



# APPROVE SHEET

TO: 直流支撑电容 18uF ± 5% 600V

Main Materials		Mark & Outline
ITEMS	NAME	
Film	Metalized Polypropylene film	
Electrode	Tinned copper wire	
Epoxy	Flame-retardant Epoxy-White	
Case	Flame-retardant plastic case-grey	

Part No.	TYPE	Dimensions (mm)							NOTE
		W	H	T	P	P1	L	ΦD	
FC6021	MKP-FC 18μF J 600V.DC	32	37	22	27.5	12.7	6	0.8	

CUSTOMER CONFIRM			CSD OFFER		
APPROVED BY	CHECKED BY	STAMP	APPROVED BY	STAMP	MADE BY
					闫佳佳
DATE			DATE	2020-08-26	

SHENZHEN CRC NEW ENERGY CO., LTD

6th and 7th Floor R&D Building, Yanchuan North Industrial Park,

Songgang Town, Baoan District, Shenzhen, China

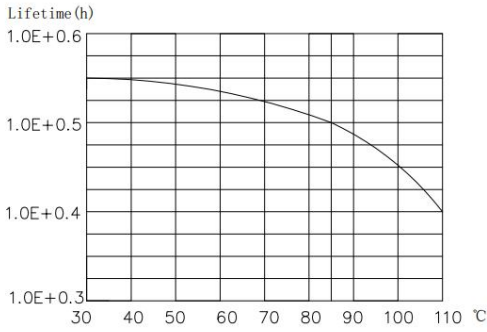
TEL: +86 - 0755 - 29948883 / 29948998 FAX: +86 - 0755 - 29948906 <http://www.csdcap.com>

# Technical data

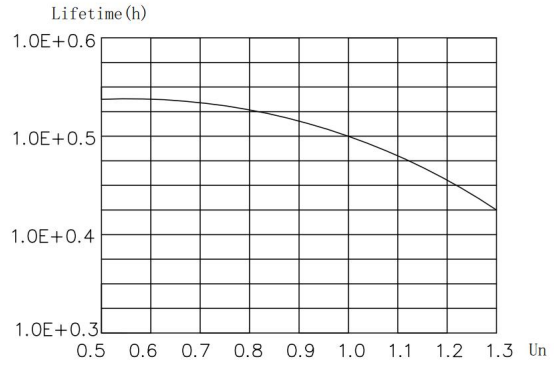
Rated capacitance	$C_N$	$18\mu\text{F} \pm 5\%$					
Rated voltage	$U_N$	600V.DC					
Non-recurrent surge voltage	$U_s$	1000V.DC					
Maximum current	$I_{rms}$	14A					
Series resistance	$R_s$	$\leq 6.1\text{m}\Omega$					
Tangent of the loss	$\tan \delta$	$\leq 0.0015$ (100Hz)					
Insulation Resistance	$C \times R_{is}$	$\geq 5000\text{S}$					
Self inductance	$L_e$	$\leq 30\text{nH}$					
Lowest operating temperature	$\Theta_{min}$	$-40^\circ\text{C}$					
Maximum operating temperature	$\Theta_{max}$	$105^\circ\text{C}$					
Operating humidity	RH	0~95%					
Storage temperature	$\Theta_{storage}$	$-40^\circ\text{C} \sim 105^\circ\text{C}$					
Service life		100000h					
Failure quota		$< 100\text{Fit}$					
<b>Test data</b>							
Voltage test between terminals	$V_{tt}$	900V.DC/10S					
	过电压	<table border="1"> <tbody> <tr> <td>1.1 <math>U_N</math> (30% of on-load-dur.)</td> </tr> <tr> <td>1.15 <math>U_N</math> (30min/day)</td> </tr> <tr> <td>1.2 <math>U_N</math> (5min/day)</td> </tr> <tr> <td>1.3 <math>U_N</math> (1min/day)</td> </tr> <tr> <td>1.5 <math>U_N</math> (30ms every time, 1 000times during the life of the capacitor)</td> </tr> </tbody> </table>	1.1 $U_N$ (30% of on-load-dur.)	1.15 $U_N$ (30min/day)	1.2 $U_N$ (5min/day)	1.3 $U_N$ (1min/day)	1.5 $U_N$ (30ms every time, 1 000times during the life of the capacitor)
1.1 $U_N$ (30% of on-load-dur.)							
1.15 $U_N$ (30min/day)							
1.2 $U_N$ (5min/day)							
1.3 $U_N$ (1min/day)							
1.5 $U_N$ (30ms every time, 1 000times during the life of the capacitor)							
Operating altitude		2000m (max)					
Terminal tightening torque		—					
Bottom tightening torque		—					
Weight		—					

# Electrical Characteristics of Film Capacitor

## 1. Lifetime Expectancy

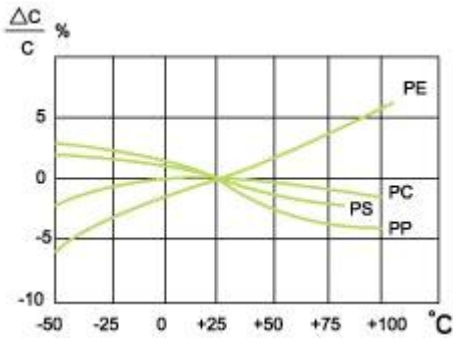


Life time Expectancy of charge temperature

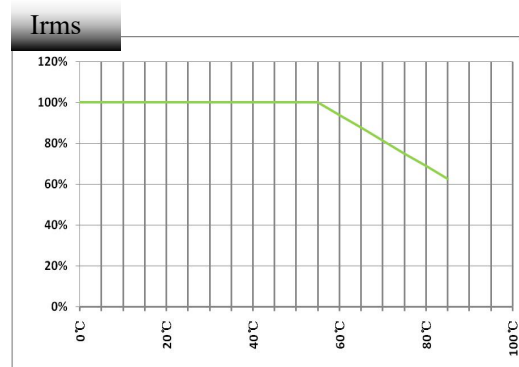


Life time Expectancy of charge voltage

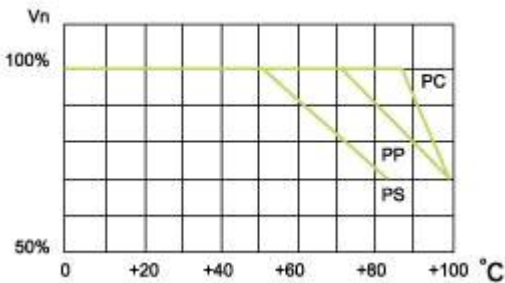
## 2. Temperature Characteristics



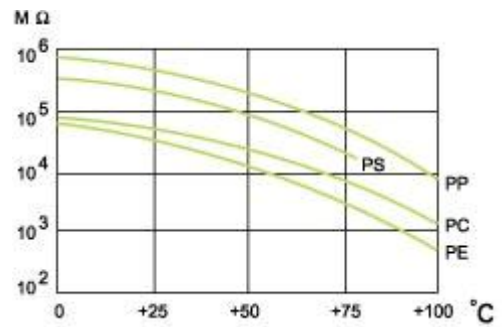
Capacitance vs. Temperature



Operation current vs. Temperature

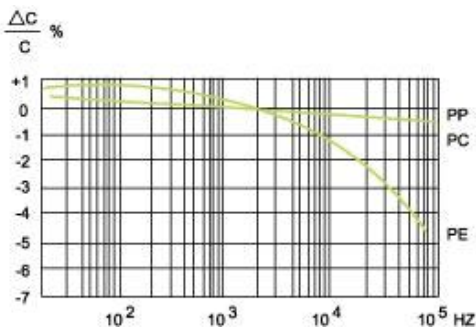


Operation voltage vs. Temperature

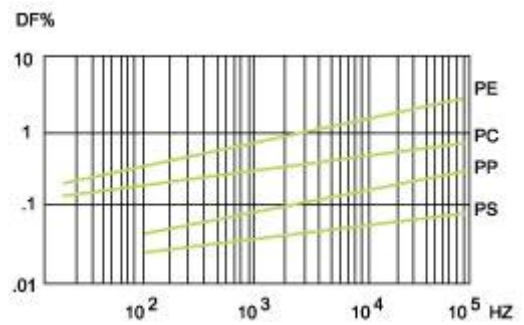


(CR value) IR vs. Temperature

## 3. Frequency Characteristics



Capacitance vs. Frequency



Dissipation Factor vs. Frequency