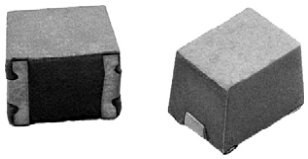
Wirewound, Surface-Mount, Molded Inductors



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
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free
RoHS COMPLIANT

ELECTRICAL SPECIFICATIONS

Inductance range: 0.010 µH to 1000 µH

Special tolerances available upon request

Operating temperature: -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

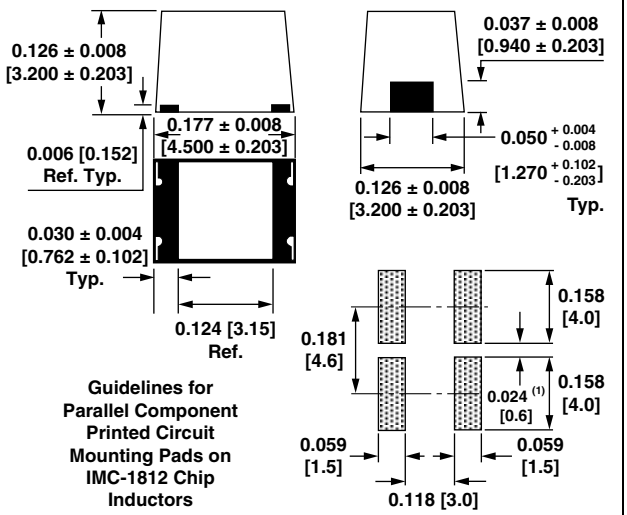
STANDARD ELECTRICAL SPECIFICATIONS

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

Note

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

DIMENSIONS in inches [millimeters]



Note

(1) Recommended minimum spacing between components

PART MARKING

- Vishay Dale
- Inductance code
- Date code

DESCRIPTION

IMC-1812	10 µH	± 10 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

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

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