

代码编制规则 Part Number

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
F	C	C	2	K	D	G	1	4	7	K	J	0	6	5	8	4	0
电容器类型 Capacitor Type	产品外形 Product Shape	额定电压代码 Rated Voltage Code (DC)	系列代码 Series Code		容量代码 Capacitance Code	容量偏差 Capacitance Tolerance	直径 Diameter	高度 Height	引出端子螺母 terminals type	引出端子 间距 Terminals Pitch	底部固定孔 Bottom Stud Hole						
FC=薄膜电容器 FC=Film Capacitor	圆柱型=C Column=C	600=2S	CBB136G=DG		55=556	±5%=J	84.5=J	51=051	Female M5*7=8	45=4	有=0 With=0 无=1 Without=1						
		800=2K			85=856	±10%=K	85=K	65=065	Female M6*10=0								
		1000=3A			90=906	Special=S		76=076	Female M8*10=2								
					140=147			115=115	Female M10*10=4								
					220=227				Male M6*20=1								
								Male M8*20=3									
									Male M10*20=5								
									Female M8*12=6								
									Female M10*12=B								
									Male M8*15=A								
									Male M8*17=7								
									Male M8*12=9								

Features

- Used in DC-Link circuits, can replace electrolytic capacitor
- PP film design, good temperature characteristics
- Stable capacity
- Low ESR, high ripple current handing capabilities
- Self-healing property
- Customized configurations
- Plastic case, filled with fire-retardant resin

Applications

- Transportation: EV or HEV
- Welders, Elevators, Motor Driver systems

特点

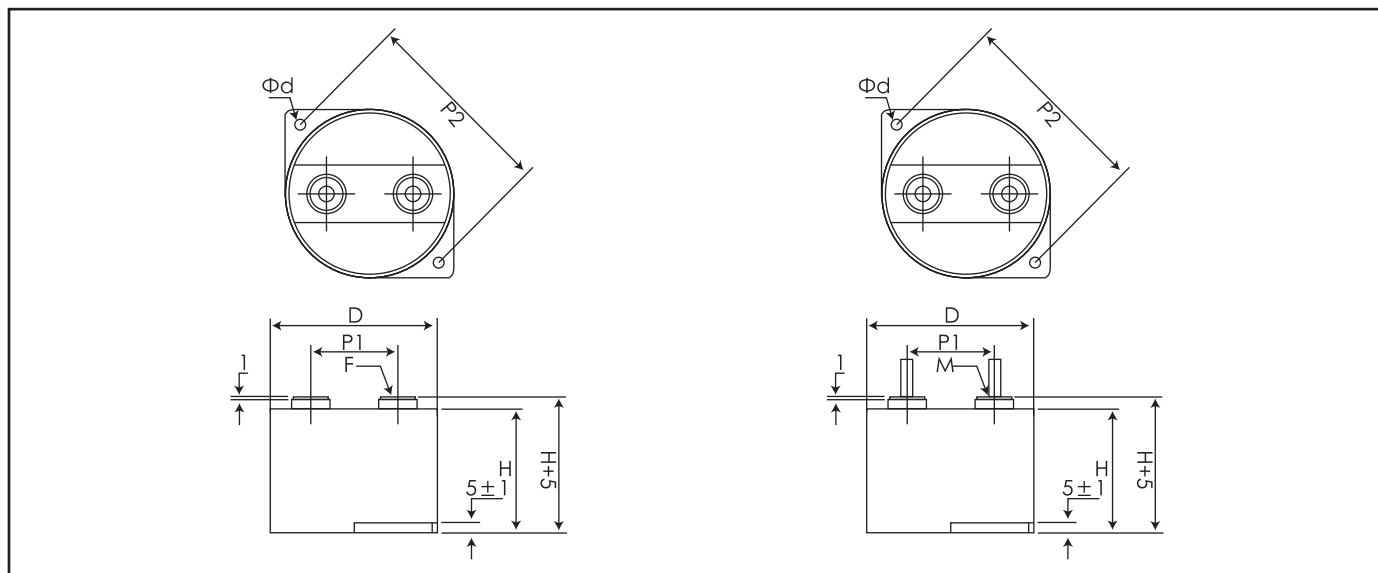
- 直流滤波用，可替代电解电容器
- 采用聚丙烯薄膜，温度特性好
- 容值稳定，变化率小
- 等效串联电阻小，能承受较大的纹波电流
- 有自愈性
- 客户订制
- 塑壳，阻燃树脂灌封

应用场合

- 交通工具，如：电动车和混合动力车
- 焊接设备，电梯，电机驱动

外形图 Dimensions

Unit: mm



ΦD±1	H±1	P1±0.5	P2±0.5	Output		Φd±0.5
				F	M	
85	65	45	101	M6*10	M8*20	5.5
85	51	45	101	M6*10	M8*20	5.5

标识 Marking

	1
CBB136G	2
220μF ± 10%	3
U _R = 600VDC SH	4
U _{TC} = 3000V 50/60Hz	5
-40~+105°C IEC61071	6
Discharge before handling	7
J05F13104	8

NO.	项目 Item
1	商标 Brand
2	产品系列 Products series
3	容量和偏差 Capacitance and Tolerance
4	额定电压和自愈性 Rated voltage and Self-healing property
5	端子与铝壳电压U _{TC} Voltage Between Terminals and Case
6	温度范围 Temperature Range 引用标准 Reference Standard
7	安全警示 Safety Warning
8	年度标记 Year Code 二维码 QR Code

性能特性 Specifications

项目 Item	特性 Characteristics		
引用标准 Reference Standard	GB/T 17702 (IEC 61071)		
气候类别 Climatic Category	40/105/56		
工作温度范围 Operating Temperature Range	-40~+105°C ($\theta_{\text{hotspot}} \leq 105^\circ\text{C}$) $\theta_{\text{hotspot}} = 85^\circ\text{C} \sim 105^\circ\text{C}$: decreasing factor 1.35% per °C for $U_R(\text{dc})$		
存储温度范围 Storage Temperature Range	-40~+105°C		
额定电压 U_R Rated Voltage	600~1000V _{DC}		
电容范围 Capacitance Range	55~220 μF		
电容偏差 Capacitance Tolerance	$\pm 5\%$ (J), $\pm 10\%$ (K)		
端子与端子电压 U_{TT} Voltage Between Terminals	$1.5 \times U_R V_{DC}$, 10s (20 °C)		
端子与铝壳电压 U_{TC} Voltage Between Terminals and Case	4000 V _{AC} , 10 s (20 °C, 50 Hz)		
介质损耗角正切 Dielectric Dissipation Factor	$\leq 2 \times 10^{-4}$		
绝缘电阻 Insulation Resistance	$\geq 5000 \text{M}\Omega \cdot \mu\text{F}$ (20°C, 100V _{DC} , 1min)		
过电压 Over Voltage	1.1 U_R (30% of on-load-duration)		
	1.15 U_R (30 min/day)		
	1.2 U_R (5 min/day)		
	1.3 U_R (1 min/day)		
	1.5 U_R (30 ms every time, 100ms/day)		
最大电极扭矩 Max Torque of terminals	M5:4.5Nm	M6 (Female):5 Nm	M8 (Male):8 Nm
最大安装扭矩 Max Torque of installation	3.5Nm		
预期寿命 Life Expectancy	100000 hours ($U_R, \theta_{\text{hotspot}} = 70^\circ\text{C}$)		
失效率 Failure Rate	50 FIT		

规格标准 Standard Ratings

U_R (V)	C_R (μF)	P/N	I_{max} (A)		R_{th} (K/W)	\hat{I} (A)	R_s (m Ω)	L_s (nH)	D (mm)	H (mm)
			60°C	85°C						
600	140	FCC2SDG147*K051040	85	51	5.3	2800	1.3	20	85	51
	220	FCC2SDG227**065040	79	48	5.0	2860	1.5	30	84.5/85	65
800	90	FCC2KDG906*K051040	76	47	5.3	2375	1.3	20	85	51
	140	FCC2KDG147**065040	73	45	5.0	2100	1.5	30	84.5/85	65
1000	55	FCC3ADG556*K051040	71	43	5.3	1760	1.5	20	85	51
	85	FCC3ADG856**065040	67	41	5.0	1785	1.7	30	84.5/85	65

* R_{th} 为产品热点到环境的热阻 (自然冷却)

The thermal Resistance from hotspot to ambient environment.(Natural cooling)

可根据客户要求定制。Customer products are available on request.

预期寿命曲线 Expected lifetime curve

