

■ FEATURES

The MCD-C series power inductors have low DC resistance and large permissible DC current with high reliability.

The MCD-C series has high saturation magnetic-flux density and high efficiency.

■ APPLICATIONS

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

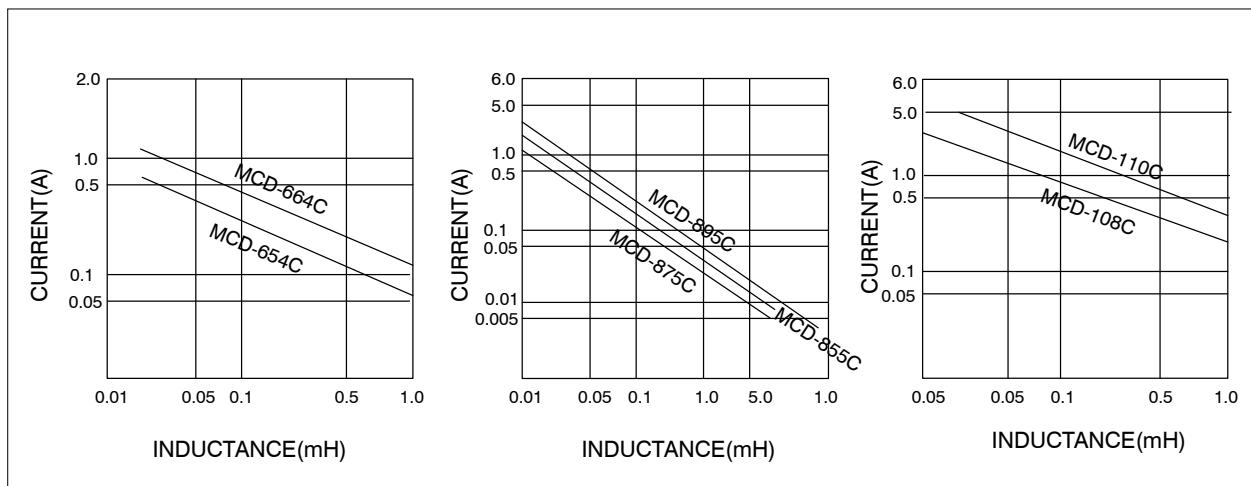
Suitable for use in power lines of camcorder, LCD set, OA equipment, notebook computer, PDA, and small size communication equipment.

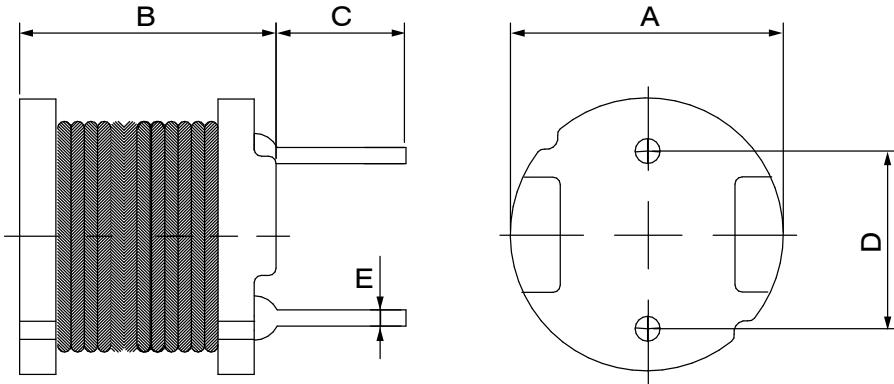
■ PRODUCT IDENTIFICATION

①	②	③	④	⑤	⑥	⑦
MCD	-	654	C	-	101	K
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- ①** Product Code
- ②** Core Dimensions
- ③** Core Code
- ④** Inductance Code
- ⑤** Tolerance Code
- ⑥** UL Tube
- ⑦** Pattern Code

■ TYPICAL ELECTRICAL CHARACTERISTICS



■ PRODUCT SERIES

TYPE	DIMENSIONS (mm)				
	A	B	C	D	E
MCD-654C	6.0±0.5	5.5Max	15±2	3.0±0.5	0.5±0.1
MCD-664C	6.0±0.5	6.5Max	15±2	4.0±0.5	0.5±0.1
MCD-855C	7.8±0.5	6.5Max	15±2	5.0±0.5	0.65±0.1
MCD-875C	7.8±0.5	8.0Max	15±2	5.0±0.5	0.65±0.1
MCD-895C	7.8±0.5	9.5Max	15±2	5.0±0.5	0.65±0.1
MCD-108C	10±0.5	8.5Max	15±2	6.5±0.5	0.65±0.1
MCD-110C	10±0.5	10.5Max	15±2	6.5±0.5	0.65±0.1

■ PRODUCT SPECIFICATIONS

Part No.	Inductance (μ H)	Test Frequency	DC Resistance (Ω) Max.						Permissible DC Current(A) Max.							
			654C	664C	855C	875C	895C	108C	110C	654C	664C	855C	875C	895C		
100	10	100KHz			0.07	0.05	0.04	0.027	0.022			2.50	2.90	2.60	4.50	5.30
120	12				0.08	0.06	0.04	0.031	0.023			2.40	2.50	2.60	4.10	4.90
150	15				0.09	0.07	0.05	0.036	0.026			2.10	2.20	2.10	3.70	4.40
180	18				0.10	0.08	0.05	0.049	0.033			2.00	1.90	2.00	3.40	4.00
220	22		0.18	0.11	0.12	0.09	0.06	0.055	0.037	0.90	1.27	1.70	1.80	1.70	3.10	3.60
270	27		0.21	0.14	0.14	0.11	0.06	0.062	0.048	0.81	1.14	1.60	1.70	1.60	2.80	3.30
330	33		0.27	0.17	0.17	0.13	0.07	0.079	0.055	0.74	1.03	1.40	1.50	1.40	2.50	2.90
390	39		0.29	0.19	0.21	0.14	0.08	0.087	0.073	0.68	0.95	1.30	1.30	1.40	2.30	2.70
470	47		0.34	0.23	0.24	0.15	0.10	0.099	0.083	0.62	0.87	1.20	1.30	1.30	2.10	2.50
560	56		0.42	0.26	0.31	0.18	0.11	0.13	0.092	0.57	0.80	1.10	1.20	1.20	1.90	2.30
680	68		0.48	0.28	0.34	0.20	0.14	0.14	0.12	0.51	0.72	1.00	1.10	1.10	1.70	2.10
820	82		0.55	0.39	0.40	0.24	0.16	0.16	0.14	0.47	0.66	0.93	1.00	1.00	1.60	1.90
101	100		0.68	0.43	0.52	0.28	0.19	0.21	0.16	0.42	0.59	0.81	0.89	0.90	1.40	1.70
121	120		0.77	0.54	0.59	0.36	0.22	0.24	0.20	0.39	0.54	0.76	0.81	0.82	1.30	1.50
151	150		0.95	0.64	0.71	0.42	0.27	0.32	0.23	0.35	0.48	0.67	0.72	0.74	1.20	1.40
181	180		1.15	0.74	0.89	0.57	0.31	0.35	0.31	0.32	0.44	0.62	0.66	0.71	1.10	1.30
221	220		1.30	0.96	1.04	0.63	0.38	0.45	0.34	0.29	0.40	0.54	0.57	0.64	0.96	1.10
271	270		1.55	1.12	1.28	0.88	0.53	0.61	0.40	0.26	0.36	0.49	0.51	0.57	0.87	1.00
331	330		2.18	1.48	1.47	1.05	0.61	0.69	0.52	0.23	0.33	0.44	0.46	0.51	0.79	0.93
391	390		2.47	1.66	1.37	1.17	0.69	0.78	0.65	0.21	0.30	0.41	0.44	0.48	0.72	0.86
471	470		2.92	1.91	1.95	1.34	0.89	1.0	0.71	0.20	0.27	0.38	0.41	0.43	0.66	0.78
561	560		3.97	2.30	2.83	1.72	1.01	1.20	1.00	0.18	0.25	0.35	0.36	0.40	0.60	0.71
681	680		4.57	2.67	3.25	1.96	1.18	1.40	1.10	0.16	0.23	0.32	0.33	0.35	0.55	0.65
821	820		5.28	3.10	3.82	2.56	1.57	1.80	1.30	0.15	0.21	0.31	0.30	0.32	0.50	0.59
102	1000		7.06	4.45	5.28	2.94	1.84	2.10	1.70	0.13	0.19	0.25	0.27	0.30	0.45	0.53
122	1200	1KHz			6.03	4.04	2.10					0.23	0.24	0.24		
152	1500				7.15	4.70	2.80					0.21	0.22	0.23		
182	1800				8.26	5.05	3.21					0.20	0.20	0.21		
222	2200				11.1	6.25	4.21					0.18	0.18	0.19		
272	2700				13.1	8.72	4.92					0.16	0.16	0.17		
332	3300				15.9	10.6	6.16					0.14	0.15	0.15		
392	3900				18.0	14.2	6.84					0.13	0.14	0.14		
472	4700				23.9	16.7	7.89					0.12	0.12	0.13		
562	5600				26.8	18.7	11.5					0.11	0.11	0.12		
682	6800				31.7	21.8	13.52					0.098	0.10	0.11		
822	8200				46.5	28.7	15.2					0.088	0.093	0.10		

■ PRODUCT SPECIFICATIONS

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			654C	664C	855C	875C	895C	108C	110C	654C	664C	855C	875C	895C
103	10000	1KHz			55.7	33.0	22.0			0.081	0.084	0.089		
123	12000						25.0					0.073		
153	15000						29.1					0.068		
183	18000						38.9					0.066		
223	22000						44.9					0.059		
273	27000						55.7					0.052		
333	33000						64.2					0.048		
393	39000						74.2					0.072		
473	47000						96.4					0.038		

Tolerance of inductance: 10~82 μ H: $\pm 20\%$ (M) 100~47000 μ H: $\pm 10\%$ (K)

The max. permissible DC current is the DC current applied which causes 10% reduction of its initial inductance value, or the coil temperature to rise by 40°C, whichever is lower.