



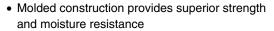
# **Surface Mount, Molded, Shielded Inductors**



STANDARD ELECTRICAL SPECIFICATIONS									
			TEST	SELF-		RATED*			
			FREQ.	RESONANT	DCR	DC			
IND. (µH)	TOL.	Q MIN.	L & Q (MHz)	FREQ. MIN. (MHz)	MAX. (Ohms)	CURRENT (mA)			
0.10	± 20 %	30	25.2	460	0.23	552			
0.12	± 20 %	30	25.2	400	0.26	519			
0.15	± 20 %	30	25.2	390	0.29	491			
0.18	± 20 %	30	25.2	350	0.32	468			
0.22 0.27	± 20 % ± 20 %	30 30	25.2 25.2	310 280	0.36 0.40	441 418			
0.27	± 20 %	30	25.2	240	0.45	394			
0.39	± 20 %	30	25.2	215	0.60	342			
0.47	± 20 %	30	25.2	205	0.75	306			
0.56	± 20 %	30	25.2	195	0.80	296			
0.68 0.82	± 20 % ± 20 %	30	25.2 25.2	165 155	0.95 1.20	271 242			
1.0	± 20 %	30	7.96	140	0.35	447			
1.2	± 10 %	30	7.96	120	0.38	429			
1.5	± 10 %	30	7.96	100	0.40	418			
1.8	± 10 %	30	7.96	90.0	0.43	403			
2.2	± 10 %	30	7.96	80.0	0.46	390			
2.7	± 10 %	30	7.96	67.0	0.49	378			
3.3 3.9	± 10 % ± 10 %	30 30	7.96 7.96	61.0 56.0	0.55 0.59	357 344			
4.7	± 10 %	30	7.96	50.0	0.62	336			
5.6	± 10 %	30	7.96	40.0	0.69	333			
6.8	± 10 %	30	7.96	32.0	0.75	306			
8.2	± 10 %	30	7.96	30.0	0.82	292			
10.0	± 10 %	50	2.52	25.0	0.90	279			
12.0 15.0	± 10 % ± 10 %	50 50	2.52 2.52	22.0 18.0	1.0 1.10	265 252			
18.0	± 10 %	50	2.52	15.0	1.10	238			
22.0	± 10 %	50	2.52	14.0	1.36	227			
27.0	± 10 %	50	2.52	13.0	1.56	212			
33.0	± 10 %	50	2.52	12.0	1.72	202			
39.0 47.0	± 10 % ± 10 %	50 50	2.52 2.52	11.0 9.0	1.89 2.10	192 183			
56.0	± 10 % ± 10 %	50 50	2.52	9.0 8.0	2.10	173			
68.0	± 10 %	50	2.52	7.6	2.60	164			
82.0	± 10 %	50	2.52	7.2	2.86	156			
100.0	± 10 %	50	0.796	7.0	3.25	147			
120.0	± 10 %	50	0.796	6.0	3.64	139			
150.0	± 10 %	50	0.796	5.0	4.16	130			
180.0 220.0	± 10 % ± 10 %	40 40	0.796 0.796	4.5 4.2	5.72 6.30	111 105			
270.0	± 10 %	40	0.796	4.0	6.90	103			
330.0	± 10 %	40	0.796	3.7	7.54	96			
390.0	± 10 %	40	0.796	3.5	8.20	92			
470.0	± 10 %	40	0.796	3.3	9.20	87			
560.0	± 10 % ± 10 %	40 40	0.796	2.8	10.50 12.0	82 76			
680.0 820.0	± 10 % ± 10 %	40	0.796 0.796	2.6 2.2	13.50	76 72			
1000.0	± 10 %	40	0.252	2.0	16.0	66			

<sup>\*</sup>Rated DC Current based on the maximum temperature rise, not to exceed 40 °C at + 85 °C ambient.

### **FEATURES**





 Tape and reel packaging for automatic handling, 2000/reel, EIA 481

- RoHS COMPLIANT
- Compatible with vapor phase and infrared reflow soldering
- Shielded construction minimizes coupling to other components
- 100 % lead (Pb)-free and RoHS compliant

### **ELECTRICAL SPECIFICATIONS**

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

Inductance Tolerance:  $\pm$  20 % for 0.10  $\mu H$  to 0.82  $\mu H$ 

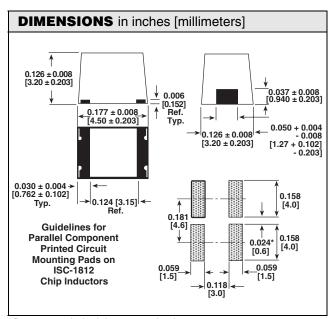
 $\pm$  10 % for 1.0  $\mu$ H to 1000  $\mu$ H standard  $\pm$  10 %,  $\pm$  5 % and  $\pm$  3 % available

Temperature Range: - 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

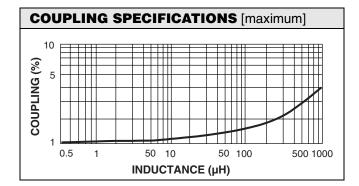


<sup>\*</sup>Recommended minimum spacing between components

# Vishay Dale

## Shielded Mount, Molded, Shielded Inductors





# PART MARKING - Vishay Dale - Inductance value - Date code

DESCRIPTION				
ISC-1812 MODEL	10 μ <b>Η</b> INDUCTANCE VALUE	± 10 % INDUCTANCE TOLERANCE	<b>ER</b> PACKAGE CODE	<b>e3</b> JEDEC LEAD (Pb)-FREE STANDARD
<b>GLOBAL PART NUI</b>	MBER			
I S C	1 8 1 SIZE	PACKAGE COL	1 0 INDUCTANCE	O K VALUE TOL.

Document Number: 34061 Revision: 22-May-07



Vishay

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Revision: 18-Jul-08

Document Number: 91000