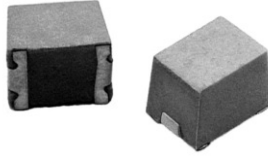


## Surface Mount, Molded Inductor



**RoHS**  
COMPLIANT

### STANDARD ELECTRICAL SPECIFICATIONS

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

\*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
- 100 % lead (Pb)-free and RoHS compliant

### ELECTRICAL SPECIFICATIONS

**Inductance Range:** 0.010 μH to 1000 μH

**Inductance Tolerance:** ± 20 % for 0.010 μH to 0.39 μH

± 10 % for 0.47 μH to 1000 μH standard

± 10 %, ± 5 %, ± 3 % available

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

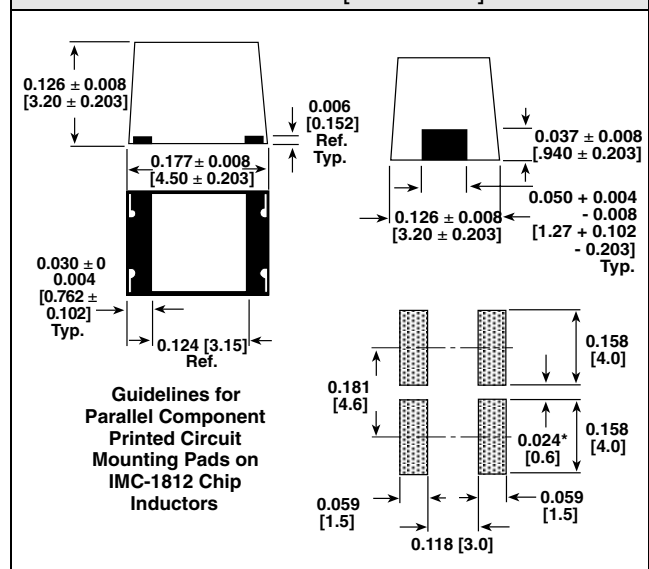
**Coilform Material:** Non-magnetic for 0.010 μH to 0.82 μH

Powdered Iron for 1.0 μH to 120 μH. Ferrite for 150 μH to 1000 μH

### 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]



\* Recommended minimum spacing between components

### PART MARKING

- Vishay Dale
- Inductance value
- Date code



DESCRIPTION				
IMC-1812 MODEL	10 $\mu$ H INDUCTANCE VALUE	$\pm 10\%$ INDUCTANCE TOLERANCE	ER PACKAGE CODE	e3 JEDEC LEAD (Pb)-FREE STANDARD
GLOBAL PART NUMBER				
I M C PRODUCT FAMILY	1 8 1 2 SIZE	E R PACKAGE CODE	1 0 0 INDUCTANCE VALUE	K TOL.



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