

# LI-ION BATTERY

## LC123+PC

### RECHARGEABLE BATTERY

SPECIFICATIONS		
Typical Capacity		500mAh
Minimum Capacity*1		480mAh
Nominal Voltage		3.7V
Voltage Range		3.0 to 4.2V
Discharge Condition	Max. Current	2C mA
	Cut-off Voltage	3.0V
AC Impedance(mOHM)		< 70 at 1KHz
Operating Temp	Storage	-20°C ~ 60°C
	Charge	0°C ~ 45°C
	Discharge	-20°C ~ 60°C
Energy Density	Volumetric	355Wh/l
	Gravimetric	179Wh/g



\* The tube design in the photo is for visual purpose only

\*1.Nominal Capacity: 23±3°C, 0.2C, 2.75V cutoff Discharge Capacity

MECHANICAL DATA	
Diameter	17.0 mm
Height	35.0 mm
Weight	19.0 ± 0.5g

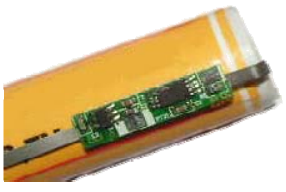
CHARGING			
Charge Condition	Charge Method	CC/CV	
	Max. Current	1.0CmA (500mA)	
	Voltage	4.2 ± 0.03V	
	Charge battery in a temperature range of 0°C to +45°C. Maximum charge rate at C rate, charge battery at a constant current until 4.2V ± 0.03V per cell is attained. Hold at 4.2V per cell until current declines to C/10. Then cut off charge voltage.		
Approx. Charging time	C rate		2 ~ 3 hours
	C/2		3 ~ 4 hours
	C/5		6 ~ 7 hours

Never charge batteries unattended. It's recommended to use a fireproof container.

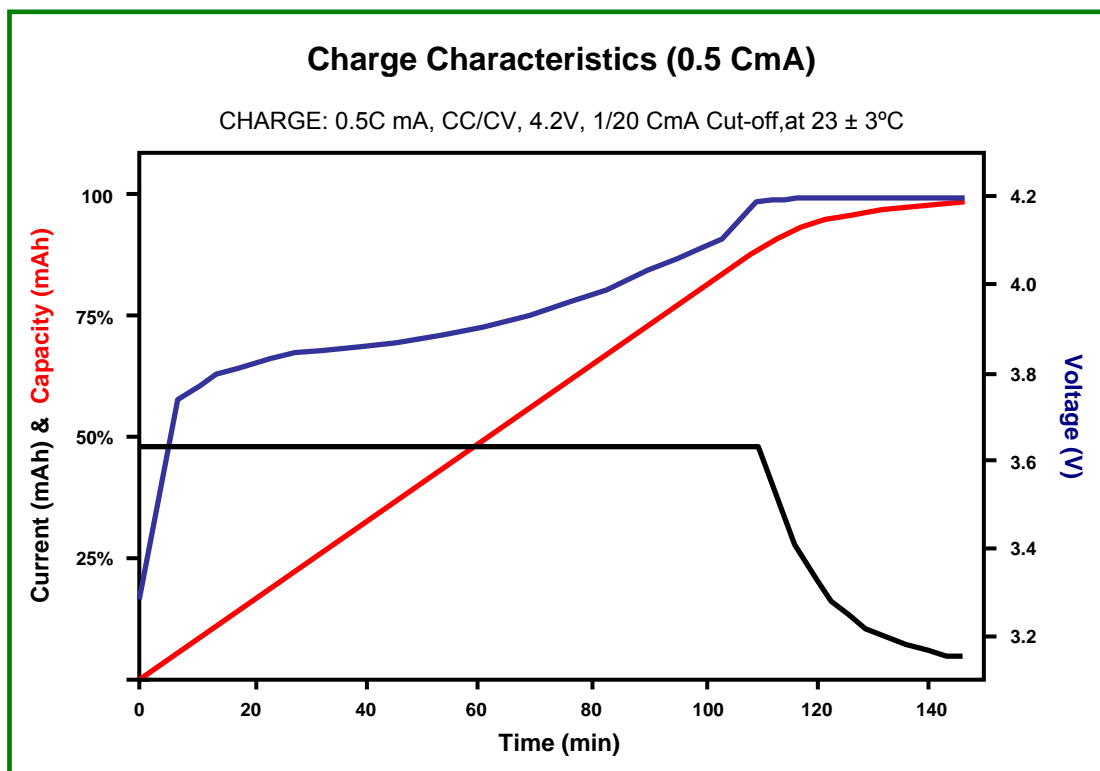
# LC123+PC

## RECHARGEABLE BATTERY

PROTECTION CIRCUIT MODULE	
Overcharge Voltage	4.35 ± 0.03V
Overdischarge Voltage	2.30 ± 0.1V
Overcurrent	3 ± 1 A
Short Protection	Cut short circuit

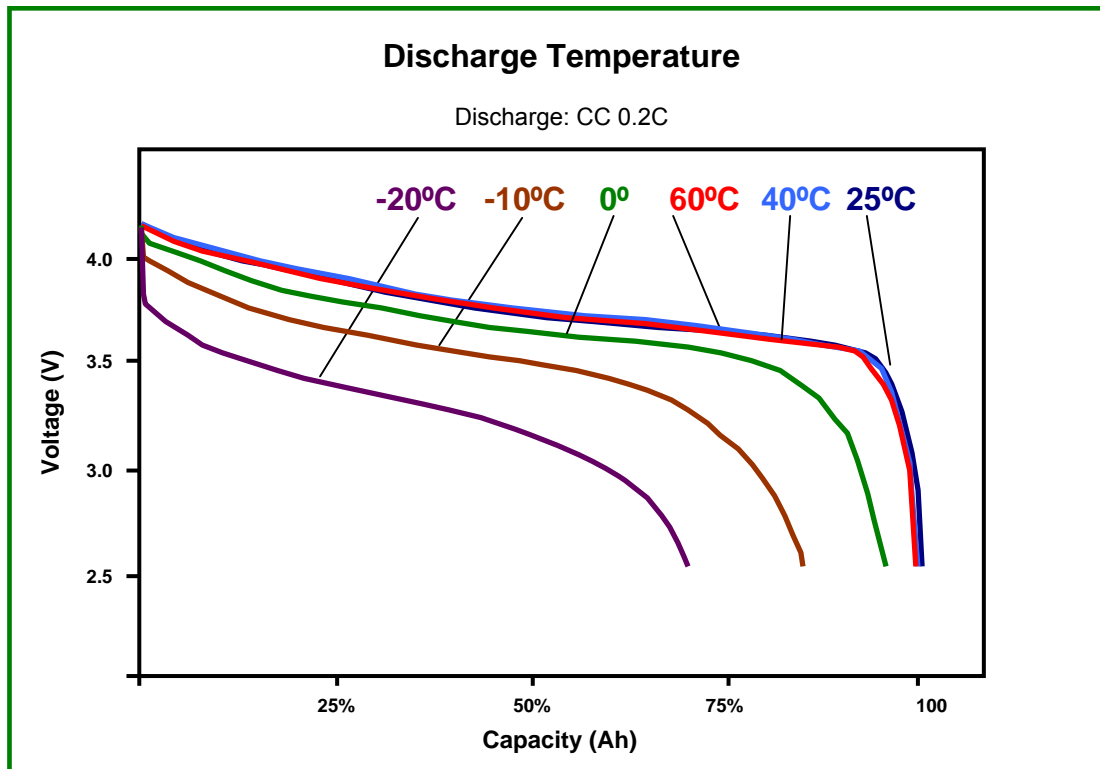
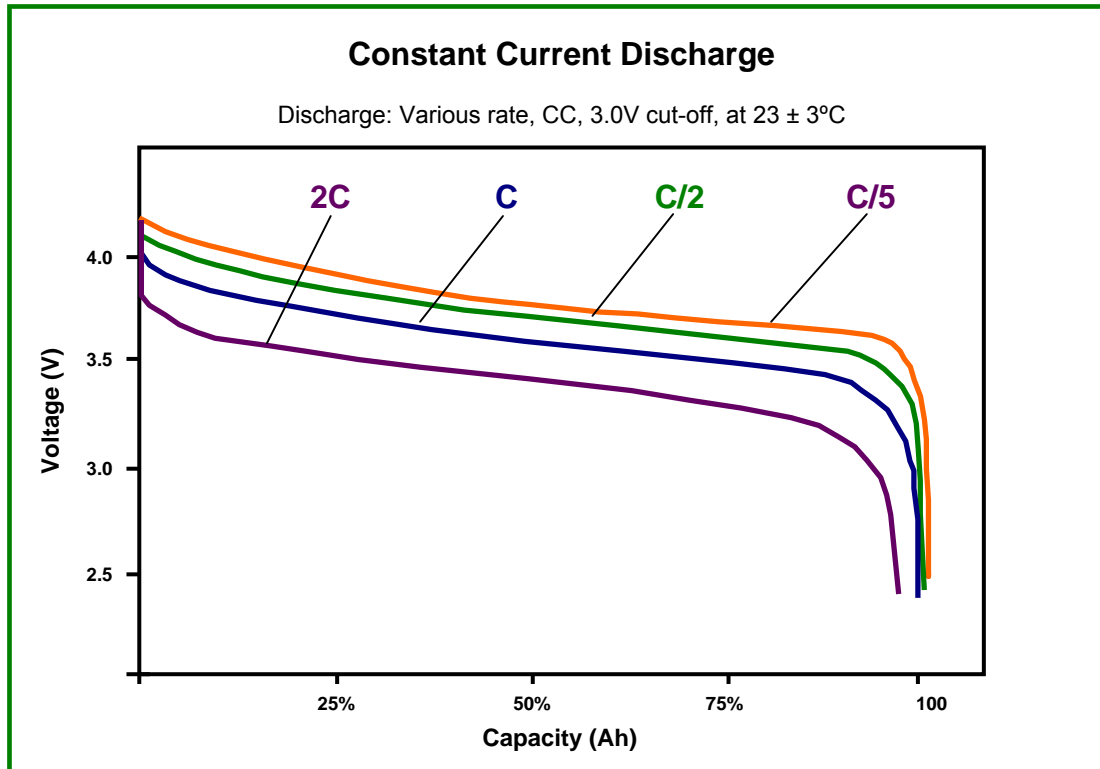


ITEM	CRITERION	REMARKS
C-rate characteristics	0.2C	100%
	1C	≥98%
Temperature Dependence of Capacity	60°C	≥95%
	45°C	≥97%
	23°C	1
	0°C	≥90%
	-10°C	≥70%
Cycle Life Characteristics	≥500cycles	More than 80% of initial capacity Charge: 0.5C,CC/CV,4.2V,C/20 end Discharge: 0.2C,CC,3.0V
Storage Characteristics (Recovery Capacity)	6 Month at 23°C	≥90%
	3 Month at 45°C	≥80%
	1 Month at 60°C	≥80%
		On a storage,Cell state is 40%~60% charge(3.7~3.9V)



# LC123+PC

## RECHARGEABLE BATTERY



# LC123+PC

## RECHARGEABLE BATTERY

### **! Danger**

“Do not disassemble or reconstruct battery”

“Do not short-circuit battery”

“Do not use or leave battery nearby fire, stove or heated place (>80°C)”

“Do not immerse the battery in water or sea water , or get it wet”

“Do not charge battery nearby the fire or under the blazing sun”

“Do use the specified charger and observe charging requirement”

“Never charge batteries unattended”

“Put battery in the fireproof container, charge in an isolated area, away from other flammable materials. Always have fire extinguisher for emergency use”

“Do not use the battery with conspicuous damage or deformation”

“Do not make the direct soldering on battery”

“Do not reverse charge or overdischarge the cell”

“Do not connect battery to the plug socket or car-cigarette-plug”

“Do not use battery for unspecified equipment”

“Do not touch a leaked battery directly”

### **! Warning**

“Do not use Lithium ion battery in mixture”

“Keep the battery away from babies”

“Do not continue to charge battery over specified time”

“Do not get into a microwave or a high pressure container”

“Do not use a leaked battery nearby fire”

“Do not use an abnormal battery”