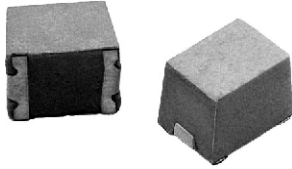


# Wirewound, Surface Mount, Molded, Shielded Inductors



## FEATURES

- Molded construction provides superior strength and moisture resistance
- Tape and reel packaging for automatic handling, 2000/reel, EIA-481
- Compatible with vapor phase and infrared reflow soldering
- Shielded construction minimizes coupling to other components
- Compliant to RoHS directive 2002/95/EC


**RoHS**  
COMPLIANT

## STANDARD ELECTRICAL SPECIFICATIONS

IND. ( $\mu$ H)	TOL.	TEST FREQ. (MHz)	Q MIN.	SRF MIN. (MHz)	DCR MAX. ( $\Omega$ )	RATED DC CURRENT <sup>(1)</sup> (mA)
		L & Q				
0.1	$\pm 20\%$	25.2	30	460	0.23	552
0.1	$\pm 20\%$	25.2	30	400	0.26	519
0.2	$\pm 20\%$	25.2	30	390	0.29	491
0.2	$\pm 20\%$	25.2	30	350	0.32	468
0.2	$\pm 20\%$	25.2	30	310	0.36	441
0.3	$\pm 20\%$	25.2	30	280	0.40	418
0.3	$\pm 20\%$	25.2	30	240	0.45	394
0.4	$\pm 20\%$	25.2	30	215	0.60	342
0.5	$\pm 20\%$	25.2	30	205	0.75	306
0.6	$\pm 20\%$	25.2	30	195	0.80	296
0.7	$\pm 20\%$	25.2	30	165	0.95	271
0.8	$\pm 20\%$	25.2	30	155	1.20	242
1.0	$\pm 10\%$	7.96	30	140	0.35	447
1.2	$\pm 10\%$	7.96	30	120	0.38	429
1.5	$\pm 10\%$	7.96	30	100	0.40	418
1.8	$\pm 10\%$	7.96	30	90.0	0.43	403
2.2	$\pm 10\%$	7.96	30	80.0	0.46	390
2.7	$\pm 10\%$	7.96	30	67.0	0.49	378
3.3	$\pm 10\%$	7.96	30	61.0	0.55	357
3.9	$\pm 10\%$	7.96	30	56.0	0.59	344
4.7	$\pm 10\%$	7.96	30	50.0	0.62	336
5.6	$\pm 10\%$	7.96	30	40.0	0.69	333
6.8	$\pm 10\%$	7.96	30	32.0	0.75	306
8.2	$\pm 10\%$	7.96	30	30.0	0.82	292
10.0	$\pm 10\%$	2.52	50	25.0	0.90	279
12.0	$\pm 10\%$	2.52	50	22.0	1.00	265
15.0	$\pm 10\%$	2.52	50	18.0	1.10	252
18.0	$\pm 10\%$	2.52	50	15.0	1.24	238
22.0	$\pm 10\%$	2.52	50	14.0	1.36	227
27.0	$\pm 10\%$	2.52	50	13.0	1.56	212
33.0	$\pm 10\%$	2.52	50	12.0	1.72	202
39.0	$\pm 10\%$	2.52	50	11.0	1.89	192
47.0	$\pm 10\%$	2.52	50	9.0	2.10	183
56.0	$\pm 10\%$	2.52	50	8.0	2.34	173
68.0	$\pm 10\%$	2.52	50	7.6	2.60	164
82.0	$\pm 10\%$	2.52	50	7.2	2.86	156
100.0	$\pm 10\%$	0.796	50	7.0	3.25	147
120.0	$\pm 10\%$	0.796	50	6.0	3.64	139
150.0	$\pm 10\%$	0.796	50	5.0	4.16	130
180.0	$\pm 10\%$	0.796	40	4.5	5.72	111
220.0	$\pm 10\%$	0.796	40	4.2	6.30	105
270.0	$\pm 10\%$	0.796	40	4.0	6.90	101
330.0	$\pm 10\%$	0.796	40	3.7	7.54	96
390.0	$\pm 10\%$	0.796	40	3.5	8.20	92
470.0	$\pm 10\%$	0.796	40	3.3	9.20	87
560.0	$\pm 10\%$	0.796	40	2.8	10.50	82
680.0	$\pm 10\%$	0.796	40	2.6	12.00	76
820.0	$\pm 10\%$	0.796	40	2.2	13.50	72
1000.0	$\pm 10\%$	0.252	40	2.0	16.00	66

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

## ELECTRICAL SPECIFICATIONS

**Inductance Range:** 0.10  $\mu$ H to 1000  $\mu$ H

**Inductance Tolerance:**  $\pm 20\%$  for 0.10  $\mu$ H to 0.82  $\mu$ H  
 $\pm 10\%$  for 1.0  $\mu$ H to 1000  $\mu$ H standard  
 $\pm 10\%$ ,  $\pm 5\%$ ,  $\pm 3\%$  available

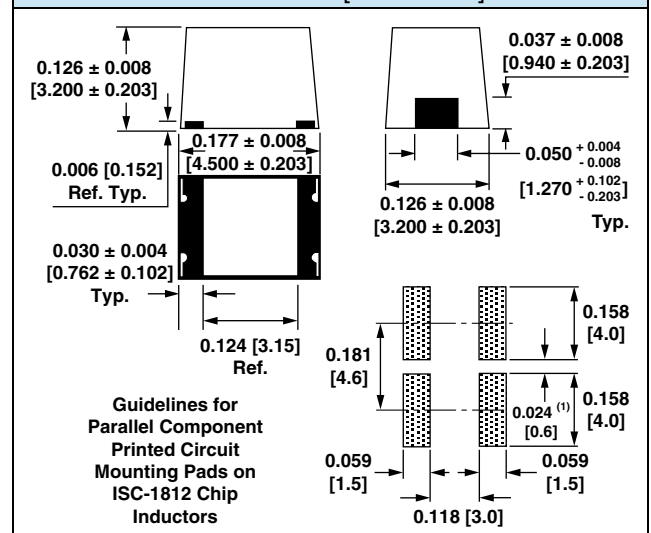
**Operating Temperature:** - 55 °C to + 125 °C

**Coilform Material:** Non-magnetic for 0.10  $\mu$ H to 0.82  $\mu$ H  
 Powdered iron for 1.0  $\mu$ H to 22  $\mu$ H  
 Ferrite for 27  $\mu$ 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]

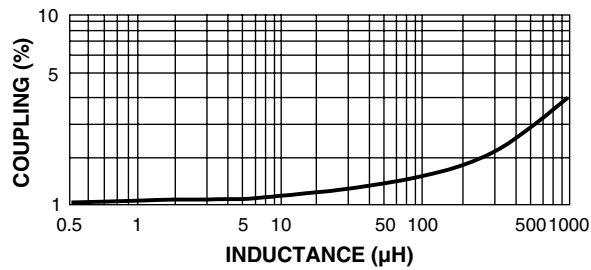

**Note**
<sup>(1)</sup> Recommended minimum spacing between components

## PART MARKING

- Vishay Dale
- Inductance value
- Date code



## COUPLING SPECIFICATIONS [maximum]



## DESCRIPTION

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

## GLOBAL PART NUMBER

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



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