



# Wirewound, Surface Mount, Molded, Shielded Inductors



STAN	NDARD	ELEC	TRIC	AL SP	ECIFI	CATIONS	
IND. (µH)	TOL.	TEST FREQ. (MHz) L & Q	Q MIN.	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (1) (mA)	
0.1	± 20 %	25.2	30	460	0.23	552	
0.1	± 20 %	25.2	30	400	0.26	519	
0.2	± 20 %	25.2	30	390	0.29	491	
0.2	± 20 %	25.2	30	350	0.32	468	
0.2 0.3	± 20 % ± 20 %	25.2	30	310	0.36 0.40	441	
0.3	± 20 % ± 20 %	25.2 25.2	30 30	280 240	0.40	418 394	
0.3	± 20 %	25.2	30	215	0.43	342	
0.5	± 20 %	25.2	30	205	0.75	306	
0.6	± 20 %	25.2	30	195	0.80	296	
0.7	± 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 2.7	± 10 % ± 10 %	7.96 7.96	30 30	80.0 67.0	0.46 0.49	390 378	
3.3	± 10 %	7.96	30	61.0	0.49	357	
3.9	± 10 %	7.96	30	56.0	0.59	344	
4.7	± 10 %	7.96	30	50.0	0.62	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 22.0	± 10 % ± 10 %	2.52 2.52	50 50	15.0 14.0	1.24 1.36	238 227	
27.0	± 10 %	2.52	50	13.0	1.56	212	
33.0	± 10 %	2.52	50	12.0	1.72	202	
39.0	± 10 %	2.52	50	11.0	1.89	192	
47.0	± 10 %	2.52	50	9.0	2.10	183	
56.0	± 10 %	2.52	50	8.0	2.34	173	
68.0	± 10 %	2.52	50	7.6	2.60	164	
82.0	± 10 %	2.52	50	7.2	2.86	156	
100.0	± 10 %	0.796	50	7.0	3.25	147	
120.0	± 10 % ± 10 %	0.796 0.796	50	6.0 5.0	3.64	139 130	
150.0 180.0	± 10 %	0.796	50 40	5.0 4.5	4.16 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	± 10 %	0.796	40	3.7	7.54	96	
390.0	± 10 %	0.796	40	3.5	8.20	92	
470.0	± 10 %	0.796	40	3.3	9.20	87	
560.0	± 10 %	0.796	40	2.8	10.50	82	
680.0	± 10 %	0.796	40	2.6	12.00	76	
820.0	± 10 %	0.796	40	2.2	13.50	72	
1000.0	± 10 %	0.252	40	2.0	16.00	66	

#### Note

### **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

#### **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

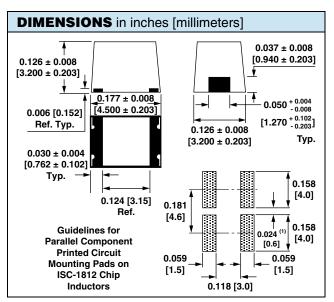
 $\pm$  10 %,  $\pm$  5 %,  $\pm$  3 % available

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

Coilform Material: Non-magnetic for 0.10 μH to 0.82 μH
Powdered iron for 1.0 μH to 22 μH
Ferrite for 27 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



#### Note

(1) Recommended minimum spacing between components

#### **PART MARKING**

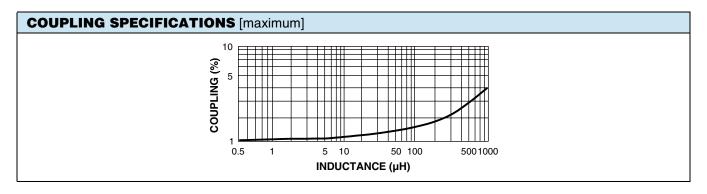
- Vishay Dale
- Inductance value
- Date code

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

Vishay Dale

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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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