



**THE DATASHEET OF  
ISC1210SY8R2K**



# Wirewound, Surface Mount, Molded, Shielded Inductors



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

**Note**  
<sup>(1)</sup> 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
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**RoHS COMPLIANT**  
**HALOGEN FREE**

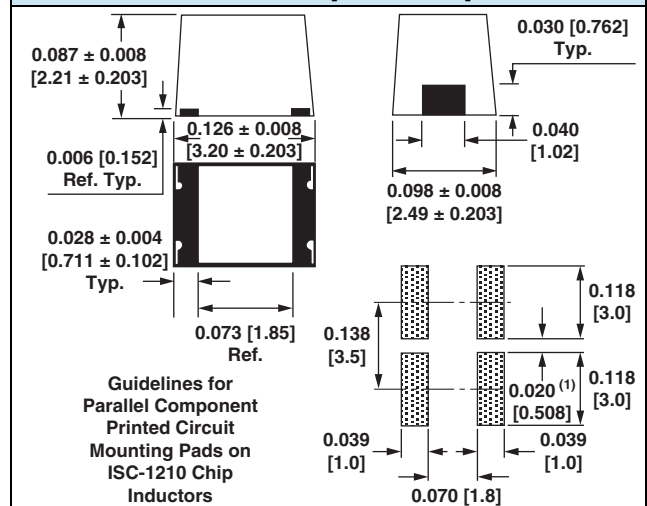
## ELECTRICAL SPECIFICATIONS

**Inductance range:** 0.01 μH to 100 μH  
**Special tolerances available upon request**  
**Operating temperature:** -55 °C to +125 °C  
**Coilform material:** Non-magnetic for 0.01 μH to 0.10 μH; powdered iron for 0.12 μH to 100 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**  
<sup>(1)</sup> Recommended minimum spacing between components

## PART MARKING

- Vishay Dale
- Inductance value
- Date code

DESCRIPTION				
ISC-1210	10 μH	± 10 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

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



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