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# Wirewound, Surface-Mount, Molded, Shielded Inductors

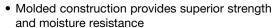




STAP	STANDARD ELECTRICAL SPECIFICATIONS									
IND. (µH)	TOL.	TEST FREQ. (MHz)	Q MIN.	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA) <sup>(1)</sup>				
0.10	± 20 %	25.2	30	460	0.23	552				
0.12 0.15	± 20 % ± 20 %	25.2 25.2	30 30	400 390	0.26 0.29	519 491				
0.18	± 20 %	25.2	30	350	0.32	468				
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 %	25.2	30	215	0.60	342				
0.56	± 20 %	25.2	30	205	0.75	306				
0.68	± 20 %	25.2	30	195	0.80	296				
0.82 0.8	± 20 % ± 20 %	25.2 25.2	30 30	165 155	0.95 1.20	271 242				
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 2.2	± 10 % ± 10 %	7.96 7.96	30 30	90.0 80.0	0.43 0.46	403 390				
2.7	± 10 %	7.96	30	67.0	0.49	378				
3.3	± 10 %	7.96	30	61.0	0.55	357				
3.9 4.7	± 10 % ± 10 %	7.96 7.96	30 30	56.0 50.0	0.59 0.62	344 336				
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 12.0	± 10 % ± 10 %	2.52 2.52	50 50	25.0 22.0	0.90 1.00	279 265				
15.0	± 10 %	2.52	50	18.0	1.10	252				
18.0	± 10 %	2.52	50	15.0	1.24	238				
22.0 27.0	± 10 % ± 10 %	2.52 2.52	50 40	14.0 13.0	1.36 1.56	227 212				
33.0	± 10 %	2.52	40	12.0	1.72	202				
39.0	± 10 %	2.52	40	11.0	1.89	192				
47.0	± 10 %	2.52	40	9.0	2.10	183				
56.0 68.0	± 10 % ± 10 %	2.52 2.52	40 40	8.0 7.6	2.34 2.60	173 164				
82.0	± 10 %	2.52	40	7.2	2.86	156				
100.0	± 10 %	0.796	40	7.0	3.25	147				
120.0 150.0	± 10 % ± 10 %	0.796 0.796	40 40	6.0 5.0	3.64 4.16	139 130				
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				
470.0	± 10 %	0.796	40	3.3	9.20	87				
560.0	± 10 %	0.796	30	2.8	10.50	82				
680.0 820.0	± 10 % ± 10 %	0.796 0.796	40 30	2.6 2.2	12.00 13.50	76 72				
1000.0	± 10 %	0.790	30	2.2	16.00	66				

#### Note

#### **FEATURES**





 Tape and reel packaging for automatic handling, 2000/reel, EIA-481 ROHS COMPLIANT HALOGEN

FREE

- Compatible with vapor phase and infrared reflow soldering.
- soldering

  Shielded construction minimizes coupling to
- Shielded construction minimizes coupling to other components
- Material categorization: for definitions of compliance please see <a href="https://www.vishay.com/doc?99912">www.vishay.com/doc?99912</a>

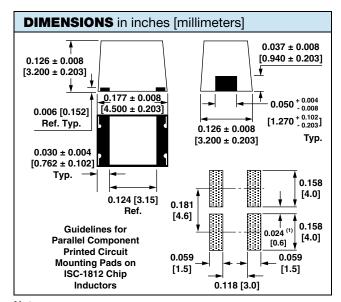
#### **ELECTRICAL SPECIFICATIONS**

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



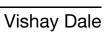
#### Note

(1) Recommended minimum spacing between components

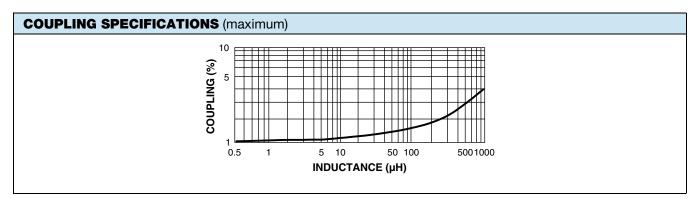
#### **PART MARKING**

- Vishay Dale
- Inductance code
- Date code

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







DESCRIPTION								
ISC-1812	10 μΗ	± 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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Vishay

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