

Wirewound, Surface Mount, Molded, Shielded Inductors



STANDARD ELECTRICAL SPECIFICATIONS

IND. (μ H)	TOL.	TEST FREQ. (MHz)	Q MIN.	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA) ⁽¹⁾
0.010	$\pm 20\%$	50	50	1000	0.10	810
0.012	$\pm 20\%$	50	50	1000	0.11	750
0.015	$\pm 20\%$	50	50	1000	0.12	720
0.018	$\pm 20\%$	50	50	1000	0.13	690
0.022	$\pm 20\%$	50	45	1000	0.15	640
0.027	$\pm 20\%$	50	45	1000	0.17	610
0.033	$\pm 20\%$	50	45	1000	0.18	585
0.039	$\pm 20\%$	50	40	1000	0.24	530
0.047	$\pm 20\%$	50	40	1000	0.26	495
0.056	$\pm 20\%$	50	40	1000	0.28	485
0.068	$\pm 20\%$	50	40	1000	0.35	475
0.082	$\pm 20\%$	50	38	900	0.45	460
0.10	$\pm 20\%$	50	36	700	0.50	450
0.12	$\pm 20\%$	25.2	40	500	0.20	630
0.15	$\pm 20\%$	25.2	40	470	0.20	600
0.18	$\pm 20\%$	25.2	40	400	0.24	580
0.22	$\pm 20\%$	25.2	40	330	0.30	565
0.27	$\pm 20\%$	25.2	40	310	0.33	500
0.33	$\pm 20\%$	25.2	40	280	0.36	475
0.39	$\pm 20\%$	25.2	40	230	0.40	465
0.47	$\pm 20\%$	25.2	40	220	0.44	460
0.56	$\pm 20\%$	25.2	40	200	0.46	455
0.68	$\pm 20\%$	25.2	40	180	0.48	450
0.82	$\pm 20\%$	25.2	40	160	0.50	450
1.0	$\pm 10\%$	7.96	30	120	0.60	400
1.2	$\pm 10\%$	7.96	30	110	0.65	390
1.5	$\pm 10\%$	7.96	30	90.0	0.75	370
1.8	$\pm 10\%$	7.96	30	85.0	0.85	350
2.2	$\pm 10\%$	7.96	30	65.0	0.90	320
2.7	$\pm 10\%$	7.96	30	60.0	1.00	290
3.3	$\pm 10\%$	7.96	30	60.0	1.10	270
3.9	$\pm 10\%$	7.96	30	58.0	1.20	250
4.7	$\pm 10\%$	7.96	30	52.0	1.25	220
5.6	$\pm 10\%$	7.96	30	50.0	1.40	210
6.8	$\pm 10\%$	7.96	30	40.0	1.60	205
8.2	$\pm 10\%$	7.96	30	35.0	1.65	195
10.0	$\pm 10\%$	2.52	30	30.0	2.00	185
12.0	$\pm 10\%$	2.52	30	24.0	2.30	175
15.0	$\pm 10\%$	2.52	30	20.0	2.50	165
18.0	$\pm 10\%$	2.52	30	17.0	2.70	155
22.0	$\pm 10\%$	2.52	30	16.0	3.10	150
27.0	$\pm 10\%$	2.52	30	14.5	3.30	125
33.0	$\pm 10\%$	2.52	30	14.5	5.10	115
39.0	$\pm 10\%$	2.52	30	14.0	5.90	105
47.0	$\pm 10\%$	2.52	30	13.0	8.00	100
56.0	$\pm 10\%$	2.52	30	11.5	10.0	95
68.0	$\pm 10\%$	2.52	30	11.0	10.0	90
82.0	$\pm 10\%$	2.52	30	11.0	11.0	85
100.0	$\pm 10\%$	0.796	30	6.0	12.0	80

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, infrared and wave soldering methods
- Shielded construction minimizes coupling to other components
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition



RoHS
COMPLIANT
HALOGEN
FREE

ELECTRICAL SPECIFICATIONS

Inductance Range: 0.01 μ H to 100 μ H

Inductance Tolerance: $\pm 20\%$ for 0.01 μ H to 0.82 μ H;
 $\pm 10\%$ for 1.0 μ H to 100 μ H standard; $\pm 5\%$, $\pm 3\%$ available

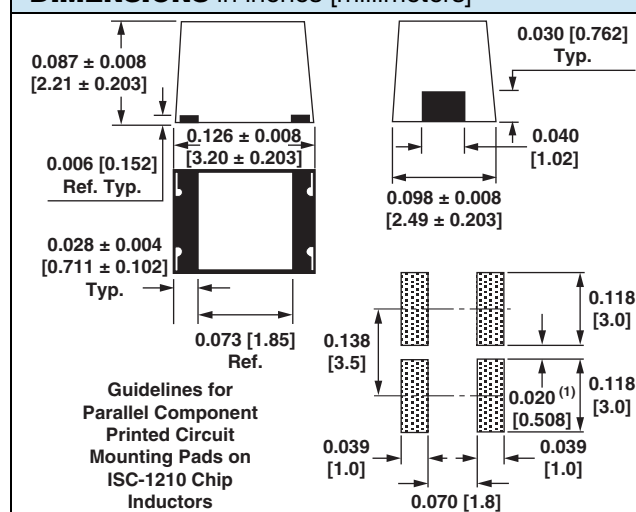
Operating Temperature: - 55 °C to + 125 °C

Coilform Material: Non-magnetic for 0.01 μ H to 0.10 μ H;
powdered iron for 0.12 μ H to 100 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

DIMENSIONS in inches [millimeters]



Note

⁽¹⁾ Recommended minimum spacing between components

PART MARKING

- Vishay Dale
- Inductance value
- Date code

DESCRIPTION

ISC-1210	10 μ H	$\pm 10\%$	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	S	C	1	2	1	0	E	R	1	0	0	K
PRODUCT FAMILY			SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.



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