

SMD Shielded Power Inductors

Application Field

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

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

Features

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

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

Tape and reel packages are available for auto mounting machine.

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

Dimensions and footprint (Unit : mm)

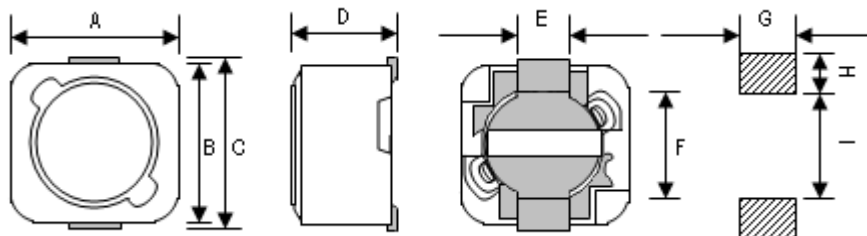


Fig-1

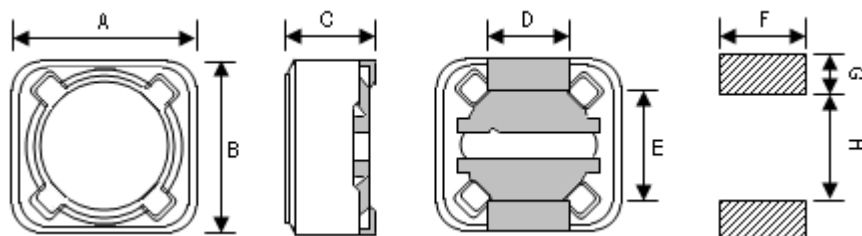


Fig-2

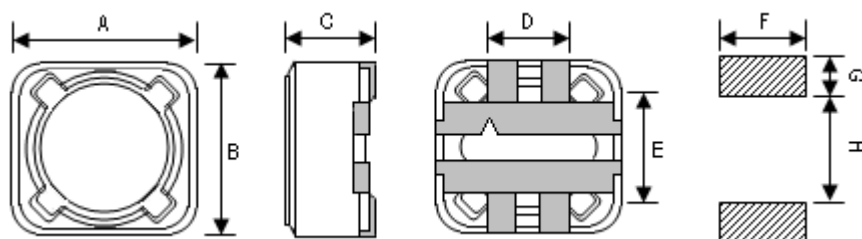


Fig-3

Unit : mm

Size	A	B	C	D	E	F	G	H	I
MDC-0603	6.20±0.5	5.80±0.5	6.60 max	3.20 max	1.50±0.2	4.60±0.2	1.90	1.40	4.60
MDC-0604	6.20±0.5	5.80±0.5	6.60 max	5.00 max	1.50±0.2	4.60±0.2	1.90	1.40	4.60
MDC-0703	7.30±0.5	7.30±0.5	3.60 max	2.70±0.2	5.10±0.2	3.10	1.60	4.80	-
MDC-0704	7.30±0.5	7.30±0.5	4.60 max	2.70±0.2	5.10±0.2	3.10	1.60	4.80	-
MDC-1204	12.00±0.5	12.00±0.5	4.50 max	5.00±0.2	7.60±0.2	5.40	2.80	7.00	-
MDC-1205	12.00±0.5	12.00±0.5	6.00 max	5.00±0.2	7.60±0.2	5.40	2.80	7.00	-
MDC-1207	12.00±0.5	12.00±0.5	8.00 max	5.00±0.2	7.60±0.2	5.40	2.90	7.00	-

Part Number Code

MDC - 0603 - 680 M
 1 2 3 4

1、Product Code

2、Dimensions Code

3、Inductance = Decimal Point

4、Tolerance : K = ±10%、L = ±15%、M = ±20%

Specification

Part No.	Inductance (μH)	Freq. (Hz)	DCR(Ω) (max)	IDC(A) (max)
MDC-0603-2R9	2.9	100KHz	0.068	1.940
MDC-0603-3R3	3.3	100KHz	0.075	1.800
MDC-0603-4R0	4.0	100KHz	0.080	1.630
MDC-0603-4R7	4.7	100KHz	0.090	1.550
MDC-0603-5R5	5.5	100KHz	0.096	1.400
MDC-0603-100	10	1K	0.150	1.100
MDC-0603-120	12	1K	0.200	1.000
MDC-0603-150	15	1K	0.230	0.900
MDC-0603-180	18	1K	0.270	0.800
MDC-0603-220	22	1K	0.340	0.740
MDC-0603-270	27	1K	0.380	0.660
MDC-0603-330	33	1K	0.450	0.590
MDC-0603-470	47	1K	0.690	0.500
MDC-0603-560	56	1K	0.780	0.460
MDC-0603-680	68	1K	1.070	0.420
MDC-0603-820	82	1K	1.210	0.380
MDC-0603-101	100	1K	1.390	0.340

Part No.	Inductance (μ H)	Freq. (Hz)	DCR(Ω) (max)	IDC(A) (max)
MDC-0603-121	120	1K	1.900	0.310
MDC-0603-151	150	1K	2.180	0.280
MDC-0603-181	180	1K	2.770	0.260
MDC-0603-221	220	1K	3.120	0.230
MDC-0603-271	270	1K	4.380	0.220
MDC-0603-331	330	1K	4.940	0.190

Part No.	Inductance (μ H)	Freq. (Hz)	DCR(Ω) (max)	IDC(A) (max)
MDC-0604-2R9	2.9	100KHz	0.047	1.800
MDC-0604-3R3	3.3	100KHz	0.050	1.750
MDC-0604-4R0	4.0	100KHz	0.060	1.650
MDC-0604-4R7	4.7	100KHz	0.065	1.550
MDC-0604-5R5	5.5	100KHz	0.070	1.450
MDC-0604-100	10	1K	0.120	1.350
MDC-0604-120	12	1K	0.130	1.220
MDC-0604-150	15	1K	0.180	1.110
MDC-0604-180	18	1K	0.240	1.020
MDC-0604-220	22	1K	0.270	0.910
MDC-0604-270	27	1K	0.300	0.820
MDC-0604-330	33	1K	0.330	0.740
MDC-0604-390	39	1K	0.370	0.690
MDC-0604-470	47	1K	0.520	0.620
MDC-0604-560	56	1K	0.560	0.580
MDC-0604-680	68	1K	0.630	0.510
MDC-0604-820	82	1K	0.710	0.460
MDC-0604-101	100	1K	1.030	0.420
MDC-0604-121	120	1K	1.150	0.380
MDC-0604-151	150	1K	1.680	0.350
MDC-0604-181	180	1K	1.870	0.320
MDC-0604-221	220	1K	2.080	0.290
MDC-0604-271	270	1K	2.370	0.260
MDC-0604-331	330	1K	2.670	0.230
MDC-0604-391	390	1K	2.940	0.220
MDC-0604-471	470	1K	3.930	0.200
MDC-0604-561	560	1K	5.430	0.180
MDC-0604-681	680	1K	7.320	0.170
MDC-0604-821	820	1K	8.240	0.150
MDC-0604-102	1000	1K	9.260	0.140

Part No.	Inductance (μH)	Freq. (Hz)	DCR(Ω) (max)	IDC(A) (max)
MDC-0703-100	10	1K	0.072	1.680
MDC-0703-120	12	1K	0.098	1.520
MDC-0703-150	15	1K	0.130	1.330
MDC-0703-180	18	1K	0.140	1.200
MDC-0703-220	22	1K	0.190	1.070
MDC-0703-270	27	1K	0.210	0.960
MDC-0703-330	33	1K	0.240	0.910
MDC-0703-390	39	1K	0.320	0.770
MDC-0703-470	47	1K	0.360	0.760
MDC-0703-560	56	1K	0.470	0.680
MDC-0703-680	68	1K	0.520	0.610
MDC-0703-820	82	1K	0.690	0.570
MDC-0703-101	100	1K	0.790	0.500
MDC-0703-121	120	1K	0.890	0.490
MDC-0703-151	150	1K	1.270	0.430
MDC-0703-181	180	1K	1.450	0.390
MDC-0703-221	220	1K	1.650	0.350
MDC-0703-271	270	1K	2.310	0.320
MDC-0703-331	330	1K	2.620	0.280
MDC-0703-391	390	1K	2.940	0.260
MDC-0703-471	470	1K	4.180	0.240
MDC-0703-561	560	1K	4.670	0.220
MDC-0703-681	680	1K	5.730	0.190
MDC-0703-821	820	1K	6.540	0.180
MDC-0703-102	1000	1K	9.440	0.160

Part No.	Inductance (μH)	Freq. (Hz)	DCR(Ω) (max)	IDC(A) (max)
MDC-0704-100	10	1K	0.049	1.840
MDC-0704-120	12	1K	0.058	1.710
MDC-0704-150	15	1K	0.081	1.470
MDC-0704-180	18	1K	0.091	1.310
MDC-0704-220	22	1K	0.110	1.230
MDC-0704-270	27	1K	0.150	1.120
MDC-0704-330	33	1K	0.170	0.960
MDC-0704-390	39	1K	0.230	0.910
MDC-0704-470	47	1K	0.260	0.880
MDC-0704-560	56	1K	0.350	0.750
MDC-0704-680	68	1K	0.380	0.690

Part No.	Inductance (μ H)	Freq. (Hz)	DCR(Ω) (max)	IDC(A) (max)
MDC-0704-820	82	1K	0.430	0.610
MDC-0704-101	100	1K	0.610	0.600
MDC-0704-121	120	1K	0.660	0.520
MDC-0704-151	150	1K	0.880	0.460
MDC-0704-181	180	1K	0.980	0.420
MDC-0704-221	220	1K	1.170	0.360
MDC-0704-271	270	1K	1.640	0.340
MDC-0704-331	330	1K	1.860	0.320
MDC-0704-391	390	1K	2.850	0.290
MDC-0704-471	470	1K	3.010	0.260
MDC-0704-561	560	1K	3.620	0.230
MDC-0704-681	680	1K	4.630	0.220
MDC-0704-821	820	1K	5.200	0.200
MDC-0704-102	1000	1K	6.000	0.180

Part No.	Inductance (μ H)	Freq. (Hz)	DCR(Ω) (max)	IDC(A) (max)
MDC-1204-3R9	3.9	100K	0.015	6.500
MDC-1204-4R7	4.7	100K	0.018	5.700
MDC-1204-6R8	6.8	100K	0.023	4.900
MDC-1204-8R2	8.2	100K	0.026	4.600
MDC-1204-100	10	1K	0.028	4.500
MDC-1204-120	12	1K	0.038	4.000
MDC-1204-150	15	1K	0.050	3.200
MDC-1204-180	18	1K	0.057	3.100
MDC-1204-220	22	1K	0.066	2.900
MDC-1204-270	27	1K	0.080	2.800
MDC-1204-330	33	1K	0.097	2.700
MDC-1204-390	39	1K	0.132	2.100
MDC-1204-470	47	1K	0.160	1.900
MDC-1204-560	56	1K	0.190	1.800
MDC-1204-680	68	1K	0.220	1.500
MDC-1204-820	82	1K	0.260	1.300
MDC-1204-101	100	1K	0.308	1.200
MDC-1204-121	120	1K	0.380	1.100
MDC-1204-151	150	1K	0.530	0.950
MDC-1204-181	180	1K	0.620	0.850
MDC-1204-221	220	1K	0.700	0.800
MDC-1204-271	270	1K	0.870	0.600
MDC-1204-331	330	1K	0.990	0.500

Part No.	Inductance (μ H)	Freq. (Hz)	DCR(Ω) (max)	IDC(A) (max)
MDC-1205-1R3	1.3	100KHz	0.012	8.000
MDC-1205-2R1	2.1	100KHz	0.014	7.000
MDC-1205-3R1	3.1	100KHz	0.017	6.000
MDC-1205-4R4	4.4	100KHz	0.020	5.000
MDC-1205-5R8	5.8	100KHz	0.021	4.400
MDC-1205-7R5	7.5	100KHz	0.024	4.200
MDC-1205-100	10	1K	0.025	4.000
MDC-1205-120	12	1K	0.027	3.500
MDC-1205-150	15	1K	0.030	3.300
MDC-1205-180	18	1K	0.034	3.000
MDC-1205-220	22	1K	0.036	2.800
MDC-1205-270	27	1K	0.051	2.300
MDC-1205-330	33	1K	0.057	2.100
MDC-1205-390	39	1K	0.068	2.000
MDC-1205-470	47	1K	0.075	1.800
MDC-1205-560	56	1K	0.110	1.700
MDC-1205-680	68	1K	0.120	1.500
MDC-1205-820	82	1K	0.140	1.400
MDC-1205-101	100	1K	0.160	1.300
MDC-1205-121	120	1K	0.170	1.100
MDC-1205-151	150	1K	0.230	1.000
MDC-1205-181	180	1K	0.290	0.900
MDC-1205-221	220	1K	0.400	0.800
MDC-1205-271	270	1K	0.460	0.750
MDC-1205-331	330	1K	0.510	0.680
MDC-1205-391	390	1K	0.690	0.650
MDC-1205-471	470	1K	0.770	0.580
MDC-1205-561	560	1K	0.860	0.540
MDC-1205-681	680	1K	1.200	0.480
MDC-1205-821	820	1K	1.340	0.430
MDC-1205-102	1000	1K	1.530	0.400

Part No.	Inductance (μ H)	Freq. (Hz)	DCR(Ω) (max)	IDC(A) (max)
MDC-1207-1R2	1.2	100KHz	0.0070	9.800
MDC-1207-2R4	2.4	100KHz	0.0115	8.000
MDC-1207-3R5	3.5	100KHz	0.0135	7.500
MDC-1207-4R7	4.7	100KHz	0.0158	6.800
MDC-1207-6R1	6.1	100KHz	0.0176	6.600

Part No.	Inductance (μ H)	Freq. (Hz)	DCR(Ω) (max)	IDC(A) (max)
MDC-1207-7R6	7.6	100KHz	0.0200	5.900
MDC-1207-100	10	1K	0.0216	5.400
MDC-1207-120	12	1K	0.0243	4.900
MDC-1207-150	15	1K	0.0270	4.500
MDC-1207-180	18	1K	0.0392	3.900
MDC-1207-220	22	1K	0.0432	3.600
MDC-1207-270	27	1K	0.0459	3.400
MDC-1207-330	33	1K	0.0648	3.00
MDC-1207-390	39	1K	0.0729	2.750
MDC-1207-470	47	1K	0.100	2.500
MDC-1207-560	56	1K	0.110	2.350
MDC-1207-680	68	1K	0.140	2.100
MDC-1207-820	82	1K	0.160	1.950
MDC-1207-101	100	1K	0.220	1.700
MDC-1207-121	120	1K	0.250	1.600
MDC-1207-151	150	1K	0.280	1.420
MDC-1207-181	180	1K	0.350	1.300
MDC-1207-221	220	1K	0.390	1.160
MDC-1207-271	270	1K	0.560	1.060
MDC-1207-331	330	1K	0.640	0.950
MDC-1207-391	390	1K	0.700	0.880
MDC-1207-471	470	1K	0.980	0.790
MDC-1207-561	560	1K	1.070	0.730
MDC-1207-681	680	1K	1.460	0.670
MDC-1207-821	820	1K	1.640	0.600
MDC-1207-102	1000	1K	1.820	0.550