

Vishay Dale

# Wirewound, Surface-Mount, Molded, Shielded Inductors



STANDARD ELECTRICAL SPECIFICATIONS							
IND. (µH)	TOL.	TEST FREQ. (MHz) L & Q	Q MIN.	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA) <sup>(1)</sup>	
0.10	± 20 %	25.2	30	460	0.23	552	
0.12	± 20 %	25.2	30	400	0.26	519	
0.15	± 20 %	25.2	30	390	0.29	491	
0.18	± 20 %	25.2	30	350	0.32	468	
0.22	± 20 %	25.2	30	310	0.36	441	
0.33 0.39	± 20 % ± 20 %	25.2 25.2	30 30	280 240	0.40 0.45	418 394	
0.39	± 20 % ± 20 %	25.2 25.2	30	240 215	0.45	394 342	
0.47	$\pm 20\%$ $\pm 20\%$	25.2 25.2	30	205	0.00	306	
0.68	± 20 %	25.2	30	195	0.80	296	
0.82	± 20 %	25.2	30	165	0.95	271	
0.8	± 20 %	25.2	30	155	1.20	242	
1.0	± 10 %	7.96	30	140	0.35	447	
1.2	± 10 %	7.96	30	120	0.38	429	
1.5	± 10 %	7.96	30	100	0.40	418	
1.8	± 10 %	7.96	30	90.0	0.43	403	
2.2	± 10 %	7.96	30	80.0	0.46	390	
2.7	± 10 %	7.96	30	67.0	0.49	378	
3.3 3.9	± 10 % ± 10 %	7.96 7.96	30 30	61.0 56.0	0.55 0.59	357 344	
4.7	± 10 %	7.96	30	50.0	0.59	336	
5.6	± 10 %	7.96	30	40.0	0.69	333	
6.8	± 10 %	7.96	30	32.0	0.75	306	
8.2	± 10 %	7.96	30	30.0	0.82	292	
10.0	± 10 %	2.52	50	25.0	0.90	279	
12.0	± 10 %	2.52	50	22.0	1.00	265	
15.0	± 10 %	2.52	50	18.0	1.10	252	
18.0	± 10 %	2.52	50	15.0	1.24	238	
22.0	± 10 %	2.52	50	14.0	1.36	227	
27.0	± 10 %	2.52	40 40	13.0	1.56	212	
33.0 39.0	± 10 % ± 10 %	2.52 2.52	40 40	12.0 11.0	1.72 1.89	202 192	
47.0	$\pm 10\%$ $\pm 10\%$	2.52	40	9.0	2.10	183	
56.0	± 10 %	2.52	40	8.0	2.34	173	
68.0	± 10 %	2.52	40	7.6	2.60	164	
82.0	± 10 %	2.52	40	7.2	2.86	156	
100.0	± 10 %	0.796	40	7.0	3.25	147	
120.0	± 10 %	0.796	40	6.0	3.64	139	
150.0	± 10 %	0.796	40	5.0	4.16	130	
180.0	± 10 %	0.796	40	4.5	5.72	111	
220.0	± 10 %	0.796	40	4.2	6.30	105	
270.0	± 10 %	0.796	40	4.0	6.90	101	
330.0 390.0	± 10 % ± 10 %	0.796 0.796	40 40	3.7 3.5	7.54 8.20	96 92	
390.0 470.0	± 10 %	0.796	40 40	3.3	8.20 9.20	92 87	
560.0	± 10 %	0.796	30	2.8	9.20 10.50	82	
680.0	± 10 %	0.796	40	2.6	12.00	76	
820.0	± 10 %	0.796	30	2.2	13.50	72	
1000.0	± 10 %	0.252	30	2.0	16.00	66	

#### Note

(1) 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



- COMPLIANT HALOGEN
- Compatible with vapor phase and infrared reflow soldering
- Shielded construction minimizes coupling to other components
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>

### **ELECTRICAL SPECIFICATIONS**

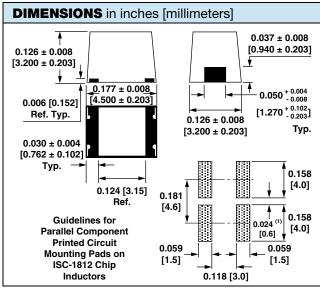
Inductance range: 0.10 µH to 1000 µH Special tolerances available upon request

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



#### Note

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

#### PART MARKING

- Vishay Dale
- Inductance code
- Date code

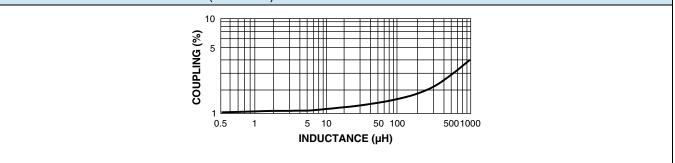
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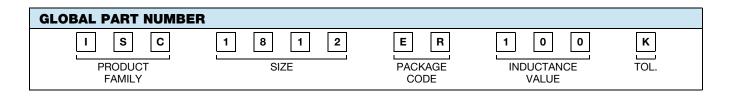
**ISC-1812** 

Vishay Dale

### **COUPLING SPECIFICATIONS** (maximum)



DESCRIPTION							
ISC-1812	10 µH	± 10 %	ER	e3			
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC <sup>®</sup> LEAD (Pb)-FREE STANDARD			





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