

# SURFACE MOUNT SHIELDED INDUCTORS

## MSI SERIES

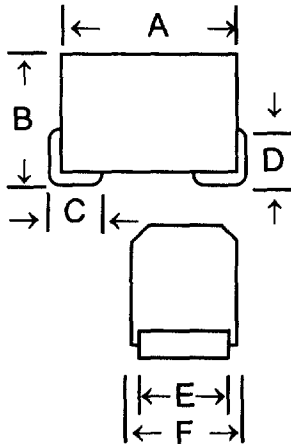


RESISTORS - CAPS & COILS - DELAY LINES



### FEATURES

- Electromagnetic shield results in minimal coupling
- Price is competitive with leaded counterparts
- Epoxy molded construction provides superior moisture protection
- Uniform shape designed for automatic machine placement
- Available on 12mm T&R
- Compatible with vapor-phase and infra-red reflow soldering
- Terminals prevent leaching and provide strong resistance to pull or shearing
- Marking of inductance and tol. Available to ±5% tol. on special order



### DIMENSIONS

	MSI1210	MSI1812
A	.126[3.2±.2]	.177±.012[4.5±.3]
B	.087[2.2±.2]	.126±.003[3.2±.2]
C	.016[.4] Min.	.016[.4] Min.
D	.02[.5] Typ	.016[.4] Typ.
E	.039[1.0±.2]	.063[1.6] Min.
F	.098[2.5±.2]	.125±.01[3.2±.25]

### MARKING FORMAT

Marking code is comprised of a 3-digit inductance code (2 significant digits and a multiplier), followed by the tolerance code. Letter "R" indicates decimal point, e.g. "5R6M" is 5.6μH ± 20%, "100K" is 10μH ± 10%, "102J" is 1000μH ± 5%, etc.

### SPECIFICATIONS

Resistance to Soldering Heat	260°C, 10 seconds
Resistance to Solvents	per MIL-STD-202
Coupling (1mm apart)	2% Max 1 mH to 100mH 5% Max > 100mH
Test Equipment	HP4342A Q Meter, HP4191A RF Analyzer, Wheatstone Bridge

### MSI1210

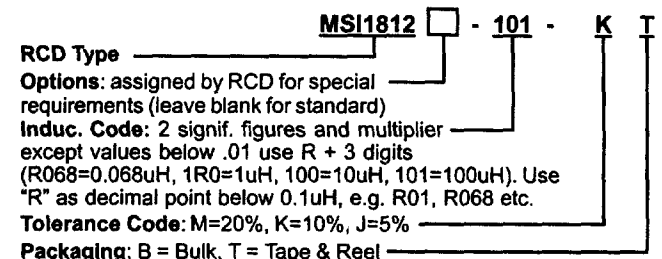
Induc. (μH)	Code	Std. Tol.	Q (Min.)	Test Freq. (MHz)	SRF Min. (MHz)	Max. DCR (ohm)	Rated Current (mA)
0.010	R010	20%	15	100	2500	0.14	450
0.012	R012	20%	17	100	2300	0.15	450
0.015	R015	20%	19	100	2100	0.16	450
0.018	R018	20%	20	100	1900	0.18	450
0.022	R022	20%	22	100	1700	0.20	450
0.027	R027	20%	22	100	1500	0.22	450
0.033	R033	20%	23	100	1400	0.24	450
0.039	R039	20%	24	100	1300	0.29	450
0.047	R047	20%	25	100	1200	0.31	450
0.056	R056	20%	26	100	1100	0.33	450
0.068	R068	20%	27	100	1000	0.36	450
0.082	R082	20%	27	100	900	0.40	450
0.10	R10	20%	28	100	700	0.45	450
0.12	R12	20%	30	25.2	500	0.22	450
0.15	R15	20%	30	25.2	450	0.25	450
0.18	R18	20%	30	25.2	400	0.39	450
0.22	R22	20%	30	25.2	350	0.32	450
0.27	R27	20%	30	25.2	320	0.36	450
0.33	R33	20%	30	25.2	300	0.41	450
0.39	R39	20%	30	25.2	250	0.45	450
0.47	R47	20%	30	25.2	220	0.50	450
0.56	R56	20%	30	25.2	180	0.55	450
0.68	R68	20%	30	7.96	160	0.60	450
0.82	R82	20%	30	7.96	140	0.66	450
1.0	1R0	10%	30	7.96	120	0.70	400
1.2	1R2	10%	30	7.96	100	0.76	390
1.5	1R5	10%	30	7.96	85	0.85	370
1.8	1R8	10%	30	7.96	80	0.91	350
2.2	2R2	10%	30	7.96	75	1.0	320
2.7	2R7	10%	30	7.96	70	1.1	290
3.3	3R3	10%	30	7.96	60	1.2	260
3.9	3R9	10%	30	7.96	55	1.4	250
4.7	4R7	10%	30	7.96	50	1.5	220
5.6	5R6	10%	30	7.96	47	1.6	200
6.8	6R8	10%	30	7.96	43	1.8	180
8.2	8R2	10%	30	7.96	40	2.0	170
10	100	10%	30	2.52	36	2.2	150
12	120	10%	30	2.52	33	2.5	140
15	150	10%	30	2.52	28	2.8	130
18	180	10%	30	2.52	25	3.4	120
22	220	10%	30	2.52	23	3.7	110
27	270	10%	30	2.52	18	5.0	80
33	330	10%	30	2.52	17	5.6	70
39	390	10%	30	2.52	16	6.4	65
47	470	10%	30	2.52	15	7.0	60
56	560	10%	30	2.52	13	8.2	55
68	680	10%	30	2.52	12	9.0	50
82	820	10%	30	2.52	11	10	45
100	101	10%	30	0.796	10	11	40
120	121	10%	30	0.796	10	11	70
150	151	10%	20	0.796	8	15	65
180	181	10%	20	0.796	7	18	60
220	221	10%	20	0.796	7	21	50
270	271	10%	20	0.796	6	28	45
330	331	10%	20	0.796	5	35	40

### MSI1812

Induc. (μH)	Code	Std. Tol.	Q (Min.)	Test Freq. (MHz)	SRF Min. (MHz)	Max. DCR (ohm)	Rated Current (mA)
0.10	R10	20%	30	25.2	460	0.23	450
0.12	R12	20%	30	25.2	460	0.26	450
0.15	R15	20%	30	25.2	390	0.29	450
0.18	R18	20%	30	25.2	350	0.32	450
0.22	R22	20%	30	25.2	310	0.36	450
0.27	R27	20%	30	25.2	280	0.40	450
0.33	R33	20%	30	25.2	240	0.45	450
0.39	R39	20%	30	25.2	215	0.60	410
0.47	R47	20%	30	25.2	205	0.75	370
0.56	R56	20%	30	25.2	195	0.80	355
0.68	R68	20%	30	25.2	165	0.95	310
0.82	R82	20%	30	25.2	155	1.20	285
1.0	1R0	20%	40	7.96	140	0.35	150
1.2	1R2	20%	40	7.96	120	0.38	145
1.5	1R5	20%	40	7.96	100	0.40	140
1.8	1R8	20%	40	7.96	90	0.43	130
2.2	2R2	20%	40	7.96	80	0.46	120
2.7	2R7	20%	40	7.96	67	0.49	110
3.3	3R3	20%	40	7.96	61	0.55	105
3.9	3R9	10%	40	7.96	56	0.59	100
4.7	4R7	10%	40	7.96	50	0.62	92
5.6	5R6	10%	40	7.96	40	0.68	86
6.8	6R8	10%	40	7.96	32	0.75	80
8.2	8R2	10%	40	7.96	30	0.82	75
10	100	10%	40	2.52	25	0.90	70
12	120	10%	40	2.52	22	1.00	65
15	150	10%	40	2.52	18	1.10	60
18	180	10%	40	2.52	15	1.24	57
22	220	10%	40	2.52	14	1.36	54
27	270	10%	40	2.52	13	1.56	50
33	330	10%	40	2.52	12	1.72	47
39	390	10%	40	2.52	11	1.89	44
47	470	10%	40	2.52	9	2.10	41
56	560	10%	40	2.52	8	2.34	39
68	680	10%	40	2.52	7.6	2.60	36
82	820	10%	40	2.52	7.2	2.86	34
100	101	10%	40	0.796	7.0	3.25	32
120	121	10%	30	0.796	6.0	3.64	30
150	151	10%	30	0.796	5.0	4.16	28
180	181	10%	30	0.796	4.5	5.72	26
220	221	10%	30	0.796	4.2	6.30	24
270	271	10%	30	0.796	4.0	6.90	23
330	331	10%	30	0.796	3.7	7.54	22
390	391	10%	30	0.796	3.5	8.20	21
470	471	10%	30	0.796	3.3	9.20	19
560	561	10%	30	0.796	2.8	10.5	18
680	681	10%	30	0.796	2.6	12.0	17
820	821	10%	30	0.796	2.2	13.5	16
1000	102	10%	30	0.252	2.0	16.0	15

### P/N DESIGNATION

Consult factory for availability of non-standard inductance values, or increased Q, SRF, or current ratings.



RCD Components Inc., 520 E. Industrial Park Dr., Manchester, NH, USA 03109

Tel: (603) 669-0054 Fax: (603) 669-5455 E-mail: sales@rcdcomponents.com www.rcdcomponents.com