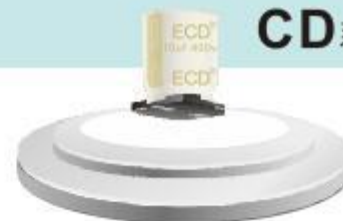


CD Series Low Impedance

CD系列

Features

- :Endurance +105℃ 8000~10000 小时
- Designed for surface mounting on high density pc board
- RoHS Compliant



Specifications

Item	Performance Characteristics								
Operating Temp. Range	-55~+105℃					-40~+105℃			
Rated Voltage Range	6.3to100VDC					160to450VDC			
Capacitance Range	1 to 100 μ F					1 to 100 μ F			
Capacitance Tolerance	$\pm 20\%$ (120Hz, 20℃)								
Leakage Current	$I_L \leq 0.01CV$ or ≤ 3 (μ A) After 2 minutes whichever is greater measured with rated working voltage applied								
Dissipation Factor($\tan \delta$) (max, 120Hz, 20℃)	W.V(VDC)	10	16	25	35	50	63	80	100
	D.F(%)	28	24	20	16	14	14	12	12
	For capacitance $> 1000 \mu F$, add 2% per anther $1000 \mu F$								
Low Temp. Characteristics (Max Impedance Ratio) (120Hz)	W.V(VDC)	10	16	25	35	50	63	80	100
	$Z_{-40^\circ C}/Z_{+20^\circ C}$	6	4	3	3	3	3	3	3
Load Life	Test conditions								
	Duration time: as righth						D- Φ		
	Ambient temperature: +105℃						5 Φ		
	Applied voltage: Rated DC working voltage						6.3		
	After test requirements at +20℃						$\geq 8\Phi$		
Shelf Life	Capacitance change: $\leq \pm 30\%$ of the initial measured value						Life hous		
	Dissipation factor: $\leq 300\%$ of the initial specified value						8000		
	Leakage current: $\leq$ the initial specified value						9000		
	Test conditions						10000		
	Duration time: 1000hrs								
Industrial	Ambient temperature: +105℃								
	Applied voltage: None								
	After test requirements at +20℃ : Same limits as Load life.								
Pre-treatment for measurements shall be conducted after application of DC working voltage for 30minutes									
JIS C-5101-4(IEC30384-4)									

Diagram of dimensions(cunit:mm)



W.D	A	B	C	W	P
5	5.3	5.3	5.9	0.75 $\pm$ 0.10	1.3
6.3	6.6	6.6	7.2	0.75 $\pm$ 0.10	1.3
8	8.3	8.3	9.0	0.90 $\pm$ 0.2	3.1
10	10.3	10.3	11.0	0.90 $\pm$ 0.2	4.6
12.5	13.0	13.0	17.0	0.90 $\pm$ 0.2	4.6
16	17.0	17.0	17.8	1.2 $\pm$ 0.3	6.7
18	19.0	19.0	19.8	1.2 $\pm$ 0.3	6.7

L $\pm$ 0.5

Multiplier for ripple current vs frequency

CAP(μ F)\Frequency(Hz)	120	1K	10K	100K $\leq$
1~8.2	0.42	0.60	0.80	1.0
10~39	0.45	0.75	0.90	1.0
47~100	0.50	0.80	0.95	1.0

Multiplier for ripple current vs temperature

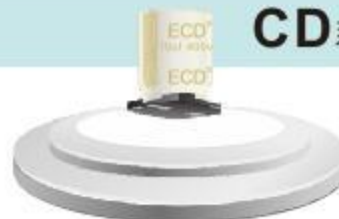
Temp.(℃)	45	60	70	85	95	105
Multiplier	2.10	1.90	1.65	1.40	1.25	1.00

CD Series Low Impedance

CD系列

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Case Size

Cap(μF) \ WV(V)	10(13)		16 (20)		25 (32)		35 (44)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
10	5*10	56	5*10	71	5*10	91	5*10	101
12	5*10	60	5*10	80	5*10	100	5*10	110
15	5*10	76	5*10	91	5*10	111	5*10	121
22	5*10	91	5*10	111	5*10	121	5*10	150
33	5*10	106	5*10	121	5*10	151	5*10	215
39	5*10	136	5*10	151	5*10	181	5*10	345
47	5*10	143	5*10	161	5*10	211	5*10	345
56	5*10	151	5*10	171	5*10	310	5*10	414
68	5*10	161	5*10	181	5*10	345	5*12	443
82	5*10	171	5*10	211	5*10	414	6.3*10	486
100	5*10	181	5*10	345	5*10	443	6.3*10	550

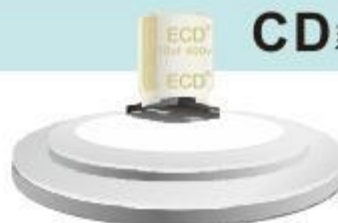
Ripple Current(mA,rms) at 105℃, 100KHz Max Impedance(Ω) at 20℃, 120Hz

CD Series Low Impedance

CD系列

Features

- :Endurance +105℃ 8000 ~10000 小时
- Designed for surface mounting on high density pc board
- RoHS Compliant



● Case Size

WV(V) Cap(μF)	50(63)		63(72)		80(92)		100(125)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
1.0			5*10	35	5*10	24	5*10	24
1.2			5*10	35	5*10	37	5*10	37
1.5	5*10	31	5*10	41	5*10	37	5*10	37
1.8	5*10	32	5*10	41	5*10	43	5*10	43
2.2	5*10	39	5*10	45	5*10	43	5*10	43
2.7	5*10	48	5*10	52	5*10	47	5*10	47
3.3	5*10	54	5*10	59	5*10	55	5*10	55
3.9	5*10	54	5*10	78	5*10	62	5*10	62
4.7	5*10	89	5*10	98	5*10	81	5*10	81
5.6	5*10	91	5*10	100	5*10	101	5*10	101
6.8	5*10	94	5*10	103	5*10	106	5*10	106
8.2	5*10	98	5*10	109	5*10	111	6.3*10	111
10	5*10	101	5*10	111	5*10	121	6.3*10	220
12	5*10	110	5*10	121	6.3*10	150	6.3*10	267
15	5*10	121	5*10	150	6.3*10	200	6.3*10	267
18	5*10	165	5*10	173	6.3*10	240	6.3*10	267
22	5*10	238	5*10	228	6.3*10	250	8*10	290
27	5*10	286	5*10	250	6.3*10	267	8*10	420
33	5*10	314	6.3*10	344	6.3*10	267	8*10	450
39	6.3*10	344	6.3*10	344	6.3*10	267	8*10	565
47	6.3*10	385	6.3*10	385	8*10	470	10*10	624
56	6.3*10	385	8*10	525	8*10	470	10*10	624
68	6.3*10	390	8*10	724	8*10	520	10*13	750
82	8*10	724	8*10	724	10*10	624	10*14	780
100	8*10	724	8*10	902	10*10	744	10*14	1040

Current(mA,rms) at 105℃, 120Hz Max Impedance(Ω) at 20℃, 120Hz

CD Series Low Impedance

CD系列

Features

- :Endurance +105℃ 8000 ~10000 小时
- Designed for surface mounting on high density pc board
- RoHS Compliant



● Case Size

WV(SV) Cap(μF)	160(200)		200(250)		250(300)		350(400)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
1.0	5*10	68	5*10	50	5*10	56	5*10	73
1.2	5*10	68	5*10	55	5*10	56	5*10	90
1.5	5*10	95	5*10	60	5*10	56	5*10	90
1.8	5*10	95	5*10	65	5*10	65	5*10	95
2.2	5*10	95	5*10	75	5*10	98	6.3*10	104
2.7	5*10	95	5*10	80	5*10	98	6.3*10	125
3.3	5*10	95	5*10	95	5*10	98	8*10	131
3.9	6.3*10	100	5*10	95	6.3*10	114	8*10	131
4.7	6.3*10	100	6.3*10	125	6.3*10	135	8*10	140
5.6	6.3*10	110	6.3*10	125	6.3*10	140	8*10	140
6.8	6.3*10	125	6.3*10	140	8*10	140	10*10	210
8.2	6.3*10	125	8*10	140	8*10	170	8*14.5	250
10	8*10	140	8*10	170	8*10	210	10*13	210
12	8*10	150	8*12.5	240	10*13	320	8*20.5	360
15	8*10	150	10*13	320	10*13	320	10*14.5	440
18	8*12.5	160	10*13	320	10*13	320	10*16.5	480
22	8*12.5	250	10*13	320	10*13	320	10*21	585
27	10*13	250	10*16.5	565	10*16.5	450	13*17	789
33	8*16.5	350	10*16.5	708	10*16.5	708	13*17	980
39	10*14.5	635	13*17	858	13*17	850	16*17	1060
47	10*16.5	680	13*17	960	13*17	960	16*21	1060
56	13*16.5	850	13*17	960	13*17	960	16*21	1115
68	13*16.5	850	16*17	1270	16*17	1270		
82	13*17.5	1155	16*17	1270				
100	13*17	1155						

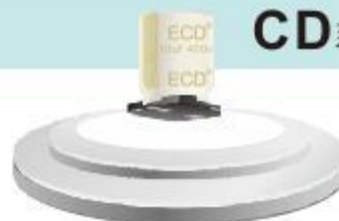
Current(mA,rms) at 105℃, 120Hz Max Impedance(Ω) at 20℃, 100KHZ

CD Series Low Impedance

CD系列

Features

- :Endurance +105℃ 8000 ~10000 小时
- Designed for surface mounting on high density pc board
- RoHS Compliant



Case Size

WV(SV) Cap(µF)	400(450)		450(500)		500(550)	
	Size	Ripple	Size	Ripple	Size	Ripple
1.0	5*10	73	5*10	72	6.3*10	45
1.2	5*10	76	5*10	78	6.3*10	45
1.5	5*10	76	6.3*10	90	6.3*10	45
1.8	6.3*10	87	6.3*10	95	8*10	80
2.2	6.3*10	105	6.3*10	100	8*10	80
2.7	6.3*10	125	6.3*10	100	8*12.5	85
3.3	6.3*10	131	8*10	120	8*12.5	85
3.9	8*10	140	8*10	135	8*14.5	102
4.7	8*10	140	10*10	140	8*16.5	130
5.6	10*10	220	10*13	200	10*14.5	130
6.8	10*13	270	10*13	220	10*14.5	130
8.2	10*13	270	10*13	200	10*14.5	240
10	10*13	270	10*14.5	350	10*16.5	260
12	10*14.5	320	10*16.5	360	13*17	270
15	10*14.5	340	13*16	370	13*17	270
18	10*16.5	360	13*17	410	13*17	470
22	10*21	570	13*17	450	13*21	470
33	13*21	850	16*17	740	16*21	700
47	16*21	1100	16*21	1215	18*21	720
56	16*21	1155	18*21	1300		

Current(mA,rms) at 105℃, 120Hz Max Impedance(Ω) at 20℃, 100KHZ

● For special designing requirement, please contact us.