

MSCDRI SERIES

SMD Power Inductors

FEATURES

These power inductors have low DC resistance and large permissible DC current with high reliability.

These power inductors can be directly mounted with special treated electrodes.

Tape and reel packages are available for auto mounting machine.

Magnetic shielded products are available for each series for the consideration of against radiation.

APPLICATIONS

For the smoothing circuit of DC-DC converter, as a choke coil or chopper coil.

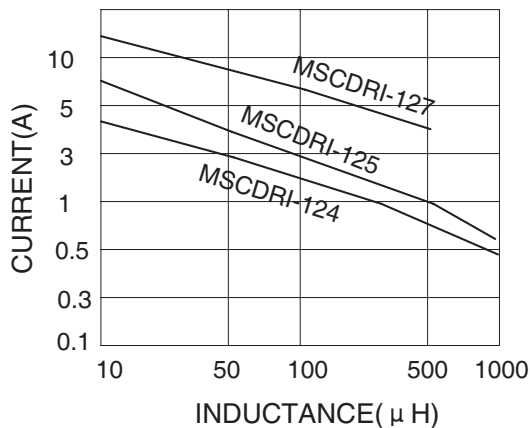
Suitable for use in power lines of camcorder, LCD set, OA equipment, notebook computer, PDA, and small size communication equipment.

PRODUCT IDENTIFICATION

1 2 3 4 5
 MSCDRI - 124 - 100 M □ □

- ① Product Code
- ② Dimensions
- ③ Inductance Code
- ④ Tolerance Code
- ⑤ Pattern Code

TYPICAL ELECTRICAL CHARACTERISTICS



PRODUCT SERIES

		Dimension in mm			
Part No.	A ±0.5	B ±0.5	C Max.	D ±0.2	
MSCDRI-63,64	6.2	5.8	3.2	1.5	
MSCDRI-73,74	7.3	7.3	3.6	2.7	
MSCDRI-124,125,127	12.0	12.0	5.0	5.0	
MSCDRI-124	12.0	12.0	5.0	5.0	
MSCDRI-125	12.0	12.0	6.0	5.0	
MSCDRI-127	12.0	12.0	8.0	5.0	

■ PRODUCT SPECIFICATIONS

Part No.	Inductance (μ H)	Test Frequency	DC Resistance(Ω)Max.							Permissible DC Current(A)Max.						
			63	64	73	74	124	125	127	63	64	73	74	124	125	127
1R2	1.2	100KHz							0.007							9.8
1R5	1.5		0.032							2.2						
2R4	2.4					0.042		0.0073	0.012				3.50		7.5	8.0
3R5	3.5								0.014							7.5
3R9	3.9						0.015	0.0109						6.50	6.8	
4R7	4.7				0.065	0.047	0.018	0.018	0.016			2.27	2.47	5.70	5.2	6.80
6R1	6.1								0.018							6.60
6R8	6.8					0.052	0.023	0.023					1.95	4.90	4.8	
7R6	7.6								0.020							5.90
8R2	8.2						0.026	0.023						4.60	4.3	
100	10	1KHz	0.15	0.12	0.076	0.056	0.028	0.025	0.022	1.10	1.35	1.68	1.84	4.50	4.00	5.40
120	12		0.20	0.13	0.098	0.060	0.038	0.027	0.024	1.00	1.20	1.52	1.71	4.00	3.50	4.90
150	15		0.23	0.18	0.150	0.085	0.050	0.030	0.027	0.90	1.10	1.33	1.43	3.20	3.30	4.50
180	18		0.27	0.24	0.170	0.100	0.057	0.034	0.039	0.80	1.00	1.20	1.31	3.10	3.00	3.90
220	22		0.34	0.27	0.190	0.110	0.066	0.036	0.043	0.74	0.91	1.07	1.23	2.90	2.80	3.60
270	27		0.38	0.30	0.230	0.180	0.080	0.051	0.046	0.66	0.82	0.96	1.12	2.80	2.30	3.40
330	33		0.45	0.33	0.280	0.250	0.097	0.057	0.065	0.59	0.75	0.91	0.96	2.70	2.10	3.00
390	39		0.49	0.37	0.340	0.260	0.132	0.068	0.073	0.54	0.69	0.77	0.91	2.10	2.00	2.75
470	47		0.69	0.52	0.360	0.280	0.150	0.075	0.100	0.50	0.62	0.76	0.88	1.90	1.80	2.50
560	56		0.78	0.56	0.470	0.380	0.190	0.110	0.11	0.46	0.58	0.68	0.75	1.80	1.70	2.35
680	68		1.07	0.63	0.520	0.400	0.220	0.120	0.14	0.42	0.52	0.61	0.69	1.50	1.50	2.10
820	82		1.21	0.71	0.690	0.430	0.260	0.140	0.16	0.38	0.47	0.57	0.61	1.30	1.40	1.95
101	100		1.39	1.03	0.790	0.610	0.308	0.160	0.22	0.34	0.43	0.50	0.60	1.20	1.30	1.70
121	120		1.90	1.15	0.890	0.660	0.380	0.170	0.25	0.31	0.39	0.49	0.52	1.10	1.10	1.60
151	150		2.18	1.68	1.270	0.880	0.530	0.230	0.28	0.28	0.35	0.43	0.46	0.90	1.00	1.42
181	180		2.77	1.87	1.450	0.980	0.620	0.290	0.35	0.26	0.32	0.39	0.42	0.80	0.90	1.30
221	220		3.20	2.08	1.650	1.170	0.700	0.400	0.39	0.23	0.29	0.35	0.36	0.75	0.80	1.16
271	270		4.38	2.37	2.3010	1.640	0.876	0.460	0.56	0.22	0.26	0.32	0.34	0.68	0.75	1.06
331	330		4.94	2.67	2.620	1.860	0.990	0.510	0.64	0.19	0.23	0.28	0.32	0.55	0.68	0.95
391	390			2.94	2.940	2.850		0.690	0.70		0.22	0.26	0.29		0.65	0.88
471	470	5.00	3.93	4.180	3.010		0.770	0.99	0.16	0.20	0.24	0.26		0.58	0.79	
561	560	5.23	5.43	4.670	3.620		0.860	1.07	0.15	0.18	0.22	0.23		0.54	0.73	
681	680		7.32	5.730	4.630		1.200	1.46		0.17	0.19	0.22		0.48	0.67	
821	820		8.24	6.540	5.200		1.340	1.64		0.15	0.18	0.20		0.43	0.60	
102	1000		9.26	9.440	6.00		1.530	1.82		0.14	0.16	0.18		0.40	0.55	

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■ TOLERANCE OF INDUCTANCE

Tolerance	MSCDRI-63	MSCDRI-64	MSCDRI-73	MSCDRI-74	MSCDRI-124	MSCDRI-125	MSCDRI-127
20% (M)	10 ~ 560 μ H	10 ~ 1000 μ H	10 ~ 1000 μ H	10 ~ 100 μ H	10 ~ 330 μ H	10 ~ 1000 μ H	10 ~ 1000 μ H
+40%, -20% (N)	1.5 ~ 7.6 μ H		4.7 ~ 7.6 μ H	2.4 ~ 7.6 μ H	3.9 ~ 8.2 μ H	4.7 ~ 7.6 μ H	1.2 ~ 7.6 μ H

The max. permissible DC current is the DC current applied which causes 10% (25% for MSCDRI-73, 74) reduction of its initial inductance value, or the coil temperature to rise by 40°C, whichever is lower.