

Vishay Dale

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 0.39	± 20 % ± 20 %	25.2 25.2	30 30	280 240	0.40 0.45	418 394	
0.39	± 20 % ± 20 %	25.2 25.2	30	240 215	0.45	394 342	
0.47	$\pm 20\%$ $\pm 20\%$	25.2 25.2	30	205	0.00	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 3.9	± 10 % ± 10 %	7.96 7.96	30 30	61.0 56.0	0.55 0.59	357 344	
4.7	± 10 %	7.96	30	50.0	0.59	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 40	13.0	1.56	212	
33.0 39.0	± 10 % ± 10 %	2.52 2.52	40 40	12.0 11.0	1.72 1.89	202 192	
47.0	$\pm 10\%$ $\pm 10\%$	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	
330.0 390.0	± 10 % ± 10 %	0.796 0.796	40 40	3.7 3.5	7.54 8.20	96 92	
390.0 470.0	± 10 %	0.796	40 40	3.3	8.20 9.20	92 87	
560.0	± 10 %	0.796	30	2.8	9.20 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



- COMPLIANT HALOGEN
- Compatible with vapor phase and infrared reflow soldering
- Shielded construction minimizes coupling to other components
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>

ELECTRICAL SPECIFICATIONS

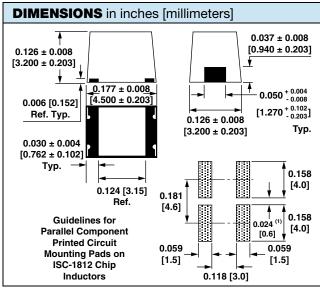
Inductance range: 0.10 µH to 1000 µH Special tolerances available upon request

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

Coilform material: non-magnetic for 0.10 μ H to 0.82 μ H; powdered iron for 1.0 μ H to 22 μ H; ferrite for 27 μ H to 1000 μ 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

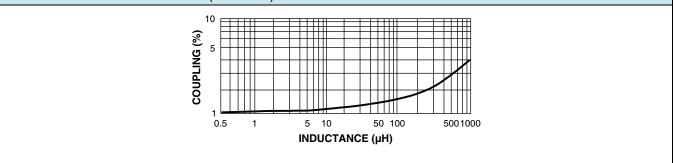
THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishav.com/doc?91000



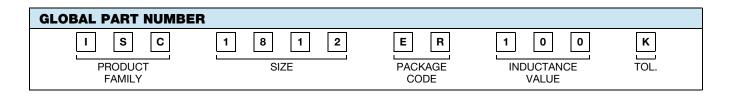
ISC-1812

Vishay Dale

COUPLING SPECIFICATIONS (maximum)



DESCRIPTION							
ISC-1812	10 µH	± 10 %	ER	e3			
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC [®] LEAD (Pb)-FREE STANDARD			





Vishay

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.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Vishay products are not designed for use in life-saving or life-sustaining applications or any application in which the failure of the Vishay product could result in personal injury or death unless specifically qualified in writing by Vishay. 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.

© 2024 VISHAY INTERTECHNOLOGY, INC. ALL RIGHTS RESERVED

Revision: 01-Jul-2024