

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



RoHS
COMPLIANT

STANDARD ELECTRICAL SPECIFICATIONS						
IND. (μ H)	TOL.	TEST FREQ. (MHz)	Q MIN.	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA) ⁽¹⁾
		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

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

ELECTRICAL SPECIFICATIONS

Inductance range: 0.010 μ H to 1000 μ H

Special tolerances available upon request

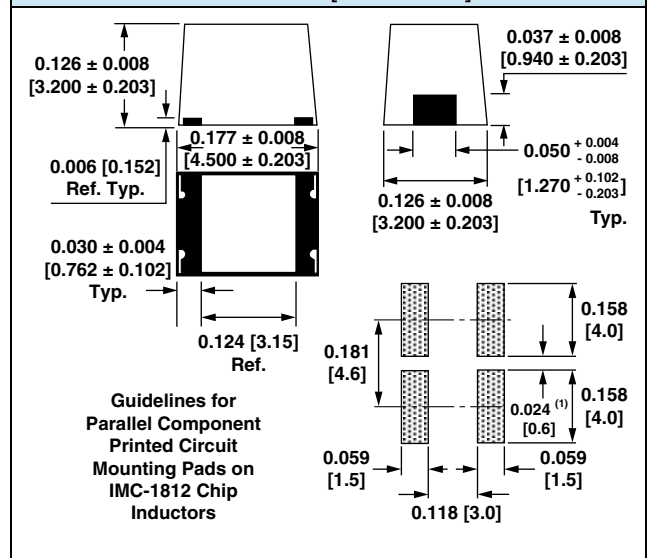
Operating temperature: -55 °C to +125 °C

Coilform material: non-magnetic for 0.010 μ H to 0.82 μ H;
powdered iron for 1.0 μ H to 120 μ H;
ferrite for 150 μ H to 1000 μ 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

⁽¹⁾ Recommended minimum spacing between components

PART MARKING

- Vishay Dale
- Inductance code
- Date code



DESCRIPTION				
IMC-1812	10 μ H	$\pm 10 \%$	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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