

## Wirewound, Surface Mount, Molded, Shielded Inductors





STAN	NDARD	ELEC	TRICA	L SPE	CIFIC	ATIONS
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 0.18	± 20 % ± 20 %	25.2 25.2	30 30	390 350	0.29 0.32	491 468
0.18	± 20 % ± 20 %	25.2 25.2	30	310	0.32	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 1.0	± 20 % ± 10 %	25.2 7.96	30 30	155 140	1.20 0.35	242 447
1.0	± 10 % ± 10 %	7.96 7.96	30	120	0.38	447 429
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 7.96	30	56.0	0.59	344 336
4.7 5.6	± 10 % ± 10 %	7.96 7.96	30 30	50.0 40.0	0.62 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 22.0	± 10 % ± 10 %	2.52 2.52	50 50	15.0 14.0	1.24 1.36	238 227
27.0	± 10 % ± 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 % ± 10 %	2.52	50	7.6	2.60	164
82.0 100.0	± 10 % ± 10 %	2.52 0.796	50 40	7.2 7.0	2.86 3.25	156 147
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
390.0 470.0	± 10 % ± 10 %	0.796 0.796	40 40	3.5 3.3	8.20 9.20	92 87
560.0	± 10 % ± 10 %	0.796	30	3.3 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

Revision: 11-Dec-12

#### **FEATURES**

 Molded construction provides superior strength and moisture resistance



 Tape and reel packaging for automatic handling, 2000/reel, EIA-481 ROHS COMPLIANT HALOGEN

FREE

- Compatible with vapor phase and infrared reflow soldering
- Shielded construction minimizes coupling to other components
- Material categorization: For definitions of compliance please see www.vishav.com/doc?99912

#### **ELECTRICAL SPECIFICATIONS**

Inductance Range: 0.10 µH to 1000 µH

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

± 10 %, ± 5 %, ± 3 % available

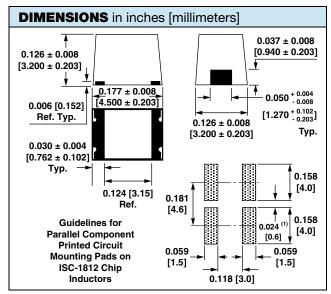
Operating Temperature: - 55 °C to + 125 °C

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



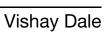
#### Note

(1) Recommended minimum spacing between components

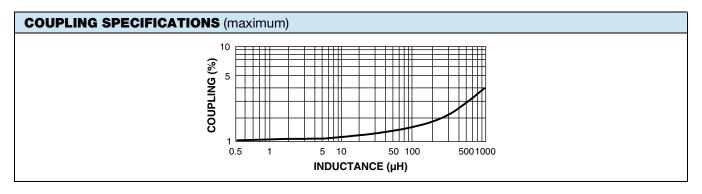
### **PART MARKING**

- Vishay Dale
- Inductance value
- Date code

 $<sup>^{(1)}</sup>$  Rated DC current based on the maximum temperature rise, not to exceed 40  $^{\circ}\text{C}$  at + 85  $^{\circ}\text{C}$  ambient







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

GLOBAL PART NUMBER								
PRODUCT FAMILY	1 8 1 2 SIZE	PACKAGE CODE	1 0 0 INDUCTANCE VALUE	K TOL.				



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Vishay

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Revision: 02-Oct-12 Document Number: 91000

# **X-ON Electronics**

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CR43NP-680KC CR54NP-820KC CR54NP-8R5MC CTX32CT-100 70F224AI MGDQ4-00004-P MHL1ECTTP18NJ MHL1JCTTD12NJ PE-51506NL PE-53601NL PE-53602NL PE-53630NL PE-53824SNLT PE-92100NL PG0434.801NLT PG0936.113NLT 9310-16 PM06-2N7 PM06-39NJ A01TK 1206CS-471XJ HC2-2R2TR HC2LP-R47-R HC3-2R2-R 1206CS-151XG RCH664NP-140L RCH664NP-4R7M RCH8011NP-221L RCP1317NP-332L RCP1317NP-391L RCR1010NP-470M RCR110DNP-331L DH2280-4R7M DS1608C-106 ASPI-4020HI-R10M-T B10TJ B82477P4333M B82498B3101J000 B82498B3680J000 ELJ-RE27NJF2 1812CS-153XJ 1812CS-183XJ 1812CS-223XJ 1812LS-104XJ 1812LS-105XJ 1812LS-124XJ 1812LS-154XJ 1812LS-223XJ 1812LS-224XJ 1812LS-563XJ