

## Excellent Integrated System Limited

Stocking Distributor

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[Vishay/Dale](#)  
[ISC1812BN100J](#)

For any questions, you can email us directly:

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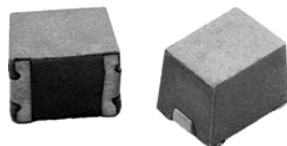


[www.vishay.com](http://www.vishay.com)

**ISC-1812**

Vishay Dale

## Wirewound, Surface Mount, Molded, Shielded Inductors



**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**

### 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	± 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	± 20 %	25.2	30	280	0.40	418
0.39	± 20 %	25.2	30	240	0.45	394
0.47	± 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	± 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	± 10 %	7.96	30	61.0	0.55	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	± 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	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	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	± 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	30	2.8	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

<sup>(1)</sup> 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
- Compatible with vapor phase and infrared reflow soldering
- Shielded construction minimizes coupling to other components
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

### ELECTRICAL SPECIFICATIONS

Inductance range: 0.10 μH to 1000 μH

Special tolerances available upon request

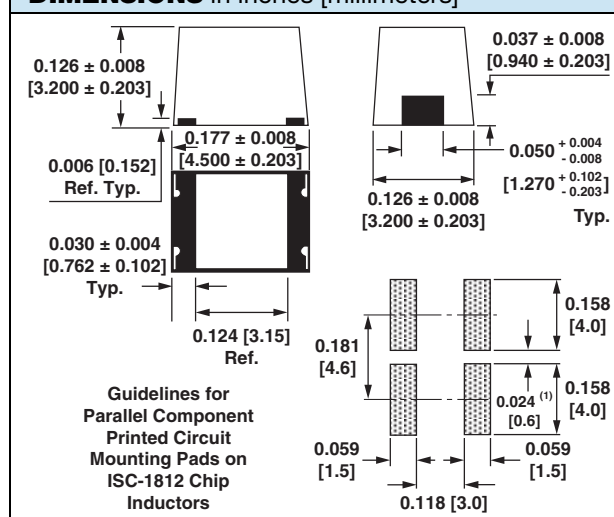
Operating temperature: -55 °C to +125 °C

Coilform material: Non-magnetic for 0.10 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

### DIMENSIONS in inches [millimeters]



#### Note

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

### PART MARKING

- Vishay Dale
- Inductance value
- Date code

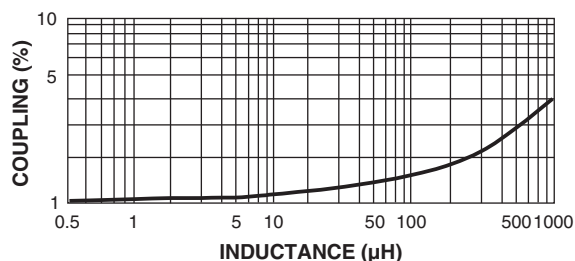


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**ISC-1812**

Vishay Dale

### COUPLING SPECIFICATIONS (maximum)



### DESCRIPTION

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

### GLOBAL PART NUMBER

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



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