

规格书

SPECIFICATION

客户名称:

Customer: _____

客户料号:

Model No: **Super Capacitors 2.7V3000F**

(贵公司承认签印时, 敬请填上或核对贵公司名称及产品料号)

(Please fill in or check your model No. before approval)

本公司机种别:

YGK product: super capacitors

本公司型号: SC2R7V302F1865

YGK Model No: SC2R7V302F1865

客户承认(CUSTOMER) Approved by	供应商 (SUPPLIER) Handled by
	King Liu

请将承认书承认后返却一份、传真至敝司。

Please acknowledge after recognition of the book is a return, or fax or mail to our company.

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Super Capacitors

1 Scope

- 1-1. This specification describes the performance of the following super capacitors and pack.
- 1-2. Model : 2.7V3000F

2 Parameter

2-1.Specification data

Descriptions	Unit	Specification data	Conditions
Rate voltage	v	2.7	
Rate capacity	F	3000	Standard Charge/Discharge
Capacity Tolerance	/	±20%	Standard Charge/Discharge
Maximal recharging voltage	V	2.85	
Maximal charging current	mA	3000	
Discharge termination voltage	v	1.00	
Maximal discharging current	mA	6000	Pulse Current discharge 30A
Using temperature scope	°C	-30~70	
Storage environment temperature	°C	-20~45	
Storage environment humidity	%	≤ 85%	
About Weight	g	39.00	

2-2. PICTURE



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3 Performance

Unless otherwise stated, tests should be done within one month of delivery under the following conditions:

Ambient Temperature $T_a: 25 \pm 3^\circ\text{C}$

Relative Humidity: $65 \pm 20\% \text{ RH}$

Notes: standard Charge/Discharge condition

Charge method: voltage limit 2.85V, 0.10mA cut-off current.

Charge current: 200 mA, recommended

Discharge method: 400mA, Cut-off voltage: 1.00V

Test	Unit	Specification	conditions
Rate capacity	F	3000	Standard Charge/Discharge
Rate voltage	v	2.7	Upon 50% charge
Internal impedance(Ri)	$m\Omega$	≤ 20	Upon fully charge(1kHz)
Leakage current (mA/72hrs)	mA	0.06	Charging current of Charge 72 hours later
High temperature characteristics	F	Discharge capacity more than the 85% of original	Using standard Charge/Discharge condition to measure capacitor's original capacity, after Standard Charge, placed 2hours upon $55 \pm 2^\circ\text{C}$, at this temperature, discharge to 1.00v in 1000mA
Low temperature characteristics	F	Discharge capacity more than the 70% of original	Using standard Charge/Discharge condition to measure capacitor's original capacity, after Standard Charge, placed 16-24hours upon $-20 \pm 2^\circ\text{C}$, at this temperature, discharge to 1.00v in 200mA

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The ratio of Charged retention		The residual capacity more than the 92% of original	Using standard Charge/Discharge condition to measure capacitor's original capacity, after Standard Charge, placed 28 days upon $25\pm 2^{\circ}\text{C}$, at this temperature, discharge to 1.00v in 100mA to test the residual capacity
Cycles test	cycle	≥ 100000	standard Charge/Discharge condition, Cycles test, until Two successive discharge capacity less than 75% of original, the cycles life cut up
Nail		without exploding and Catching fire.	Using the diameter of 3mm of stainless steel needle Pierce capacitor center, Through the external force penetrate, observing one hour
short – circuit		without exploding and Catching fire	Demolish capacitor outside protecting circuits, using the wire connect the capacitor's positive and negative, observing the change of temperature, the finished until the temperature down to 10°C less than the peak
thermal shock		without exploding and Catching fire	Heating the fully capacitor in ovens of strong convection, the temperature from $5\pm 2^{\circ}\text{C}$ per minute to 130 ± 2 , at this temperature Constant temperature 10 minutes
Heavy weight shock		without exploding and Catching fire	Placing the fully capacitor in flat surface, Using the 10 kilograms heavy hammer from 1 meter fell on the capacitor arc surface

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Hot and humid		appearance without a apparent deformation, corrosion or smoke ,discharge capacity more than 70%	Placing the fully capacitor in the box which temperature is $40\pm 2^{\circ}\text{C}$ and humidity is 90-95% for 48 hours, taking out it and placing at the normal temperature for 2 hours, observing its appearance, after that discharge to termination voltage in 1000mA
vibration		without exploding , Catching fire and leakage	At the normal temperature,placing the fully capacitor In vibration platform, vibrating it for 30 minutes as the following demand: Amplitude:1.6(p-p) frequency:10-55Hz Direction:X,Y,Z
dropped		without exploding , Catching fire and leakage	Drop the fully capacitor from 1 meter high to Hard wooden boards , Each direction freedom fall one each
Over charging		without exploding and Catching fire	After standard charge, charging 6 hours until 4.8v in 2.0A and 5A current, observe the changes of capacitor appearance

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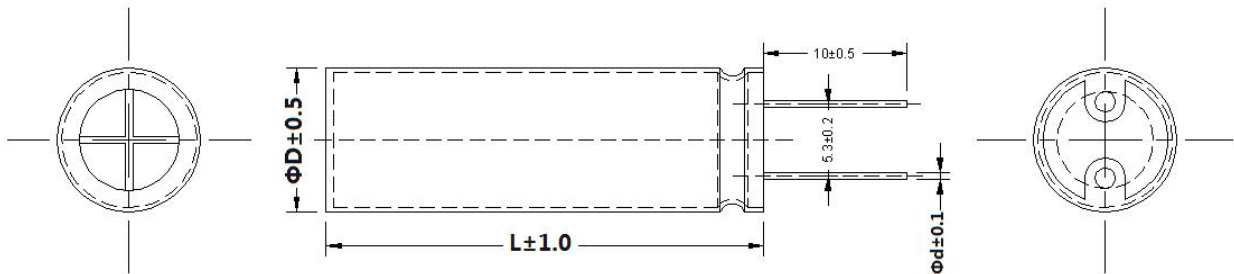
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4 Mechanical Dimensions

4.1 Please refer to the drawing of SC2R7V302



No.	case size $\Phi D * L * \Phi d$ (mm)	
1	ΦD (mm)	18.0
2	L(mm)	65.0
3	Φd (mm)	0.80/1.00

4.2 Part list:

No.	Name	Description	Quantity
1	capacitor cell	2.7V3000F- $\emptyset 18 * 65$ mm	1 SET

5 capacitor Pack lead soldering process requirements

capacitors should be avoided the positive and negative electrodes short circuit during the welding process ;Temperature soldering station,should set during 300 ~ 320 °C , welding time \leq 3 seconds.

6 Safety Certification

Product has passed the CE and ROHS authentication, please refer to attachment

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7 Appearance

super capacitors don't allow the existence rift, scar, breakage, rust, discoloration, leakage and deformation.

8 Warranty period

GONGHE provide a one-year quality assurance.

9 Caution

- ◆ Capacitors should be charged prior to use.
- ◆ For charging methods referred to our technical handbook
- ◆ Use the correct charger for super capacitors
- ◆ Do not reverse charge capacitors.
- ◆ Do not subject capacitors to adverse condition such as extreme temperature, deep cycling and excessive over charger/over discharge.
- ◆ Don't attempt to take capacitors apart or subject them to pressure or impact. Heat may be generated or catch fire.
- ◆ Far from the children, If the accident please contact the doctor
- ◆ Forbid the short-circuit capacitor, Otherwise the capacitor will permanently damaged
- ◆ Forbid burn and damage the capacitor, otherwise the capacitor may be catch fire.
- ◆ Don't solder directly to cells or capacitors
- ◆ Store capacitors in a cool dry place.
- ◆ If find any noise excessive temperature or leakage from a capacitor, please stop its use.
- ◆ When using new capacitors for the first time or after long term storage, please fully charge the capacitor before use.
- ◆ When not using a capacitor, disconnect it from a capacitor, please stop its use.
- ◆ Don't mix new capacitors in use with semi-used capacitors, over-discharge may occur.
- ◆ When connecting a capacitor pack to a charger, ensure correct polarity.
- ◆ When the capacitor is hot, please do not touch it and handle it until it has cooled down.
- ◆ Don't remove the outer sleeve from a capacitor pack nor cut into its housing.
- ◆ When find capacitor power down during use, please switch off the device to avoid over discharge.
- ◆ After use, if the capacitor is hot, before recharging it, allow it to cool in a well-ventilated place out of direct sunlight.
- ◆ Never put a capacitor into water or seawater.

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