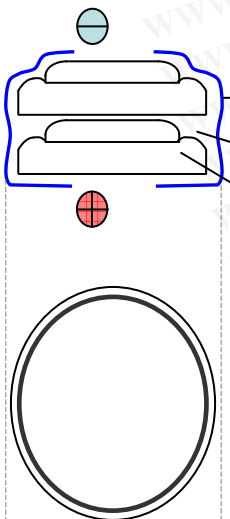


Supercapacitor (Electric Double Layer Capacitor)

- Specifications

■ Series NO. 5R5D12F47

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

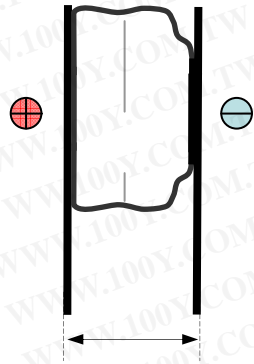
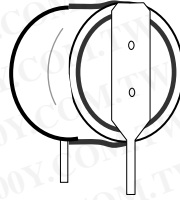
Item		Characteristics
Maximum Operating Voltage		DC 5.5 V
Capacitance (DC discharge)		0.47F
Capacitance Tolerance		± 20%
Operating Temperature Range		-20 °C ~ +70 °C
Cycle Life (1000 cycle charge-discharge)		0% capacitance decreasing
Resistance	DC discharge resistance	≦ 50 Ω
Leakage Current (keep cap. on 5.5V for 1hr)		≦ 0.1 mA
<p>5R5D12F47</p>  <p>The diagram illustrates the internal structure of the 5R5D12F47 supercapacitor. It shows a cross-section of the device with a blue outline representing the PVC heat shrinkable sleeve. Inside, there is a stack of two single cells. A detailed view of a single cell is shown below, highlighting its stainless steel can. The top and bottom terminals are marked with a minus sign (-) and a plus sign (+) respectively.</p> <ul style="list-style-type: none"> PVC heat shrinkable sleeve 2 single cells stack a single cell with stainless steel can 		

Supercapacitor (Electric Double Layer Capacitor)

- Dimensions (EDLC with solder plated pin)

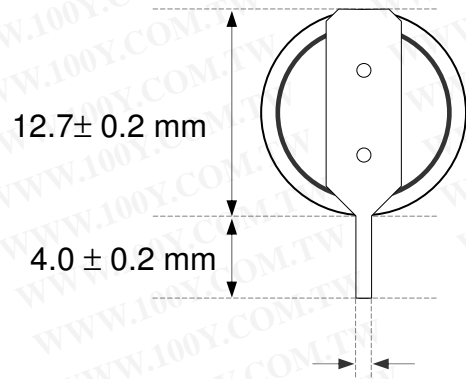
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V - Type



$5.5 \pm 0.5 \text{ mm}$

terminal thickness : 0.15 mm

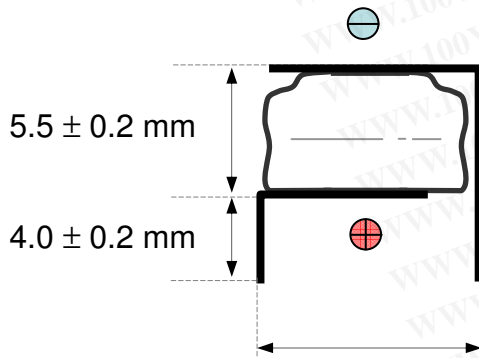


$12.7 \pm 0.2 \text{ mm}$

$4.0 \pm 0.2 \text{ mm}$

$0.8 \pm 0.05 \text{ mm}$

H - Type

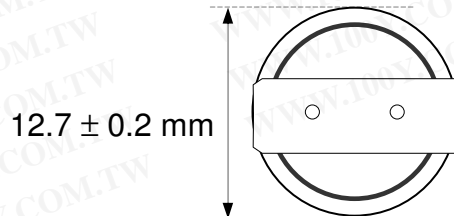


$5.5 \pm 0.2 \text{ mm}$

$4.0 \pm 0.2 \text{ mm}$

$12.9 \text{ mm} \pm 0.2 \text{ mm}$

terminal thickness : 0.15 mm



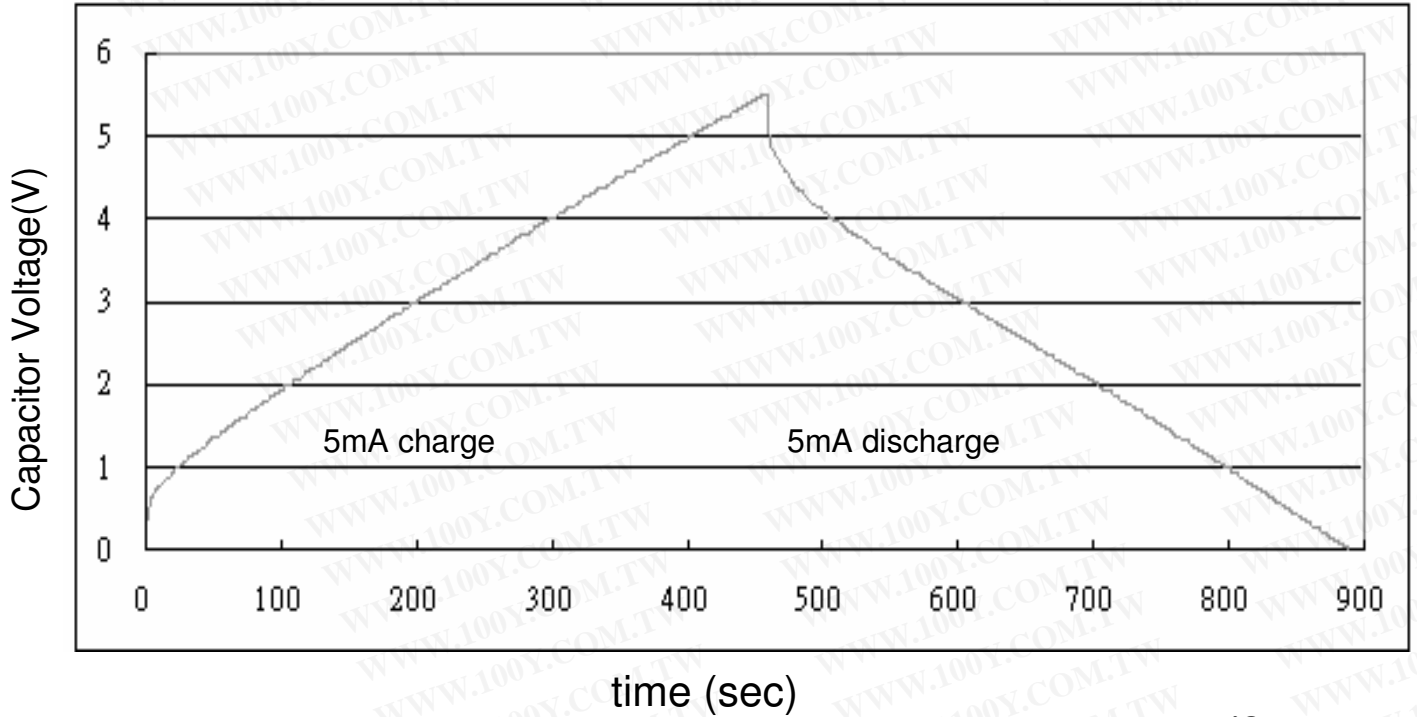
$12.7 \pm 0.2 \text{ mm}$

Supercapacitor (Electric Double Layer Capacitor)

- Test Data

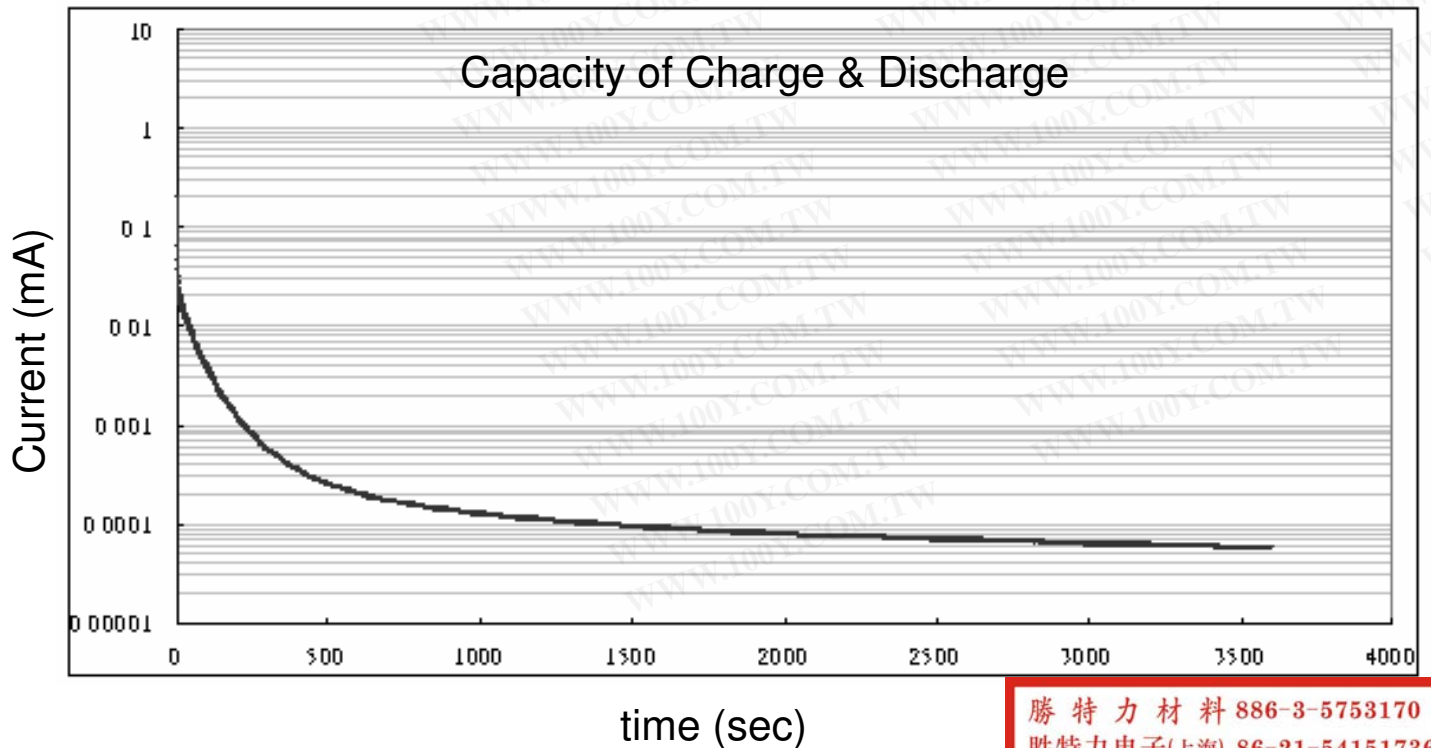
Charge – Discharge Curve

25 °C



Leakage Current Test

25 °C

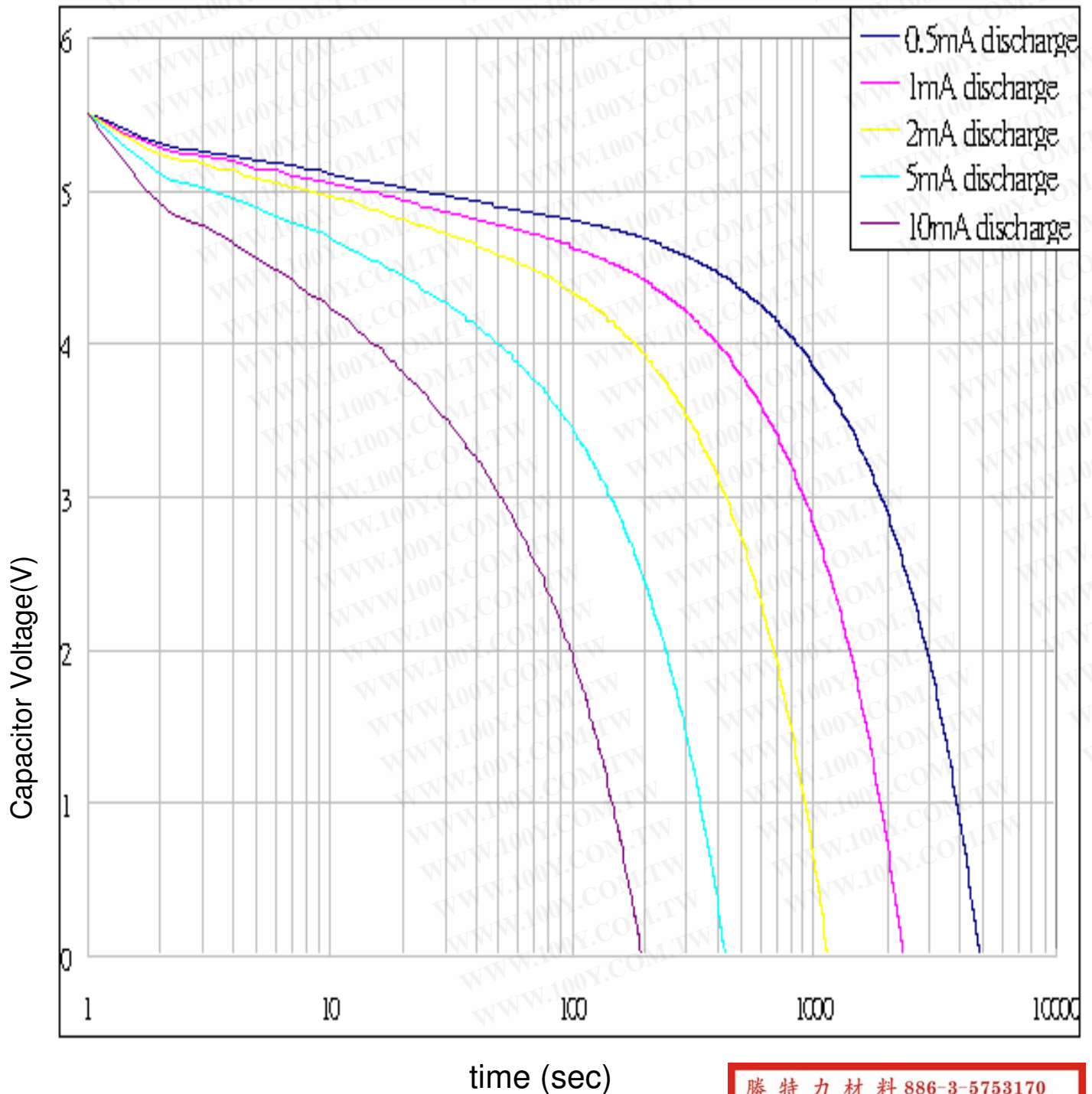


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Supercapacitor (Electric Double Layer Capacitor) -Test Result Test Condition: 25°C 1atm

Discharge Test Within Various Current

25 °C

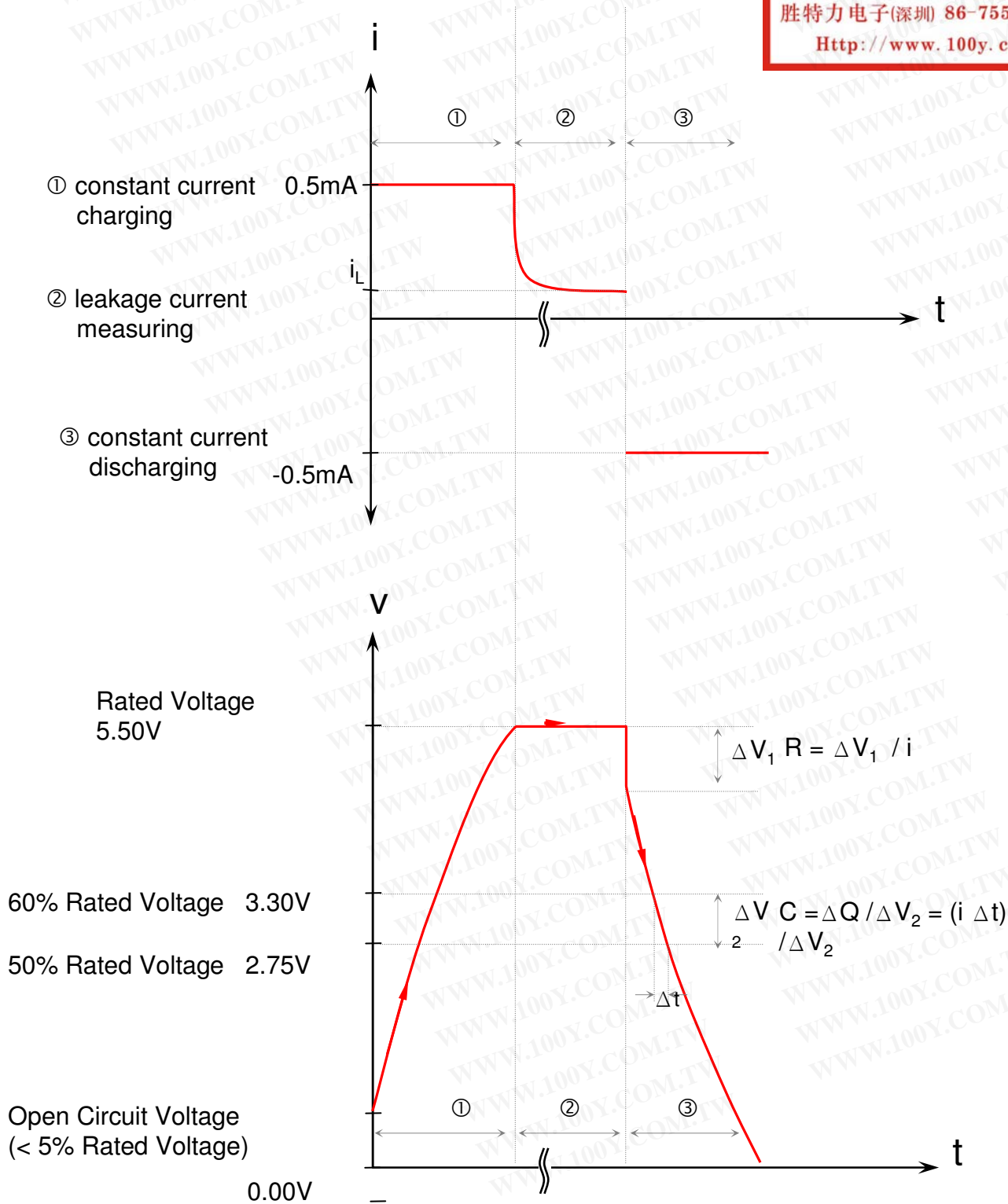


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Supercapacitor (Electric Double Layer Capacitor)

-Test Method

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Supercapacitor (Electric Double Layer Capacitor) – Notifications and Recommendation

Description

Hiteck power SuperCapacitor 5R5D12F47 is a DC electric energy storage device. The function of electric energy storage is by means of electric double layer capacitance that happens on porosity carbon electrode within electrolyte. It suits for memory backup and other power support used.

Safety



The supercapacitor should be distant from fire, high temperature or high humidity environment.

Do not compress, crush, throw down or heat the supercapacitor. In addition, do not take the supercapacitor apart.

Do not throw the supercapacitor in any liquid

Precautions in use

Do not apply voltage higher than rated voltage. Over the rated voltage will cause the supercapacitor to explode.

Since the supercapacitor is polarized; do not apply a reverse voltage. Reversing charge the supercapacitor will decrease the capacitance and cause ill effects in circuit.

The supercapacitor is not suited to AC circuit. It can not perform rectification and filter function.

Reduce the time during soldering operation. The recommend soldering conditions is: temperature below 250°C , the longest operating time should be less than 5 sec.

Do not bend the lead terminal too frequently to split.

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