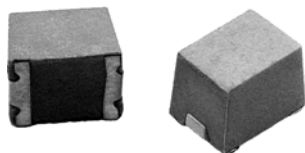


## Wirewound, Surface Mount, Molded Inductors



### STANDARD ELECTRICAL SPECIFICATIONS

IND. ( $\mu$ H)	TOL.	TEST FREQ. (MHz)	Q MIN.	SRF MIN. (MHz)	DCR MAX. ( $\Omega$ )	RATED DC CURRENT (mA) <sup>(1)</sup>
		L & Q				
0.010	$\pm 20\%$	50.0	50	1000	0.20	450
0.012	$\pm 20\%$	50.0	50	1000	0.20	450
0.018	$\pm 20\%$	50.0	50	1000	0.20	450
0.022	$\pm 20\%$	50.0	50	1000	0.20	450
0.027	$\pm 20\%$	50.0	50	1000	0.20	450
0.033	$\pm 20\%$	50.0	50	1000	0.30	450
0.039	$\pm 20\%$	50.0	50	1000	0.30	450
0.047	$\pm 20\%$	50.0	50	1000	0.30	450
0.056	$\pm 20\%$	50.0	40	900	0.35	450
0.068	$\pm 20\%$	50.0	40	800	0.35	450
0.082	$\pm 20\%$	50.0	40	700	0.40	450
0.10	$\pm 20\%$	25.2	30	650	0.32	450
0.12	$\pm 20\%$	25.2	30	600	0.30	450
0.15	$\pm 20\%$	25.2	30	500	0.30	450
0.18	$\pm 20\%$	25.2	30	400	0.35	450
0.22	$\pm 20\%$	25.2	30	350	0.40	450
0.27	$\pm 20\%$	25.2	30	300	0.45	450
0.33	$\pm 20\%$	25.2	30	250	0.55	430
0.39	$\pm 20\%$	25.2	30	220	0.70	380
0.47	$\pm 10\%$	25.2	30	190	0.80	355
0.56	$\pm 10\%$	25.2	30	170	1.20	285
0.68	$\pm 10\%$	25.2	30	150	1.40	270
0.82	$\pm 10\%$	25.2	30	140	1.60	250
1.0	$\pm 10\%$	7.96	50	100	0.50	450
1.2	$\pm 10\%$	7.96	50	80.0	0.55	430
1.5	$\pm 10\%$	7.96	50	70.0	0.60	410
1.8	$\pm 10\%$	7.96	50	60.0	0.65	390
2.2	$\pm 10\%$	7.96	50	55.0	0.70	380
2.7	$\pm 10\%$	7.96	50	50.0	0.75	370
3.3	$\pm 10\%$	7.96	50	45.0	0.80	355
3.9	$\pm 10\%$	7.96	50	40.0	0.90	330
4.7	$\pm 10\%$	7.96	50	35.0	1.00	315
5.6	$\pm 10\%$	7.96	50	33.0	1.10	300
6.8	$\pm 10\%$	7.96	50	27.0	1.20	285
8.2	$\pm 10\%$	7.96	50	25.0	1.40	270
10.0	$\pm 10\%$	2.52	50	20.0	1.60	250
12.0	$\pm 10\%$	2.52	50	18.0	2.00	225
15.0	$\pm 10\%$	2.52	50	17.0	2.50	200
18.0	$\pm 10\%$	2.52	50	15.0	2.80	190
22.0	$\pm 10\%$	2.52	50	13.0	3.20	180
27.0	$\pm 10\%$	2.52	50	12.0	3.60	170
33.0	$\pm 10\%$	2.52	50	11.0	4.00	160
39.0	$\pm 10\%$	2.52	50	11.0	4.50	150
47.0	$\pm 10\%$	2.52	50	10.0	5.00	140
56.0	$\pm 10\%$	2.52	50	9.0	5.50	135
68.0	$\pm 10\%$	2.52	50	9.0	6.00	130
82.0	$\pm 10\%$	2.52	50	8.0	7.00	120
100.0	$\pm 10\%$	0.79	40	8.0	8.00	110
120.0	$\pm 10\%$	0.79	40	6.0	8.00	110
150.0	$\pm 10\%$	0.79	40	5.0	9.00	105
180.0	$\pm 10\%$	0.79	40	5.0	9.50	102
220.0	$\pm 10\%$	0.79	40	4.0	10.0	100
270.0	$\pm 10\%$	0.79	40	4.0	12.0	92
330.0	$\pm 10\%$	0.79	40	3.5	14.0	85
390.0	$\pm 10\%$	0.79	40	3.0	16.0	80
470.0	$\pm 10\%$	0.79	40	3.0	26.0	62
560.0	$\pm 10\%$	0.79	30	3.0	30.0	50
680.0	$\pm 10\%$	0.79	30	3.0	30.0	50
820.0	$\pm 10\%$	0.79	30	2.5	35.0	30
1000.0	$\pm 10\%$	0.25	30	2.5	40.0	30

#### Note

<sup>(1)</sup> Rated DC current based on the maximum temperature rise, not to exceed 40 °C at + 85 °C ambient

### 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



**RoHS**  
COMPLIANT

### 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

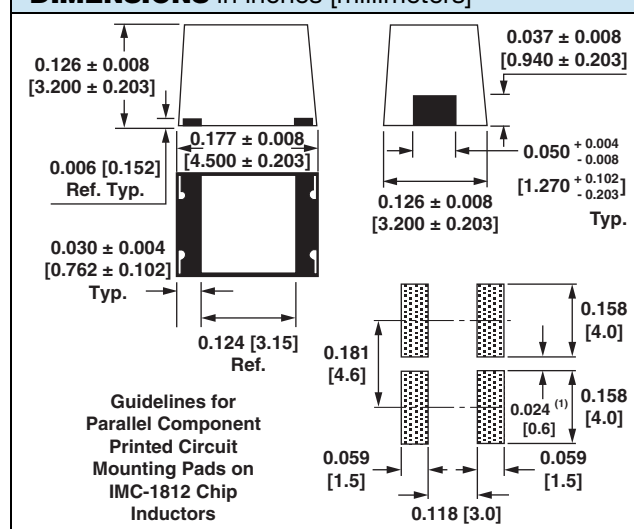
**Operating Temperature:** - 55 °C to + 125 °C

**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

### DIMENSIONS in inches [millimeters]



#### Note

<sup>(2)</sup> Recommended minimum spacing between components

### PART MARKING

- Vishay Dale
- Inductance value
- Date code

## DESCRIPTION

<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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