

XCell CR-P2 1500mAh 6V

1. Cell Specification

Item	Description	Remark
Nominal Capacity	1500mAh	Discharge with 1mA to 4.0V at 25±5°C
Minimum Capacity	1450mAh	
Nominal Voltage	6.0V	/
Delivery voltage	6.10~6.80V	Open circuit voltage
Cell Internal resistance	≤2.0Ω	Ac impedance
Weight	About 38 g	/
Maximum discharge current	1500mA	Discharge continuously to 2.0v at 25±5°C, and the discharge capacity reaches half of the nominal capacity
Maximum pulse discharge current	3000mA	Pulse cycle discharge at 25±5°C, 3s on 27s off, discharge to 2.0V, the output capacity can reach half of the nominal capacity
Operation Temperature Range	-40~70°C	The performance of the battery will decrease under low temperature
Storage life	10 years	Storage environment: 25±5°C, ≤65%RH

2. Battery/Cell performance test Criteria

2.1 Appearance inspection by visual

There shall be no such defect as rust, leakage, which may adversely affect commercial value of battery.

2.2 Environmental test condition

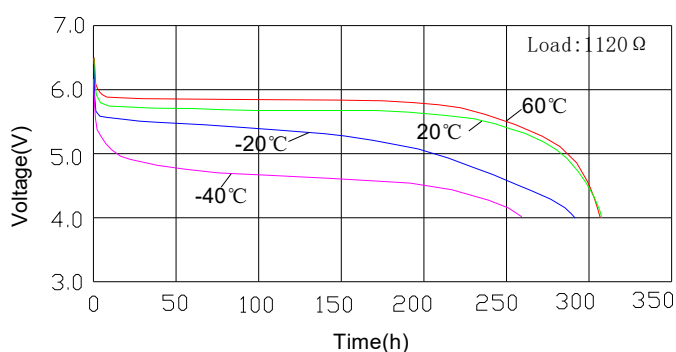
Unless otherwise specified, all test stated in this product specification are conduct at below test condition

Temperature: 20±5°C

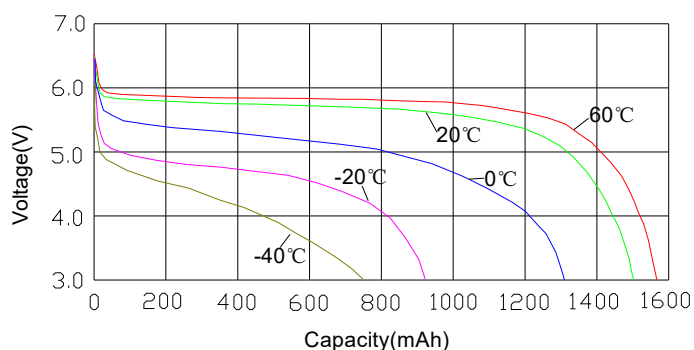
Relative Humidity:≤65% R.H.

2.3 Discharge characteristic

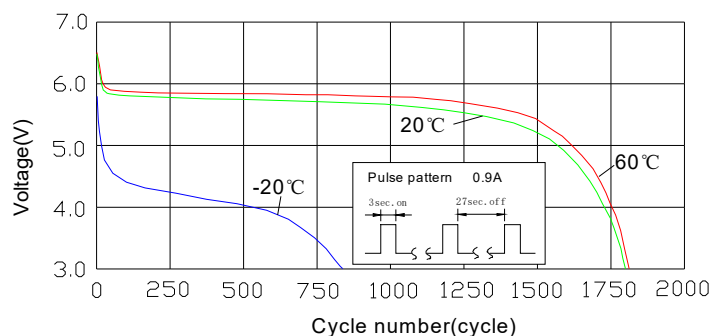
Discharge characteristics on temperature



Temperature characteristics(10mA)



Pulse discharge characteristics

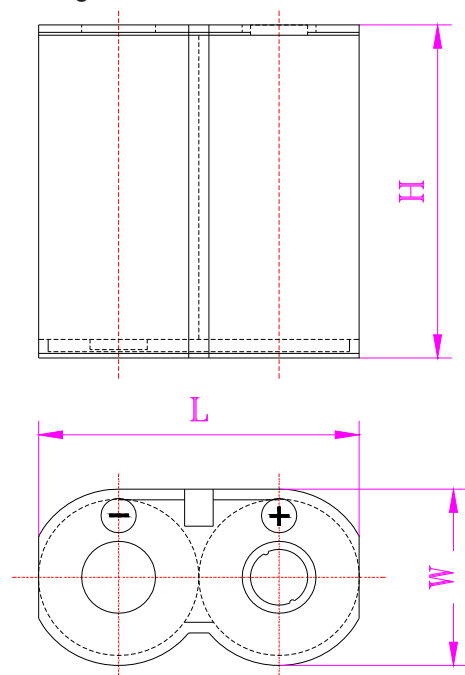


2.4 Reliability test

Items	Test Method and Condition	Criteria
Free fall test	The battery to be fully charged in accordance with standard charge condition, then drop the battery three times from a height of 1,0 m onto a concrete floor. The batteries are dropped so as to obtain impacts in random orientations.	No Fire, No explosion
Vibration test	After standard charging, fixed the cell to vibration table and subjected to vibration cycling that the frequency is to be varied at the rate of 1Hz per minute between 10Hz and 55Hz, the excursion of the vibration is 1.6mm. The cell shall be vibrated for 30 minutes per axis of XYZ axes.	No leakage, No fire, No explosion
Thermal exposure test	Each fully charged cell, stabilized at room temperature, is placed in a circulating air-convection oven. The oven temperature is raised at a rate of 5 °C/min $\pm$ 2 °C/min to a temperature of 130 °C $\pm$ 2 °C. The cell remains at this temperature for 30 min before the test is discontinued.	No Fire, No explosion
Short test 25 $\pm$ 5°C)	The fully charged battery is to be short-circuited by connecting the positive and negative terminals of the battery with resistance load not exceed 100m Ω . Tests are to be conducted at room temperature 25 $\pm$ 5°C.	No Fire, No explosion Surface temperature does not exceed 150°C
Forced discharge test	Each test battery shall be discharged to 100% depth of discharge. It shall then be connected in series with three undischarged additional batteries of the same type and the circuit load is lower than 0.1 Ω stop the test when battery temperature come back to The environment temperature	No Fire, No explosion
Over charge test	Charge the battery with full charge and charge it with dc power supply. The charging current is 3 times (5mA 3=15mA) of the specified maximum charging current I _c =0.004a and keep it for 12 hours	No Fire, No explosion
Impact	The cell is to be placed on a flat surface, A 15,8 mm diameter bar is to be placed across the center of the sample, A 9,1kg mass is to be dropped from a height of 61 $\pm$ 2,5cm onto the sample	No Fire, No explosion
Crush	Each fully charged cell is crushed between two surfaces. The force for the crushing is applied by a hydraulic ram exerting a force of 13kN $\pm$ 1kN. crushing is performed in a manner that will cause the most adverse result. Once the maximum fore has been applied, or an abrupt voltage drop of one-third of the original voltage has been obtained, the force is released.	No Fire, No explosion

3. Cell initial Dimensions

L Length max 34.8 mm / W Width max 19.50 mm /
H Height max 36.0 mm



4. Cautions in use

To ensure proper use of the battery please read the manual carefully before using it.

Handling	Do not expose to, dispose of the battery in fire. Do not put the battery in a charger or equipment with wrong terminals connected Avoid shorting the battery Avoid excessive physical shock or vibration. Do not disassemble or deform the battery. Do not immerse in water. Do not use the battery mixed with other different make, type, or model batteries. Keep out of the reach of children.
storage	Store the battery in a cool, dry and well-ventilated area.
disposal	Regulations vary for different countries. Dispose of in accordance with local regulations.

5. Storage of the Batteries

Batteries should be stored in a cool, dry environment, rain proof, sunscreen. Recommended storage environment: 25 $\pm$ 5°C, humidity is less than 65%