MSDS Low DCR Chip Power Inductors





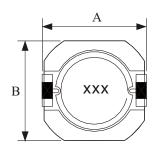
Features

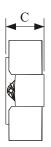
- Compact and thin
- Large Current and Low DCR
- Magnetically shielded construction

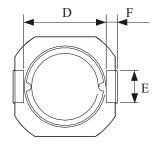
Applications

- TV game, Computer devices
- Ideal for a variety of DC-DC converter inductor applications

Dimensions & Configurations (Unit:mm)







Type	A (max)	B (max)	C (max)	D	Е	F
MSDS0620	6.3	6.2	2.0	4.8	2	0.6
MSDS0625	6.3	6.2	2.5	4.8	2	0.6
MSDS0630	6.3	6.2	3.0	4.8	2	0.6
MSDS0635	6.3	6.2	3.5	4.8	2	0.6
MSDS0806	8.4	8.3	6.8	4.1	3	2
MSDS104	10.4	10.3	4.8	6.0	3	2
MSDS106	10.4	10.3	6.8	6.0	3	2

Note: Design as Customer's Requested Specifications.



► Electrical Characteristics For MSDS0620 Series

Part Number	Inductance [µH]	Test Freq [KHz]	$\mathrm{DCR}(\mathrm{max})$ $[\mathrm{m}\Omega]$	IDC(max) [A]
MSDS0620 - 1R0M	1	100	17	3.50
MSDS0620 - 1R5M	1.5	100	21	2.94
MSDS0620 - 2R0M	2	100	29	2.47
MSDS0620 - 3R3M	3.3	100	47	1.99
MSDS0620 - 4R7M	4.7	100	66	1.59
MSDS0620 - 6R2M	6.2	100	74	1.49
MSDS0620 - 8R2M	8.2	100	102	1.25
MSDS0620 - 100M	10	100	118	1.22
MSDS0620 - 120M	12	100	154	0.99
MSDS0620 - 150M	15	100	179	0.94
MSDS0620 - 180M	18	100	207	0.83
MSDS0620 - 220M	22	100	253	0.80
MSDS0620 - 270M	27	100	331	0.65
MSDS0620 - 330M	33	100	368	0.63
MSDS0620 - 390M	39	100	473	0.55
MSDS0620 - 470M	47	100	542	0.50

► Electrical Characteristics For MSDS0625 Series

Part Number	Inductance [µH]	Test Freq [KHz]	DCR(max) [mΩ]	IDC(max) [A]
MSDS0625 - 1R0M	1	100	11	3.48
MSDS0625 - 1R5M	1.5	100	17	2.35
MSDS0625 - 2R0M	2	100	25	2.44
MSDS0625 - 3R3M	3.3	100	47	1.89
MSDS0625 - 4R3M	4.3	100	54	1.65
MSDS0625 - 6R2M	6.2	100	68	1.37
MSDS0625 - 100M	10	100	98	1.07
MSDS0625 - 120M	12	100	114	0.97
MSDS0625 - 150M	15	100	120	0.87
MSDS0625 - 180M	18	100	132	0.79
MSDS0625 - 220M	22	100	156	0.71
MSDS0625 - 270M	27	100	204	0.64
MSDS0625 - 330M	33	100	234	0.58
MSDS0625 - 390M	39	100	294	0.53
MSDS0625 - 470M	47	100	348	0.48
MSDS0625 - 560M	56	100	414	0.44
MSDS0625 - 680M	68	100	480	0.40
MSDS0625 - 820M	82	100	558	0.36
MSDS0625 - 101M	100	100	780	0.33



► Electrical Characteristics For MSDS0630 Series

Part Number	Inductance [μH]	Test Freq [KHz]	DCR(max) [mΩ]	IDC(max) [A]
MSDS0630 - 1R0N	1	100	14	3.59
MSDS0630 - 1R5N	1.5	100	16	2.93
MSDS0630 - 2R2N	2.2	100	20	2.42
MSDS0630 - 3R6N	3.6	100	26	1.89
MSDS0630 - 4R7N	4.7	100	33	1.66
MSDS0630 - 6R2N	6.2	100	39	1.45
MSDS0630 - 100M	10	100	59	1.14
MSDS0630 - 120M	12	100	63	1.04
MSDS0630 - 150M	15	100	75	0.93
MSDS0630 - 180M	18	100	89	0.85
MSDS0630 - 220M	22	100	115	0.77
MSDS0630 - 270M	27	100	144	0.70
MSDS0630 - 330M	33	100	168	0.63
MSDS0630 - 390M	39	100	180	0.58
MSDS0630 - 470M	47	100	225	0.53
MSDS0630 - 560M	56	100	264	0.48
MSDS0630 - 680M	68	100	324	0.44
MSDS0630 - 820M	82	100	396	0.4
MSDS0630 - 101M	100	100	498	0.36
MSDS0630 - 151M	150	100	738	0.31

Electrical Characteristics For MSDS0635 Series

Part Number	Inductance [μH]	Test Freq [KHz]	DCR(max) [mΩ]	IDC(max) [A]
MSDS0635 - 1R8N	1.8	100	19	3.00
MSDS0635 - 2R2N	2.2	100	22	2.69
MSDS0635 - 3R3N	3.3	100	26	2.57
MSDS0635 - 4R7N	4.7	100	32	2.08
MSDS0635 - 6R2N	6.2	100	35	1.84
MSDS0635 - 8R2N	8.2	100	44	1.54
MSDS0635 - 100M	10	100	50	1.49
MSDS0635 - 120M	12	100	62	1.28
MSDS0635 - 150M	15	100	77	1.10
MSDS0635 - 180M	18	100	82	1.05
MSDS0635 - 220M	22	100	106	0.97
MSDS0635 - 270M	27	100	140	0.82
MSDS0635 - 350M	33	100	162	0.76
MSDS0635 - 390M	39	100	191	0.70
MSDS0635 - 470M	47	100	208	0.68
MSDS0635 - 560M	56	100	257	0.60
MSDS0635 - 680M	68	100	319	0.56
MSDS0635 - 820M	82	100	420	0.47
MSDS0635 - 101M	100	100	477	0.45
MSDS0635 - 151M	151	100	664	0.37



► Electrical Characteristics For MSDS0806 Series

Part Number	Inductance [µH]	Test Freq [KHz]	DCR(max) [mΩ]	IDC(max) [A]
MSDS0806 - 2R0N	2	100	15	6.80
MSDS0806 - 2R7N	2.7	100	17	5.90
MSDS0806 - 3R3N	3.3	100	21	5.20
MSDS0806 - 4R3N	4.3	100	22	4.80
MSDS0806 - 5R8N	5.6	100	26	4.10
MSDS0806 - 6R8N	6.8	100	28	3.80
MSDS0806 - 8R2N	8.2	100	30	3.40
MSDS0806 - 100M	10	100	36	2.90
MSDS0806 - 150M	15	100	41	2.80
MSDS0806 - 220M	22	100	74	2.00
MSDS0806 - 330M	33	100	120	1.60
MSDS0806 - 470M	47	100	150	1.40
MSDS0806 - 680M	68	100	210	1.10
MSDS0806 - 101M	100	100	310	0.98
MSDS0806 - 151M	150	100	400	0.75
MSDS0806 - 221M	220	100	560	0.65

Electrical Characteristics For MSDS104 Series

Part Number	Inductance [µH]	Test Freq [KHz]	DCR(max) [Ω]	IDC(max) [A]
MSDS104 - 1R8N	1.8	100	0.014	8.70
MSDS104 - 2R7N	2.7	100	0.016	7.30
MSDS104 - 3R9N	3.9	100	0.018	5.80
MSDS104 - 5R1N	5.1	100	0.026	4.90
MSDS104 - 6R8N	6.8	100	0.035	4.50
MSDS104 - 8R2N	8.2	100	0.040	4.10
MSDS104 - 100M	10	100	0.044	3.60
MSDS104 - 120M	12	100	0.051	3.30
MSDS104 - 150M	15	100	0.062	3.10
MSDS104 - 180M	18	100	0.079	2.70
MSDS104 - 220M	22	100	0.087	2.40
MSDS104 - 270M	27	100	0.100	2.20
MSDS104 - 330M	33	100	0.125	2.00
MSDS104 - 390M	39	100	0.150	1.80
MSDS104 - 470M	47	100	0.175	1.70
MSDS104 - 560M	56	100	0.195	1.50
MSDS104 - 680M	68	100	0.240	1.30
MSDS104 - 820M	82	100	0.295	1.20
MSDS104 - 101M	100	100	0.380	1.10



Electrical Characteristics For MSDS106 Series

David Manuslani	Inductance	Test Freq	DCR(max)	IDC(max)
Part Number	[µH]	[KHz]	$[\Omega]$	[A]
MSDS106 - 1R8N	1.8	100	0.018	6.50
MSDS106 - 2R7N	2.7	100	0.020	6.00
MSDS106 - 3R5N	3.5	100	0.022	5.60
MSDS106 - 4R7N	4.7	100	0.024	5.20
MSDS106 - 6R0N	6.0	100	0.026	4.80
MSDS106 - 7R5N	7.5	100	0.030	4.20
MSDS106 - 100M	10	100	0.035	4.00
MSDS106 - 120M	12	100	0.040	3.50
MSDS106 - 150M	15	100	0.050	3.20
MSDS106 - 180M	18	100	0.060	3.00
MSDS106 - 220M	22	100	0.065	2.60
MSDS106 - 270M	27	100	0.075	2.20
MSDS106 - 330M	33	100	0.095	2.00
MSDS106 - 390M	39	100	0.110	1.90
MSDS106 - 470M	47	100	0.135	1.80
MSDS106 - 560M	56	100	0.145	1.70
MSDS106 - 680M	68	100	0.155	1.60
MSDS106 - 820M	82	100	0.185	1.50
MSDS106 - 101M	100	100	0.220	1.40
MSDS106 - 121M	120	100	0.255	1.30
MSDS106 - 151M	150	100	0.280	1.10
MSDS106 - 181M	180	100	0.350	1.00
MSDS106 - 221M	220	100	0.460	0.85
MSDS106 - 271M	270	100	0.600	0.70
MSDS106 - 331M	330	100	0.700	0.60
MSDS106 - 391M	390	100	0.860	0.55
MSDS106 - 471M	470	100	1.100	0.53
MSDS106 - 561M	560	100	1.250	0.50
MSDS106 - 681M	680	100	1.500	0.47

Note: 1. Inductance tested at 100KHz / 0.1V;

^{2.} Operating temp: -40°C to +85°C; 3. Inductance drop=30% typ. At IDC.