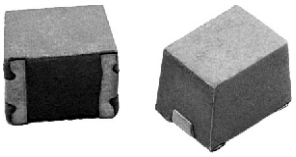
Wirewound, Surface Mount, Molded, Shielded Inductors



STANDARD ELECTRICAL SPECIFICATIONS

IND. (µH)	TOL.	TEST FREQ. (MHz) L & Q	Q MIN.	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA) (1)
0.10	± 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	40	13.0	1.56	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	± 10 %	2.52	40	8.0	2.34	173
68.0	± 10 %	2.52	40	7.6	2.60	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	± 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

(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
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

HALOGEN FREE

ELECTRICAL SPECIFICATIONS

Inductance range: 0.10 µH to 1000 µH

Special tolerances available upon request

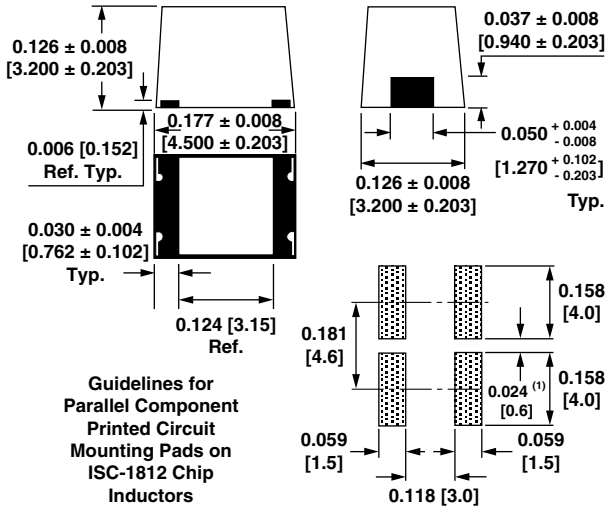
Operating temperature: -55 °C to +125 °C

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]



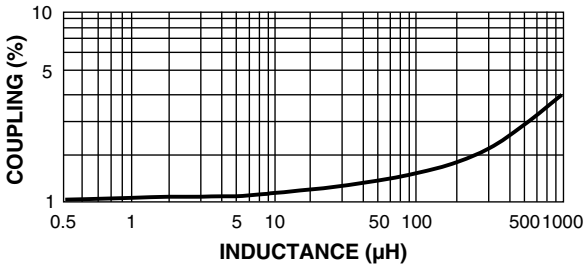
Note

(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.

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, “Vishay”), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay’s knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer’s responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer’s technical experts. Product specifications do not expand or otherwise modify Vishay’s terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.