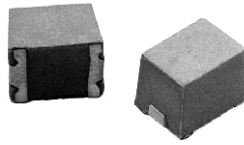


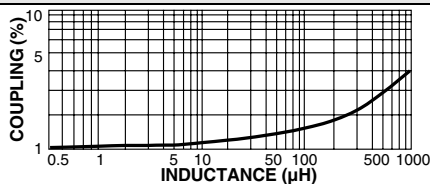
# Surface Mount, Molded, Shielded Inductors



## STANDARD ELECTRICAL SPECIFICATIONS

IND. ( $\mu$ H)	TOL.	Q MIN.	TEST FREQ. L & Q (MHz)	SELF- RESONANT FREQ. MIN. (MHz)	DCR MAX. (Ohms)	RATED* DC CURRENT (mA)
0.10	$\pm 20\%$	30	25.2	460	0.23	552
0.12	$\pm 20\%$	30	25.2	400	0.26	519
0.15	$\pm 20\%$	30	25.2	390	0.29	491
0.18	$\pm 20\%$	30	25.2	350	0.32	468
0.22	$\pm 20\%$	30	25.2	310	0.36	441
0.27	$\pm 20\%$	30	25.2	280	0.40	418
0.33	$\pm 20\%$	30	25.2	240	0.45	394
0.39	$\pm 20\%$	30	25.2	215	0.60	342
0.47	$\pm 20\%$	30	25.2	205	0.75	306
0.56	$\pm 20\%$	30	25.2	195	0.80	296
0.68	$\pm 20\%$	30	25.2	165	0.95	271
0.82	$\pm 20\%$	30	25.2	155	1.20	242
1.0	$\pm 10\%$	30	7.96	140	0.35	447
1.2	$\pm 10\%$	30	7.96	120	0.38	429
1.5	$\pm 10\%$	30	7.96	100	0.40	418
1.8	$\pm 10\%$	30	7.96	90.0	0.43	403
2.2	$\pm 10\%$	30	7.96	80.0	0.46	390
2.7	$\pm 10\%$	30	7.96	67.0	0.49	378
3.3	$\pm 10\%$	30	7.96	61.0	0.55	357
3.9	$\pm 10\%$	30	7.96	56.0	0.59	344
4.7	$\pm 10\%$	30	7.96	50.0	0.62	336
5.6	$\pm 10\%$	30	7.96	40.0	0.69	333
6.8	$\pm 10\%$	30	7.96	32.0	0.75	306
8.2	$\pm 10\%$	30	7.96	30.0	0.82	292
10.0	$\pm 10\%$	50	2.52	25.0	0.90	279
12.0	$\pm 10\%$	50	2.52	23.0	1.0	265
15.0	$\pm 10\%$	50	2.52	18.0	1.10	252
18.0	$\pm 10\%$	50	2.52	15.0	1.24	238
22.0	$\pm 10\%$	50	2.52	14.0	1.36	227
27.0	$\pm 10\%$	50	2.52	13.0	1.56	212
33.0	$\pm 10\%$	50	2.52	12.0	1.72	202
39.0	$\pm 10\%$	50	2.52	11.0	1.89	192
47.0	$\pm 10\%$	50	2.52	9.0	2.10	183
56.0	$\pm 10\%$	50	2.52	8.0	2.34	173
68.0	$\pm 10\%$	50	2.52	7.6	2.60	164
82.0	$\pm 10\%$	50	2.52	7.2	2.86	156
100.0	$\pm 10\%$	50	0.796	7.0	3.25	147
120.0	$\pm 10\%$	50	0.796	6.0	3.64	139
150.0	$\pm 10\%$	50	0.796	5.0	4.16	130
180.0	$\pm 10\%$	40	0.796	4.5	5.72	111
220.0	$\pm 10\%$	40	0.796	4.2	6.30	105
270.0	$\pm 10\%$	40	0.796	4.0	6.90	101
330.0	$\pm 10\%$	40	0.796	3.7	7.54	96
390.0	$\pm 10\%$	40	0.796	3.5	8.20	92
470.0	$\pm 10\%$	40	0.796	3.3	9.20	87
560.0	$\pm 10\%$	40	0.796	2.8	10.50	82
680.0	$\pm 10\%$	40	0.796	2.6	12.0	76
820.0	$\pm 10\%$	40	0.796	2.3	13.50	72
1000.0	$\pm 10\%$	40	0.252	2.0	16.0	66

## COUPLING SPECIFICATIONS [maximum]



## 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
- 100 % lead (Pb)-free and RoHS compliant



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

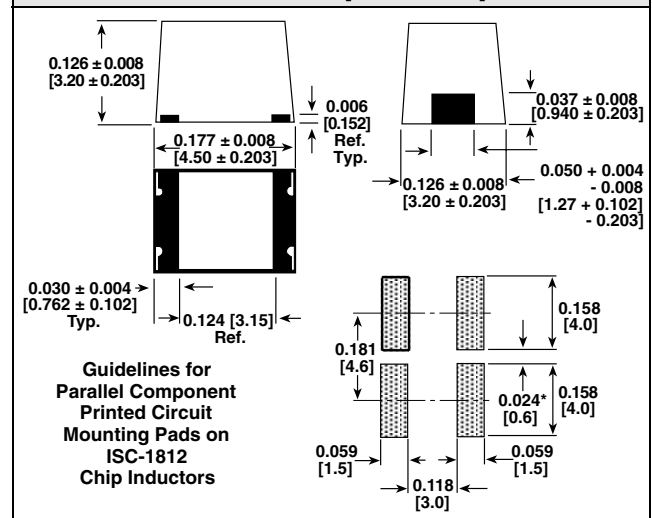
Temperature Range: - 55 °C to + 125 °C

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

## DIMENSIONS in inches [millimeters]



\*Recommended minimum spacing between components

## PART MARKING

- Vishay Dale
- Inductance value
- Date code

## DESCRIPTION

ISC-1812  
MODEL

10  $\mu$ H  
INDUCTANCE  
VALUE

$\pm 10\%$   
INDUCTANCE  
TOLERANCE

ER  
PACKAGE  
CODE

e3  
JEDEC LEAD (Pb)-FREE  
STANDARD

## GLOBAL PART NUMBER

I S C  
PRODUCT FAMILY

1 8 1 2  
SIZE

E R  
PACKAGE CODE

1 0 0  
INDUCTANCE VALUE

K  
TOL.



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