



# Surface Mount, Molded Inductor



### 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.

### 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°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.

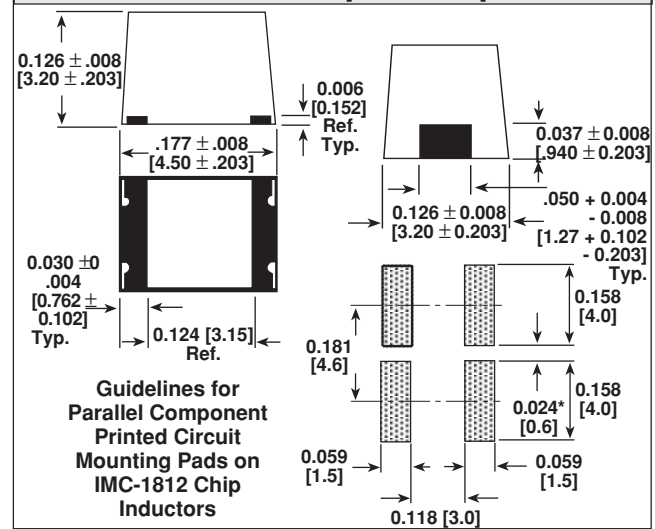
### TEST EQUIPMENT

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

### STANDARD ELECTRICAL SPECIFICATIONS

IND. ( $\mu$ H)	TOL.	Q MIN.	TEST FREQ. L & Q (MHz)	SELF-RESONANT FREQ. MIN. (MHz)	DCR MAX. (Ohms)	RATED DC CURRENT (mA)
0.010	$\pm 20\%$	50	50.0	1000.0	0.20	450
0.012	$\pm 20\%$	50	50.0	1000.0	0.20	450
0.018	$\pm 20\%$	50	50.0	1000.0	0.20	450
0.022	$\pm 20\%$	50	50.0	1000.0	0.20	450
0.027	$\pm 20\%$	50	50.0	1000.0	0.20	450
0.033	$\pm 20\%$	50	50.0	1000.0	0.30	450
0.039	$\pm 20\%$	50	50.0	1000.0	0.30	450
0.047	$\pm 20\%$	50	50.0	1000.0	0.30	450
0.056	$\pm 20\%$	40	50.0	900.0	0.35	450
0.068	$\pm 20\%$	40	50.0	800.0	0.35	450
0.082	$\pm 20\%$	40	50.0	700.0	0.40	450
0.10	$\pm 20\%$	30	25.2	650.0	0.32	450
0.12	$\pm 20\%$	30	25.2	600.0	0.30	450
0.15	$\pm 20\%$	30	25.2	500.0	0.30	450
0.18	$\pm 20\%$	30	25.2	400.0	0.35	450
0.22	$\pm 20\%$	30	25.2	350.0	0.40	450
0.27	$\pm 20\%$	30	25.2	300.0	0.45	450
0.33	$\pm 20\%$	30	25.2	250.0	0.55	430
0.39	$\pm 20\%$	30	25.2	220.0	0.70	380
0.47	$\pm 10\%$	30	25.2	190.0	0.80	355
0.56	$\pm 10\%$	30	25.2	170.0	1.20	285
0.68	$\pm 10\%$	30	25.2	150.0	1.40	270
0.82	$\pm 10\%$	30	25.2	140.0	1.60	250
1.0	$\pm 10\%$	50	7.96	100.0	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	10.00	100
270.0	$\pm 10\%$	40	0.79	4.0	12.00	92
330.0	$\pm 10\%$	40	0.79	3.5	14.00	85
390.0	$\pm 10\%$	40	0.79	3.0	16.00	80
470.0	$\pm 10\%$	40	0.79	3.0	26.00	62
560.0	$\pm 10\%$	30	0.79	3.0	30.00	50
680.0	$\pm 10\%$	30	0.79	3.0	30.00	50
820.0	$\pm 10\%$	30	0.79	2.5	35.00	30
1000.0	$\pm 10\%$	30	0.25	2.5	40.00	30

### DIMENSIONS in inches [millimeters]



\*Recommended minimum spacing between components.

### PART MARKING

- Vishay Dale
- Inductance value
- Date code

### DESCRIPTION

IMC-1812	10 $\mu$ H	$\pm 10\%$
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE

### SAP PART NUMBERING GUIDELINES (INTERNAL)

I	M	C	1	8	1	2	R	V	1	0	0	K
PRODUCT FAMILY			SIZE			PACKAGE CODE		INDUCTANCE VALUE			TOL.	

See the end of this data book for conversion tables