CD110 Series



- Standard series for general purpose
- Endurance: 2000 hours at 105℃
- Applicable to chargers, adaptor and small home appliances
- Sleeve color: White Print in Black Sleeve

Series Features:

Item	Characteristics										
Operating Temperature Range(℃)	-40 ~ +105						-25 ~ +105				
Voltage Range(V)	6.3 ~ 100						160 ~ 500				
Capacitance Range(μF)	0.1-33000										
Capacitance Tolerance (20℃,120HZ)	±20%										
Leakage Current(μA) (20 ℃)	6.3 ~ 100v						160 ~ 500V				
	1≤0.01CV or 3 μA, Whichever is greater(after 2 minutes)						1≤0.02CV + 15 μA(after 5 minutes)				
	C:Nominal Capacitance(μF) V:Rated Voltage(V)										
Dissipation Factor (20 ℃,120HZ)	R.v.(v)	6.3	10	16	25	35	50	63	100	160 ~ 250	350 ~ 450	500
	Tanδ	0.28	0.24	0.20	0.16	0.14	0.12	0.10	0.09	0.15	0.20	0.24
	When nominal capacitance exceeds 1,000μF,add 0.02 to the value above for each 1000μF increase.											

Stability at low Temperature (Impedance Ratio at 120Hz)	R.V.(V)	6.3	10	16	25 ~ 100	160 ~ 250	350 ~ 400	450	500
	Z-25℃/Z+20℃	5	4	3	2	3	6	10	15
	Z-40℃/Z+20℃	10	8	6	4	-	-	-	-

Load Life (+105℃2000h)	The following specification shall be satisfied when the capacitors are restored to 20℃ after subjected to DC Voltage with the rated ripple current is applied for 2000h at 105℃ .	
	Capacitance Change	Within ±20% of the initial measured Value.
	Dissipation Factor	≤200% of the initial specified Value
	Leakage current	≤The initial specified value

Shelf Life (+105℃1000h)	The following specification shall be satisfied when the capacitors are restored to 20℃ after Exposing them for1000h at 105℃ without Voltage applied.	
	Capacitance Change	Within ±20% of the initial measured Value.
	Dissipation Factor	≤200% of the initial specified Value
	Leakage Current	≤200% of the initial specified Value

Frequency Coefficient

Freq.(HZ) / Cap.(μF)	50(60)	120	400	1K	10K	50K-100K
CAP≤10	0.8	1	1.3	1.45	1.65	1.7
10 < CAP≤100	0.8	1	1.23	1.36	1.48	1.53
100 < CAP≤1000	0.8	1	1.16	1.25	1.35	1.38
1000 < CAP	0.8	1	1.11	1.17	1.25	1.28

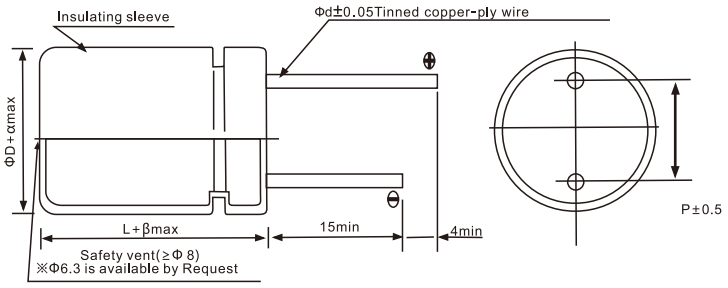
Temperature Coefficieng

Temperature (℃)	40	60	70	85	105
Factor	2.4	2.1	1.78	1.65	1

CD110 Series

Dimensions (mm)

ΦD	5	6.3	8	10	13	16	18	20	22
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10	10
Φd	0.5	0.5	0.5	0.6	0.6	0.8	0.8	0.8	0.8
β	1.0			2.0					
α	0.5								



Ratings

R.V.(V)	6.3		10		16		25		35		50		63	
Freq.(HZ) / Cap.(μF)	ΦDxL (mm)	Ripple Current (mArms)	ΦDxL (mm)	Ripple Current (mArms)	ΦDxL (mm)	Ripple Current (mArms)	ΦDxL (mm)	Ripple Current (mArms)	ΦDxL (mm)	Ripple Current (mArms)	ΦDxL (mm)	Ripple Current (mArms)	ΦDxL (mm)	Ripple Current (mArms)
0.10											5×11	3	5×11	4
0.22											5×11	3	5×11	4
0.33											5×11	6	5×11	6
0.47											5×11	8	5×11	8
1											5×11	16	5×11	16
2.2											5×11	27	5×11	29
3.3											5×11	37	5×11	37
4.7							5×11	36	5×11	44	5×11	44	5×11	48
10					5×11	46	5×11	53	5×11	65	5×11	72	5×11	77
22			5×11	65	5×11	82	5×11	92	5×11	103	5×11	109	6.3×11	124
33	5×11	70	5×11	86	5×11	83	5×11	103	5×11	119	5×11	130	6.3×11	144
47	5×11	86	5×11	104	5×11	131	5×11	130	5×11	139	6.3×11	160	6.3×11	191
68	5×11	106	5×11	130	5×11	148	6.3×11	170	6.3×11	191	8×12	214	8×12	243
100	5×11	139	5×11	193	5×11	172	6.3×11	202	6.3×11	224	8×12	276	10×13	319
120	5×11	157	5×11	200	6.3×11	220	6.3×11	242	8×12	261	8×12	303	10×16	376
150	5×11	191	5×11	224	6.3×11	243	6.3×11	264	8×12	296	10×13	350	10×16	445
180	5×11	211	6.3×11	245	6.3×11	264	6.3×11	272	8×12	340	10×13	400	10×16	505
220	6.3×11	230	6.3×11	281	8×12	340	8×12	342	8×12	371	10×13	448	10×16	530
330	6.3×11	318	6.3×11	350	8×12	391	8×12	433	10×13	505	10×16	620	10×20	724
470	6.3×11	371	6.3×11	402	8×12	495	8×12	538	10×16	658	10×20	792	13×20	924
560	8×12	452	8×12	486	10×13	549	10×16	662	10×20	808	13×20	860	13×25	1009
680	8×12	515	8×12	547	10×13	652	10×16	758	10×20	850	13×20	1005	16×25	1207
820	8×12	582	10×13	641	10×16	766	10×20	851	13×21	993	13×25	1228	16×25	1364
1000	10×13	682	10×13	693	10×16	829	10×20	1000	13×21	1202	13×25	1416	16×25	1471
1200	10×13	775	10×16	861	10×16	933	13×21	1097	13×21	1306	16×25	1541	16×32	1751
1500	10×16	891	10×16	957	10×20	1051	13×21	1285	13×25	1497	16×32	1759	16×40	1990
1800	10×16	989	10×20	1038	13×21	1233	13×21	1423	16×25	1665	16×32	2014	16×40	2145
2200	10×20	1081	10×20	1155	13×21	1411	13×25	1623	16×25	1779	16×40	2202	18×40	2355
2700	10×20	1283	13×21	1349	13×21	1634	16×25	1714	16×32	2071	18×32	2299	22×40	2717
3300	13×21	1417	13×21	1463	13×21	1663	16×25	1778	16×32	2250	18×40	2620	22×40	2935
3900	13×21	1454	13×21	1672	16×25	1902	16×32	2228	18×32	2508	18×40	2727		
4700	13×25	1782	13×25	1887	16×25	2200	16×32	2514	18×40	2722	22×40	3190		
5600	13×25	1900	16×25	2081	16×32	2332	18×32	2679	18×40	2769				
6800	16×25	2202	16×25	2355	16×32	2668	18×40	2826	22×40	3449				
8200	16×25	2220	16×32	2419	16×40	2751	18×40	2837						
10000	16×32	2414	16×40	2513	18×35	2822	22×40	3767						
12000	16×36	2644	18×36	2874	18×36	2905								
15000	16×35	2804	18×40	3150	22×40	3713								
18000	18×35	3135	18×40	3240										
22000	18×40	3404	22×40	3895										
33000	22×40	4076	22×50	4389										

Ripple Current (mArms)at105℃,120HZ

CD110 Series

Ratings

R.V.(V)	100		160		200		250		350		400		450		500	
parameter / Cap.(μF)	ΦDxL (mm)	Ripple Current (mArms)	ΦDxL (mm)	Ripple Current (mArms)	ΦDxL (mm)	Ripple Current (mArms)	ΦDxL (mm)	Ripple Current (mArms)	ΦDxL (mm)	Ripple Current (mArms)	ΦDxL (mm)	Ripple Current (mArms)	ΦDxL (mm)	Ripple Current (mArms)	ΦDxL (mm)	Ripple Current (mArms)
0.10	5×11	4														
0.22	5×11	6														
0.33	5×11	10														
0.47	5×11	13	5×11	11	5×11	11	5X11	11	6.3×11	14	6.3×11	11	8×12	11		
1	5×11	26	5×11	16	6.3×11	16	6.3×11	16	6.3×11	21	6.3×11	19	8×12	21	8×12	19
2.2	5×11	38	6.3×11	29	6.3×11	29	6.3×11	19	8×12	29	8×12	30	10×13	30	8×16	30
3.3	5×11	46	6.3×11	34	6.3×11	34	8×12	36	8×12	44	8×12	43	8×12	33	10×13	36
4.7	5×11	55	6.3×11	38	8×12	48	8×12	46	8×12	52	8×12	52	10×13	48	10×16	48
10	5×11	87	8×12	76	10×13	79	10×13	86	10×16	109	10×16	95	10×20	86	10×20	86
22	6.3×11	149	10×13	128	10×20	128	10×20	128	13×21	171	13×21	181	13×21	133	13×25	152
33	8×12	196	10×16	171	13×21	195	13×21	200	13×21	238	13×25	238	16×25	181	16×32	219
47	10×13	288	10×20	219	13×21	238	13×21	228	16×25	276	16×25	257	16×32	247	18×25	314
68	10×16	368	13×21	342	13×25	352	13×25	323	16×32	380	16×36	390	18×32	352	16×45	456
100	10×20	448	13×25	409	16×25	437	16×25	390	18×32	409	18×32	418	18×40	399	18×40	523
120	10×20	505	16×25	504	16×25	523	16×32	532	18×36	523	18×40	494	18×45	485	20×45	570
150	13×21	598	16×25	532	16×32	551	18×32	570	18×40	542					22×45	713
180	13×21	634	16×32	618	16×32	627	18×32	646								
220	13×25	703	16×32	808	18×32	713										
330	13×25	874	18×32	846	18×36	893										
470	16×25	1150	18×36	1121	18×40	1264										
560	16×36	1264	18×45	1254												
680	16×36	1552														
820	18×36	1724														
1000	18×40	1843														

Ripple Current (mArms)at105℃,120HZ

9. 包装说明Packing instructions：

9.1 先用塑料袋包装，然后再放置于包装箱中，具体包装数量请参照《创慧包装标准》 Pack with plastic bags, and then placed in a carton, please refer to 《Packing Standard》for specific packing quantity.

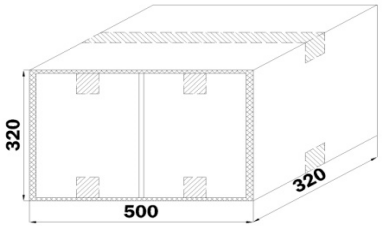
9.2 包装标识：采用中性标签，注明客户名、订单号、料号、产品系列、规格、尺寸、数量、生产日期和生产批号 Label Marking: indicate customer name, purchase number, part number, product series,specifications, size, quantity, production date and lot number, shown as below.

9.3 包装图示 Packing Figure

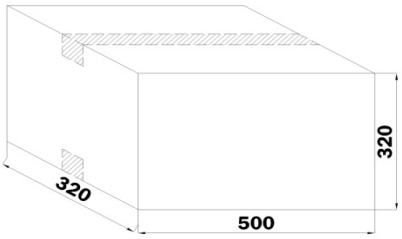
a) 标签Label

CH	T74800	
订单号 P.O	创慧	CH221102053
料号P/N	CETW-181A-000	
系列series	CD288H	墨绿底金字 PET
规格Spec	400V180uF	±20%
尺寸 Size	D18X25L	长脚
数量 Qty	50PCS	

b) 内箱Inner Carton



c) 外箱Outer Carton



10. 料号编码规则 Material number encoding rules：

CD26LF1	2T	M	181	N45	0	T
①系列Series	②电压 Voltage	③容差 Capacitance Tolerance	④容量 Capacitance	⑤尺寸Size	⑥成型 Finishing	⑦胶管Sleeve

①系列 Series	CD110	CD288H	CD288L	CD26G	CD26M	CD26L	CD110L	NP	LL
	CD288S	CD26K	CD26C	CD293	CD294	CD296	CD133	CD134	CD136

②电压V	4	6.3	10	16	25	35	50	63	80	100	120	140	160	180	200	250	315	350	400	420	450	460	500	550
代号Code	OG	OJ	1A	1C	1E	1V	1H	1J	1K	2A	2B	2S	2C	2Z	2D	2E	2F	2V	2G	2J	2W	2T	2H	2L

③容差代码code	J	K	M	W	T	Q	P
容差C.T.	±5%	±10%	±20%	-0%～+20%	-10%～ ＋20%	-20%～ ＋30%	-15%～+20%

④容量Cap.	0.1	0.22	0.3	0.47	1	2	3.3	4.7	6.8	10	22	33	47	68	100	220	330	3300	…
编码Code	R10	R22	R33	R47	10	2R2	3R3	4R7	6R8	100	220	330	470	680	101	221	331	332	…

⑤尺寸														
直径D	4	5	6	8	10	12.5	13	16	18	20	22	25	30	35
编码Code	C	D	E	F	G	H	K	L	M	N	0	P	Q	R
高度H	5	7	11	12	13	16	18	20	27	25	30	35	45	
编码Code	5	7	11	12	13	16	18	20	27	25	30	35	45	

⑥成型 Finishing	散装 Bulk	编带 Taping P=5.0	编带 Taping P=2.5	剪脚 Cut Lead L = 3.5	K脚 剪脚 L=4.5	S脚 剪脚 L=4.5	卧式 H01=4.0	卧式 H02=4.0	贴片 SMD
编码Code	0	TP5	TP25	C35	K45	S45	H140	H240	S

⑦胶管Sleeve	PVC	PET
编码Code	C	T