



CRC NEW ENERGY

# APPROVAL SHEET

TO: 直流支撑电容 7uF ± 10% 800V

Main Materials		MARKING & OUTLINE DRAWING	
<b>Construction</b>	<b>Materials</b>		
Dielectric	Metallized Polypropylene Film		
Terminal	Tinned copper wire/plate		
Filling	Flame-retardant epoxy resin , grey		
Case	Flame-retardant plastic case, grey		

Part No.	TYPE	Dimensions (mm)							NOTE
		W	H	T	P	L		ΦD	
FC5029	MKP-FC 7μF K 800V.DC	32	30	15	27.5	6		0.8	

CUSTOMER CONFIRMATION			CRC OFFER		
STAMP	APPROVED BY	CHECKED BY	STAMP	APPROVED BY	PREPARED BY
					田星月
DATE			DATE	2018-08-21	

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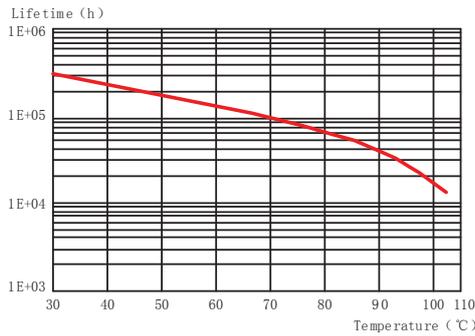
CRC-BDE-09

## Technical Data

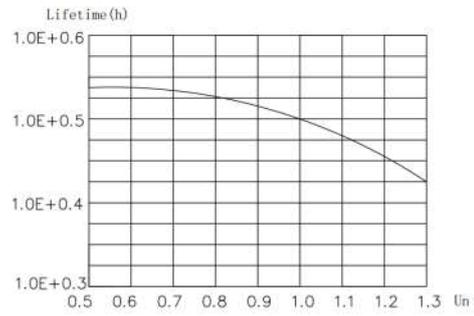
Items	Symbols	Values
Rated capacitance	$C_N$	$7.0\mu\text{F} \pm 10\%$
Rated voltage	$U_N$	800V.DC
Non-recurrent surge voltage	$U_s$	1350V.DC
Maximum current	$I_{rms}$	5A
Maximum peak current	$\hat{I}$	420A
Maximum surge current	$I_S$	1260A
Series resistance	$R_S$	$\leq 9\text{m}\Omega$
Tangent of the loss	$\tan \delta$	$\leq 0.0015$ (1kHz)
Insulation Resistance	$C \times R_{is}$	$\geq 5000\text{s}$
Self inductance	$L_e$	$\leq 28\text{nH}$
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 range	$\Theta_{storage}$	$-40^\circ\text{C} \sim 105^\circ\text{C}$
Service life		100000h
At $\Theta_{hotspot}$		$\leq 85^\circ\text{C}$
Failure quota		$< 100\text{Fit}$
<b>Test data</b>		
Voltage test between terminals	$V_{t-t}$	1200V.DC/10s
A.C. voltage test between terminals and case	$V_{t-c}$	—
Operating altitude		2000m (max)
Terminal tightening torque		—
Bottom tightening torque		—
Weight		—

# Electrical Characteristics of Film Capacitor

## 1. Lifetime Expectancy

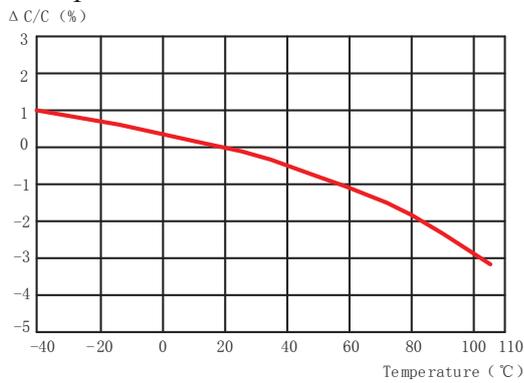


Lifetime expectancy vs. Charging temperature

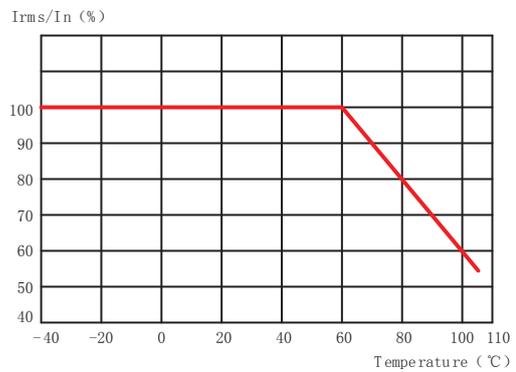


Lifetime expectancy vs. Charging voltage

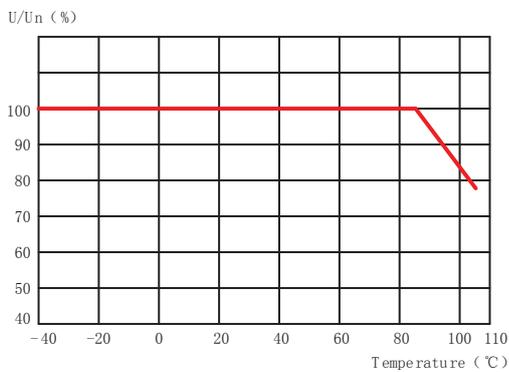
## 2. Temperature Characteristics



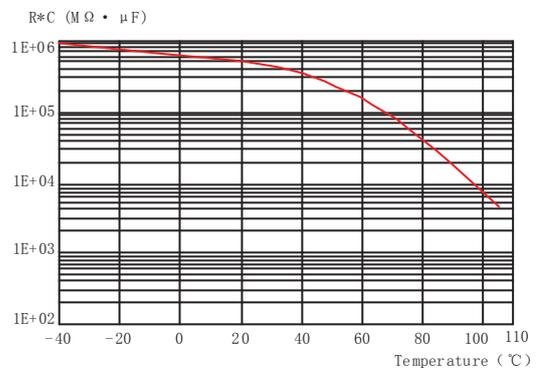
Capacitance change rate vs. Temperature



Operating current vs. Temperature

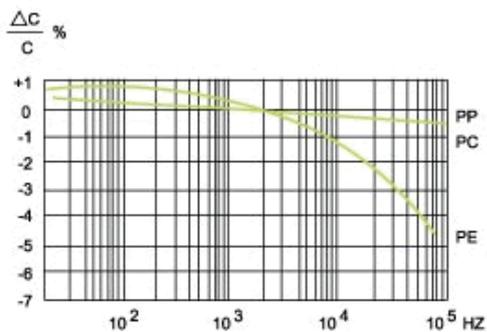


Operating voltage vs. Temperature

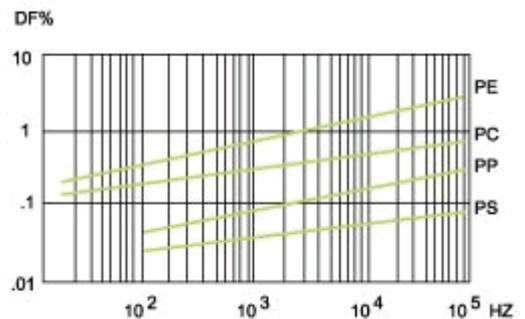


Insulation Resistance vs. Temperature

## 3. Frequency Characteristics



Capacitance change rate vs. Frequency



Dissipation factor vs. Frequency