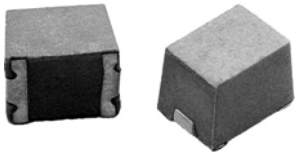
Wirewound, Surface Mount, Molded, Shielded Inductors



STANDARD ELECTRICAL SPECIFICATIONS

IND. (μH)	TOL.	TEST FREQ. (MHz) L & Q	Q MIN.	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA) (1)
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	± 20 %	25.2	30	310	0.36	441
0.3	± 20 %	25.2	30	280	0.40	418
0.3	± 20 %	25.2	30	240	0.45	394
0.4	± 20 %	25.2	30	215	0.60	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	± 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	50	7.0	3.25	147
120.0	± 10 %	0.796	50	6.0	3.64	139
150.0	± 10 %	0.796	50	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	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

(1) 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
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition

Pb-free
RoHS COMPLIANT
HALOGEN FREE

ELECTRICAL SPECIFICATIONS

Inductance Range: 0.10 μH to 1000 μH

Inductance Tolerance: ± 20 % for 0.10 μH to 0.82 μH
± 10 % for 1.0 μH to 1000 μH standard
± 10 %, ± 5 %, ± 3 % available

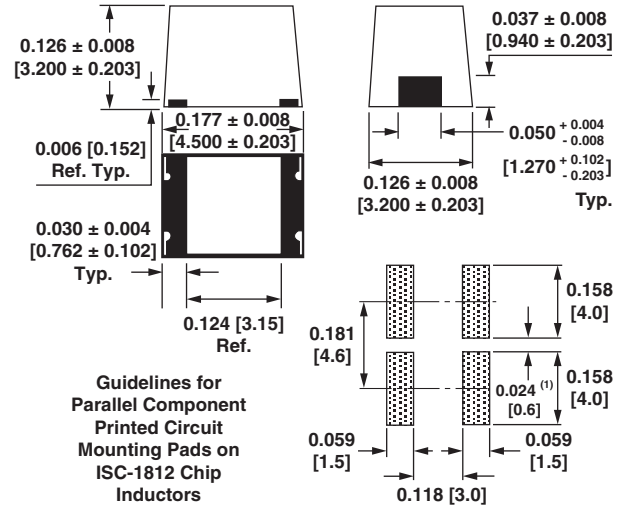
Operating Temperature: - 55 °C to + 125 °C

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

DIMENSIONS in inches [millimeters]



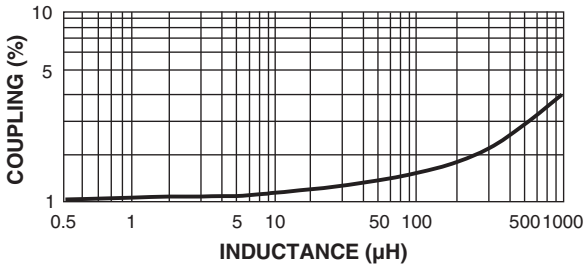
Note

(1) Recommended minimum spacing between components

PART MARKING

- Vishay Dale
- Inductance value
- Date code

COUPLING SPECIFICATIONS (maximum)



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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