

充电桩铝电解电容

Charging pile capacitance

CD294C SERIES

产品特点

- +105°C加额定纹波电流保证寿命2000小时以上。
Guaranteed operating life of more than 2000 hours at +105°C with rated ripple current applied.
- 符合RoHS标准
RoHS Compliant
- 耐久纹波，高电压、低温性能优越产品，适用于充电桩等
Endure high ripple current and high voltage, be good performance at low temperature, apply to charging point and the like.

规格书 SPECIFICATION

项目 Item	特性参数 Characteristics		
使用温度范围 Operating Temperature Range	-40°C~+105°C		
额定电压范围 Rated Voltage Range	400~500V		
容量允许偏差(20°C, 120Hz) Capacitance Tolerance	±20% (M)		
漏电流(20°C) Leakage Current	$I \leq 3 \sqrt{C_R U_R}$ (μA) 5分钟读数 after 5 minutes I: Leakage Current (μA) C _R : Nominal Capacitance (μF) U _R : Working Voltage (V)		
损耗角正切值(20°C, 120Hz) Dissipation Factor	WV	400	450~500
	Tan δ	0.15	0.20
低温特性 Low Temperature Stability	阻抗比 Impedance ratio (120 Hz)		
	Rated Voltage(V)	400~450	500
	Z-25°C / Z +20°C	3	8
	Z-40°C / Z +20°C	8	15
高温负荷特性 Load Life	在+105°C下,对电容器施加含额定纹波电流的额定工作电压2000小时,经恢复后: After 2000 hours application of WV at +105°C, the capacitors shall meet the following limits.		
	电容量变化 Capacitance Change	≤初始值的±20% ≤±20% of initial value	
	损耗角正切值 Dissipation Factor	≤2倍规定值 ≤200% of initial specified value	
	漏电流 Leakage Current	≤规定值 ≤initial specified value	
高温贮存特性 Shelf Life	电容器在+105°C下,存放1000小时,经恢复后: At +105°C no voltage applied after 1000 hours, the capacitors shall meet the following limits.		
	电容量变化 Capacitance Change	≤初始值的±20% ≤±20% of initial value	
	损耗角正切值 Dissipation Factor	≤2倍规定值 ≤200% of initial specified value	
	漏电流 Leakage Current	≤2倍规定值 ≤200% of initial specified value	

体积和最大纹波电流 CASE SIZE & MAX RIPPLE CURRENT

Size φD×L (mm), Ripple Current (A r.m.s./+105°C, 120 Hz)

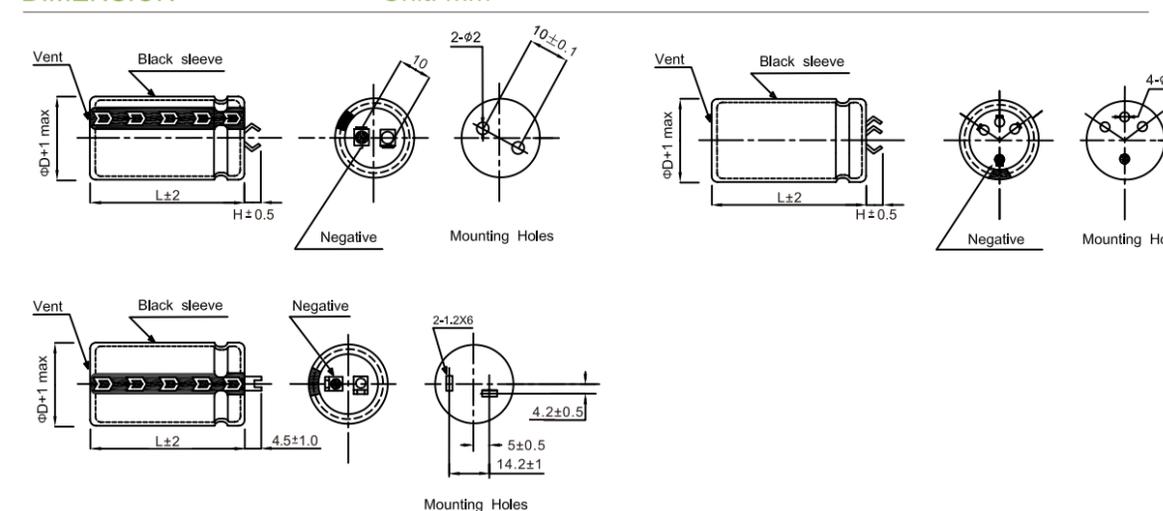
μF	WV	400		μF	WV	450		μF	WV	500	
	ITEM	D×L	R.C.		ITEM	D×L	R.C.		ITEM	D×L	R.C.
270		25×45	1.22	270		30×40	1.28	270		30×50	1.17
		30×35	1.22			35×35	1.28			35×40	1.27
		35×30	1.22			30×50	1.45			35×45	1.36
330		25×50	1.44	330		35×40	1.45	390		35×50	1.54
		30×40	1.44			35×40	1.50			35×58	1.80
		35×30	1.44			35×50	1.74			35×60	1.85
390		30×45	1.60	560		35×50	1.85	680		35×70	2.05
		35×35	1.60			35×50	2.00				
470		30×50	1.90	680		35×60	2.00				
		35×40	1.90			35×70	2.80				
560		35×45	2.12								
680		35×50	2.21								
820		35×58	2.46								

外型图

DIMENSION

单位

Unit: mm



关于上述以外的端子形状及长度请咨询我们
Please consult us for any terminal shape or length besides the above mentioned.

纹波电流修正系数 MULTIPLIER FOR RIPPLE CURRENT

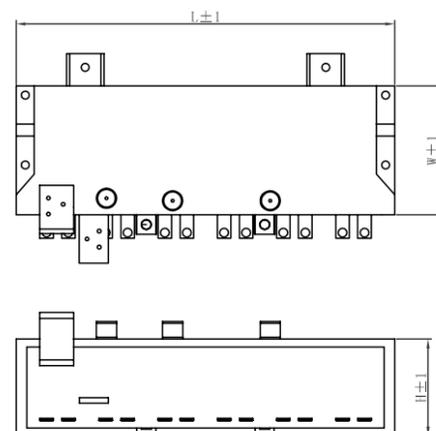
频率系数 Frequency coefficient :

频率/Frequency (Hz)	50	60	120	1K	10K	50K~
系数 Coefficient	200~250V	0.81	0.85	1.00	1.32	1.45
	400~450V	0.77	0.82	1.00	1.30	1.41

汽车电容 Automobile Capacitor

DCH SERIES

外型图 DIMENSION Unit: mm



特点 Features

- 适用于工业变频、电动汽车和混动汽车等高性能直流滤波、母线支撑应用中;
Applied to High performance DC filter applications(Industrial frequency and EV、HEV);
- 损耗小, 绝缘电阻高;
Low Dissipation factor, high insulation resistance;
- 自愈性能良好;
Good self-healing capability;
- 等效串联电阻小, 耐大纹波;
Low ESR, high current handling capabilities;
- 性能稳定, 可靠性高;
Stable performance and high reliability;
- 产品执行标准IEC61071、GB/T 17702;
Product performance follows standard IEC61071、GB/T 17702;

技术要求 Technical Specifications

引用标准 Executing Standard	符合IEC61071、GB/T 17702标准	
气候类别 Climatic Category	40 /85/ 21, 40 /105/ 56	
额定电压 Un Rated Voltage	450VDC~900VDC	
容量范围 Capacitance Range	500 μ F ~ 2500 μ F	
容量偏差 Capacitance Tolerance	$\pm 5\%$ 、 $\pm 10\%$	
耐电压 Test Voltage	端子间 Between Terminals	1.5Un, 10s
	端子与外壳间 Between Terminals and Case	3000VAC, 10s
损耗角正切 Dissipation Factor	tg δ \leq 0.0005 (100Hz)	
绝缘电阻 Insulation Resistance(I.R.)	$\tau \geq 5000S$ (20 $^{\circ}C$, 100V, 60s) (注: $\tau = RjC$)	
过电压 Over Voltage	1.1Un(30% of on-load-dur.)	
最高使用海拔 MAX. Altitude	2000m	

外形尺寸 (mm) Outline size

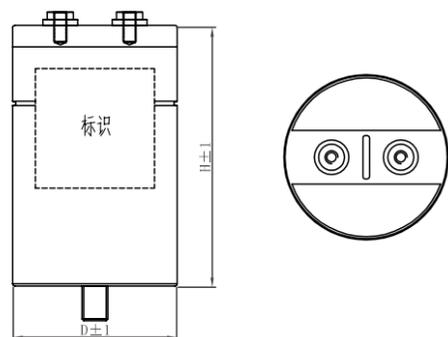
U(VDC)	C(μ F)	ESR(m Ω)	l(max)	L \pm 1 (mm)	W \pm 1 (mm)	H \pm 1 (mm)
450	550	0.8	130	230	50	62
	600	0.8	130	170	65	72
	800	0.4	200	230	65	72
	900	0.4	250	225	105	47
500	1200	0.4	300	225	105	57
	500	1	130	230	55	72
	600	0.8	200	230	65	72
800	750	0.4	250	230	55	102
	500	1.5	130	225	105	47
	600	1	200	225	105	52
900	700	0.8	250	225	105	47
	500	1.5	130	225	105	57
	700	1	200	225	115	67
	1500	0.4	300	360	90	130
	1800	0.4	300	328	136	140

直流母线支撑电容

DC-Link capacitance

DCL SERIES

外型图 DIMENSION 单位:毫米 UNIT:mm



特点 FEATURES

- 适用于工业变频、高端电源、太阳能逆变器等高性能直流滤波、母线支撑应用中，可替代电解电容器；
Applied to DC-Link circuits, can replace electrolytic capacitor;
- 损耗小，绝缘电阻高；
Low Dissipation factor, high insulation resistance;
- 自愈性能良好；
Good self-healing capability;
- 等效串联电阻小，耐大纹波；
Low ESR, high current handling capabilities;
- 性能稳定，可靠性高；
Stable performance and high reliability;
- 产品执行标准 IEC61071、GB/T 17702；
Product performance follows standard IEC61071、GB/T 17702;

技术要求 TECHNICAL SPECIFICATIONS

引用标准 Executing Standard	符合IEC61071、GB/T 17702标准	
气候类别 Climatic Category	40 /85/ 21, 40 /105/ 56	
额定电压 Un Rated Voltage	700VDC ~1500VDC	
容量范围 Capacitance Range	90μF ~ 3000μF	
容量偏差 Capacitance Tolerance	±5%、±10%	
耐电压 Test Voltage	端子间 Between Terminals	1.5Un, 10s
	端子与外壳间 Between Terminals and Case	3000VAC, 10s
损耗角正切 Dissipation Factor	tg δ ≤ 0.0005 (100Hz)	
绝缘电阻T-T Insulation Resistance(I.R.)	τ ≥ 5000S (20℃, 100V, 60s) (注: τ =RjC)	
绝缘电阻T-C Insulation Resistance(I.R.)	R ≥ 100 MΩ (20℃, 100V, 60s)	
过电压 Over Voltage	1.1Un(30% of on-load-dur.)	
最高使用海拔 MAX. Altitude	2000m	

外形尺寸 (mm) OUTLINE SIZE

U(VDC)	C(μF)	ESR(mΩ)	L(nH)	I(max60℃)	D±1 (mm)	H±1 (mm)
600	480	1.5	45	55	76	95
	820	1.5	62	45	76	155
	1100	1.4	40	64	86	155
	2000	1.1	55	67	116	140
	3000	0.8	50	100	116	230

U(VDC)	C(μF)	ESR(mΩ)	L(nH)	I(max60℃)	D±1 (mm)	H±1 (mm)
700	360	1.6	45	53	76	95
	820	1.4	40	64	86	155
	1000	1.7	55	55	86	190
	1800	1	45	85	116	175
	2500	0.8	50	100	116	230
800	290	2	55	47	76	95
	350	2.5	60	45	76	120
	580	2.2	65	49	86	140
	650	1.5	50	61	86	155
	750	1.3	55	60	86	175
	1200	1.2	65	65	116	140
	1800	0.8	50	100	116	230
	3200	0.8	65	100	136	295
900	290	2	55	47	76	95
	400	2.6	60	45	76	120
	580	2.2	65	49	86	140
	650	1.5	50	61	86	155
	750	1.3	55	60	86	175
	1200	1.2	65	65	116	140
	1800	0.8	50	100	116	230
	3200	0.8	65	100	136	295
1100	180	2.3	55	44	76	95
	250	3	60	42	76	120
	360	3.5	55	54	76	175
	420	1.7	50	57	86	155
	620	1.4	60	59	116	120
	750	1.6	65	56	116	140
	920	1.1	60	81	116	175
	1200	0.9	50	100	116	230
1200	140	2.7	55	40	76	95
	240	2	50	53	76	155
	320	2.5	65	46	86	135
	470	1.7	50	57	86	225
	620	1	50	83	116	155
	720	1.2	60	78	116	175
	950	0.9	50	100	116	230
	120	2.9	55	39	76	95
1300	210	2.1	50	52	76	155
	270	3.3	65	40	86	140
	430	1.6	60	55	116	120
	520	1.5	60	65	116	252
	630	1.2	60	78	116	175
	820	0.9	50	100	116	230
	90	3.3	55	36	76	95
	150	2.4	50	49	76	155
1500	200	3	65	42	86	135
	320	1.9	60	51	116	120
	470	1.3	60	66	116	175
	600	1	50	75	116	230