

# Lithium Ion Rechargeable Battery Technical Information

Revision1.0  
29<sup>th</sup> August 2013

<b>Model Number</b>	<b>US14500VR2B</b>
Cell Type	Cylindrical
Cell Name	US14500VR2B
Sony Code	49927860

Sony Energy Devices Corporation  
Device Solutions Business Group / Sony Corporation

## 1. General

### 1.1 Name and Code

1.1.1 Model Number : US14500VR2B  
1.1.2 Cell Name : US14500VR2B  
1.1.3 Sony Code 49927860

### 1.2 Cell Shape and Weight

1.2.1 Cell Shape : Cylindrical  
1.2.2 Size (with plastic tube) : Diameter 14.15 mm max  
Length 49.30mm max  
1.2.3 Weight : 19.3g Average

### 1.3 Safety Regulation

Sony acquired UL1642.  
Sony acquired IEC 62133

## 2. Performance

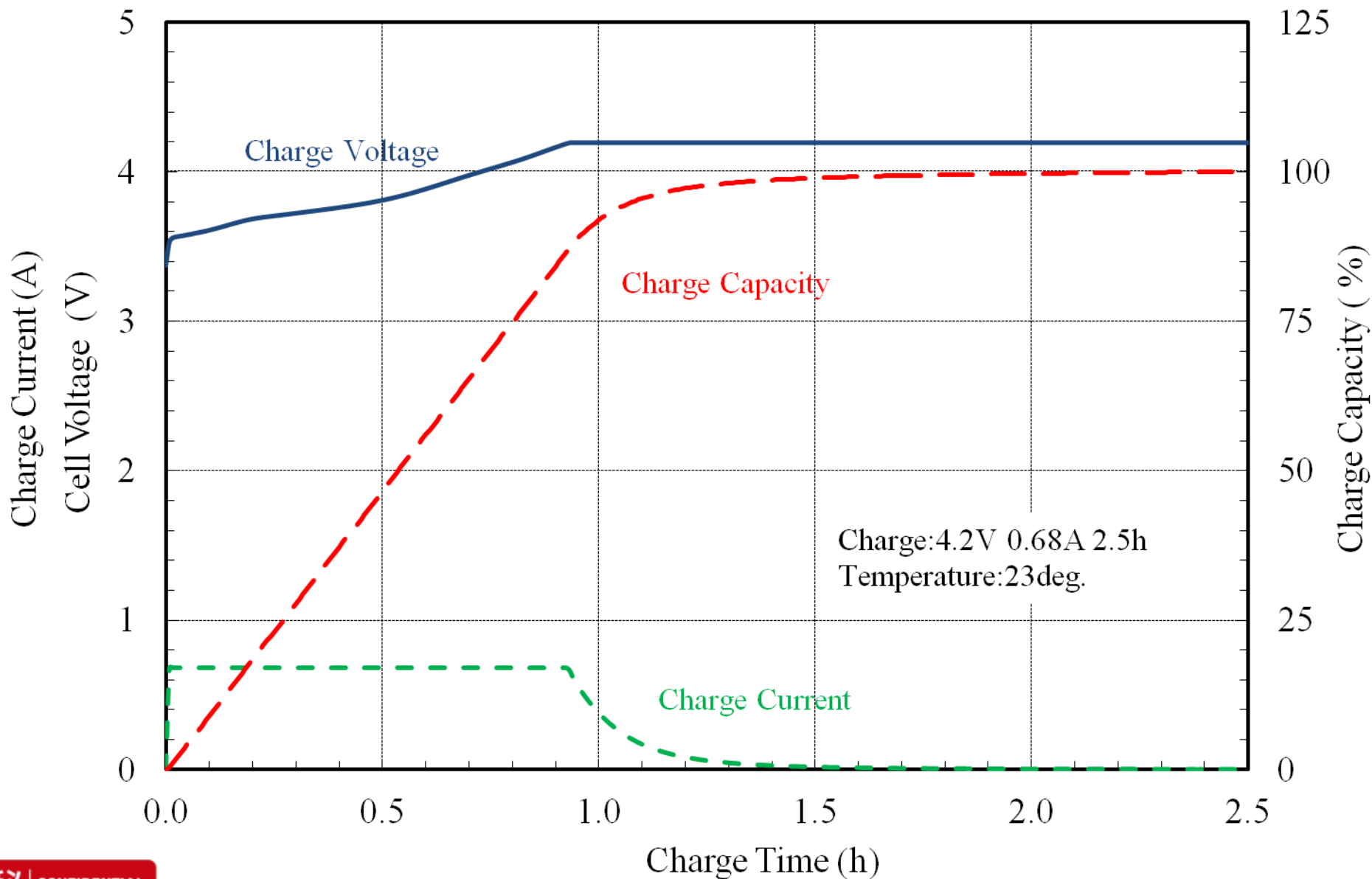
At room temperature,3.0V cut off

Nominal Capacity (0.2C discharge)	715mAh 2.65Wh	average capacity 3.7V (Average discharge voltage)
Rated Capacity (0.2C discharge)	680mAh 2.52Wh	Minimum capacity
Capacity at 0.5Ita	690mAh 2.55Wh	Typical capacity
Capacity at 1Ita	670mAh 2.48Wh	Typical capacity
Nominal Voltage	3.6V	
Internal Impedance	63mΩ Typ.	Measured by AC1kHz
Cycle Performance	60% of Initial capacity at 500 cycles	1.0Ita discharge

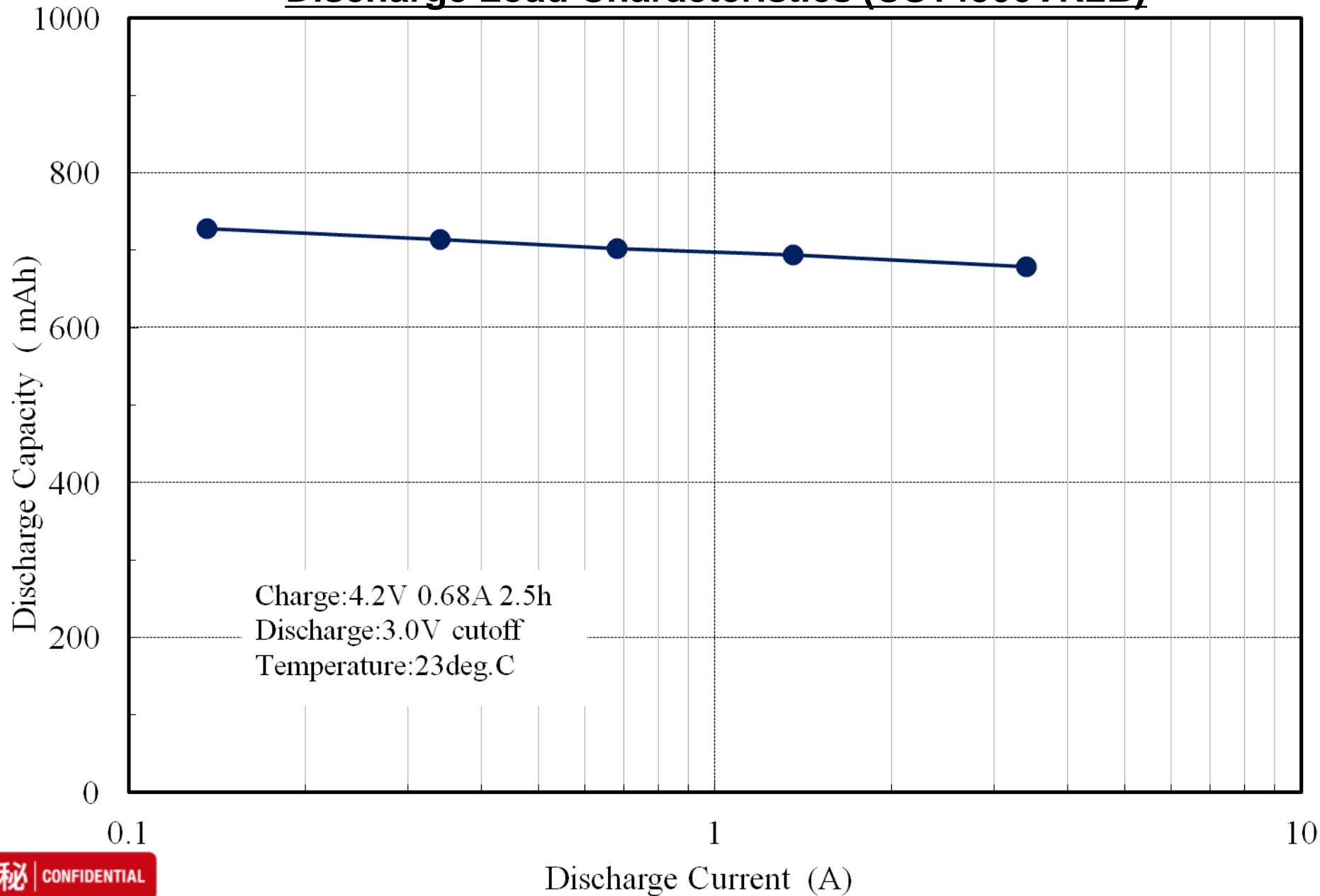
### \* Standard Charge Condition

Charge Method : Constant current constant voltage  
Charge Up Voltage : 4.20V  
Charge Current : 0.68A  
Charge Time : 2.5hours charge  
Ambient Temperature : 23deg.C

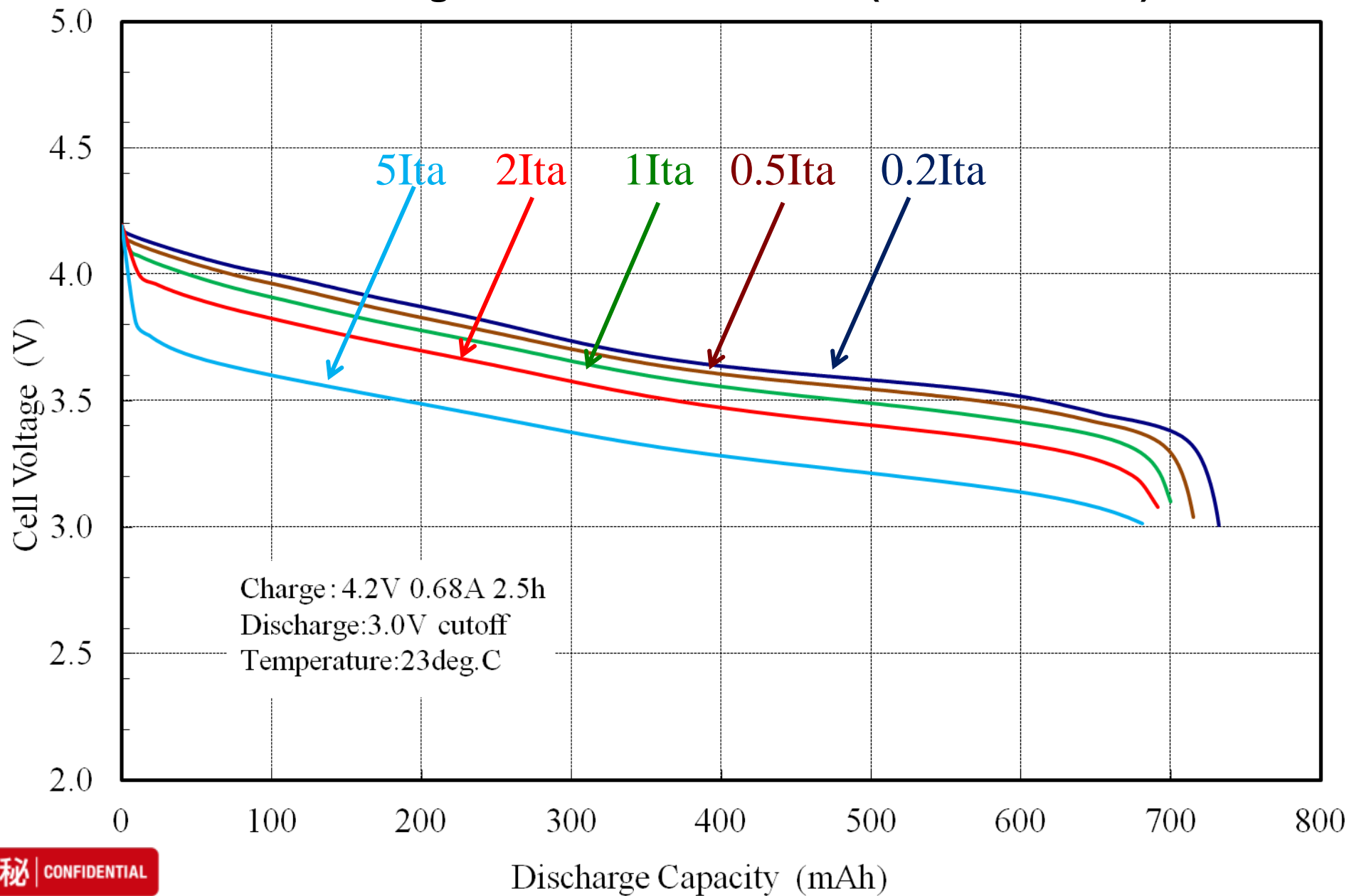
# Charge Characteristics (US14500VR2B)



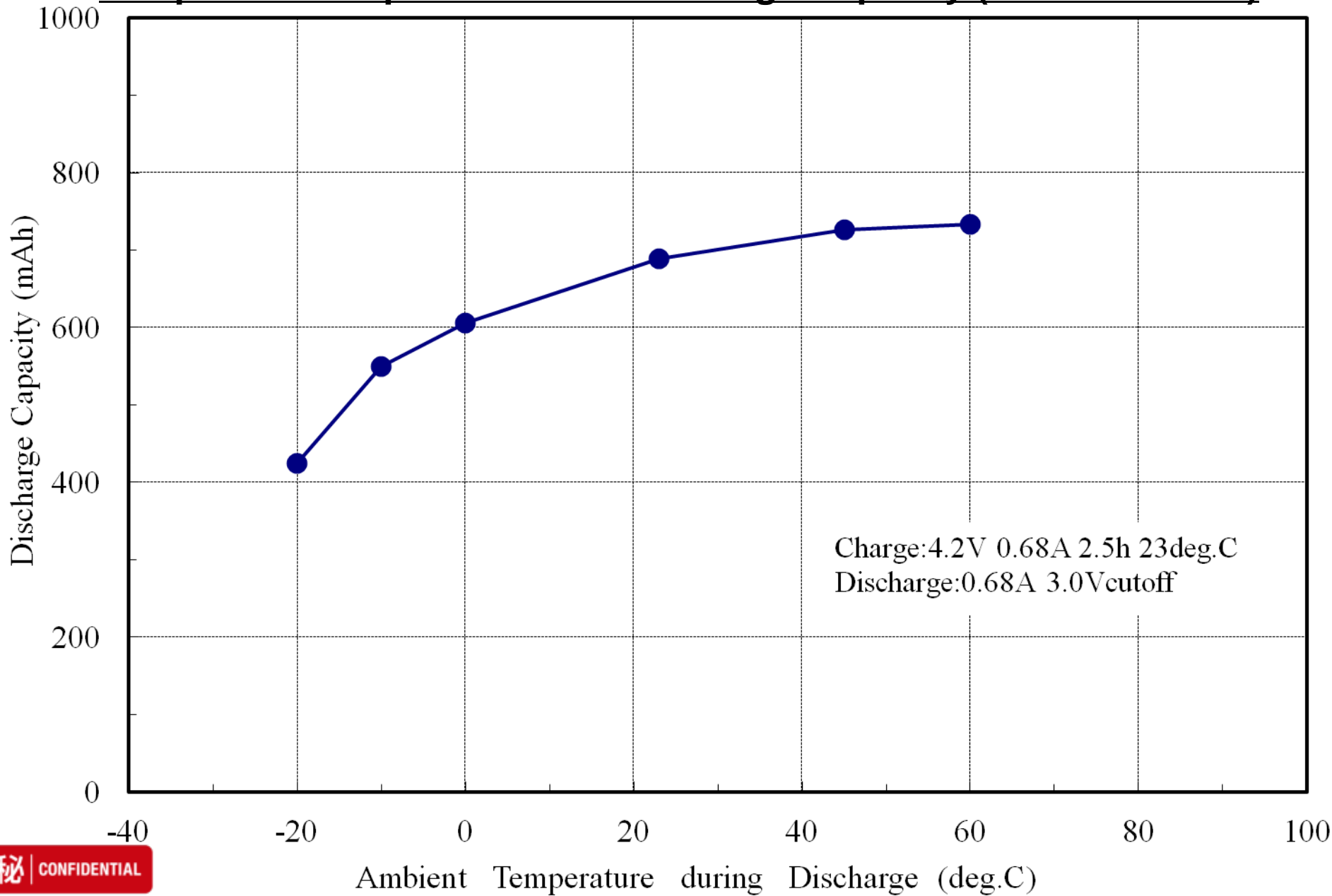
# Discharge Load Characteristics (US14500VR2B)



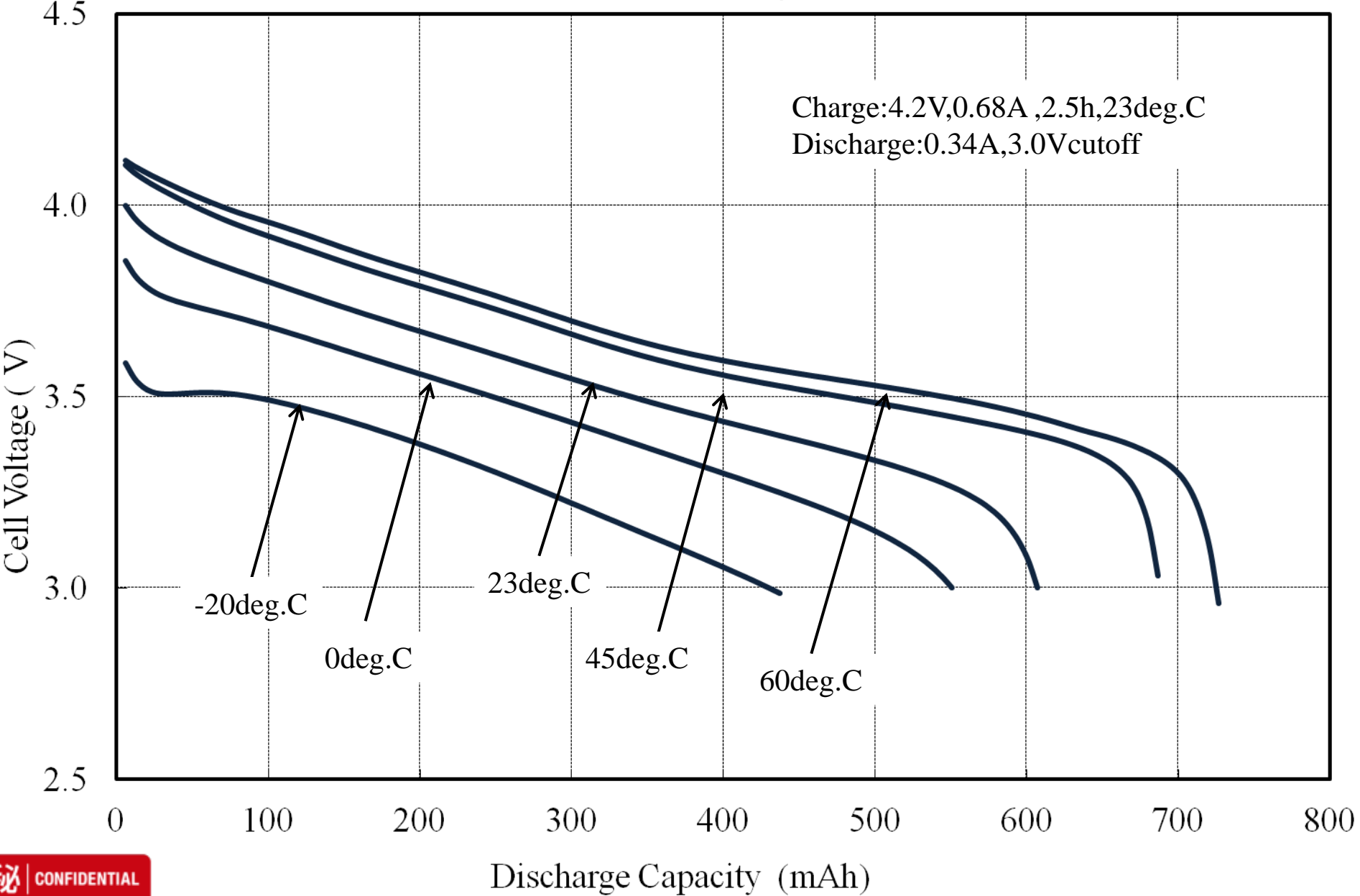
## Discharge Load Characteristics (US14500VR2B)



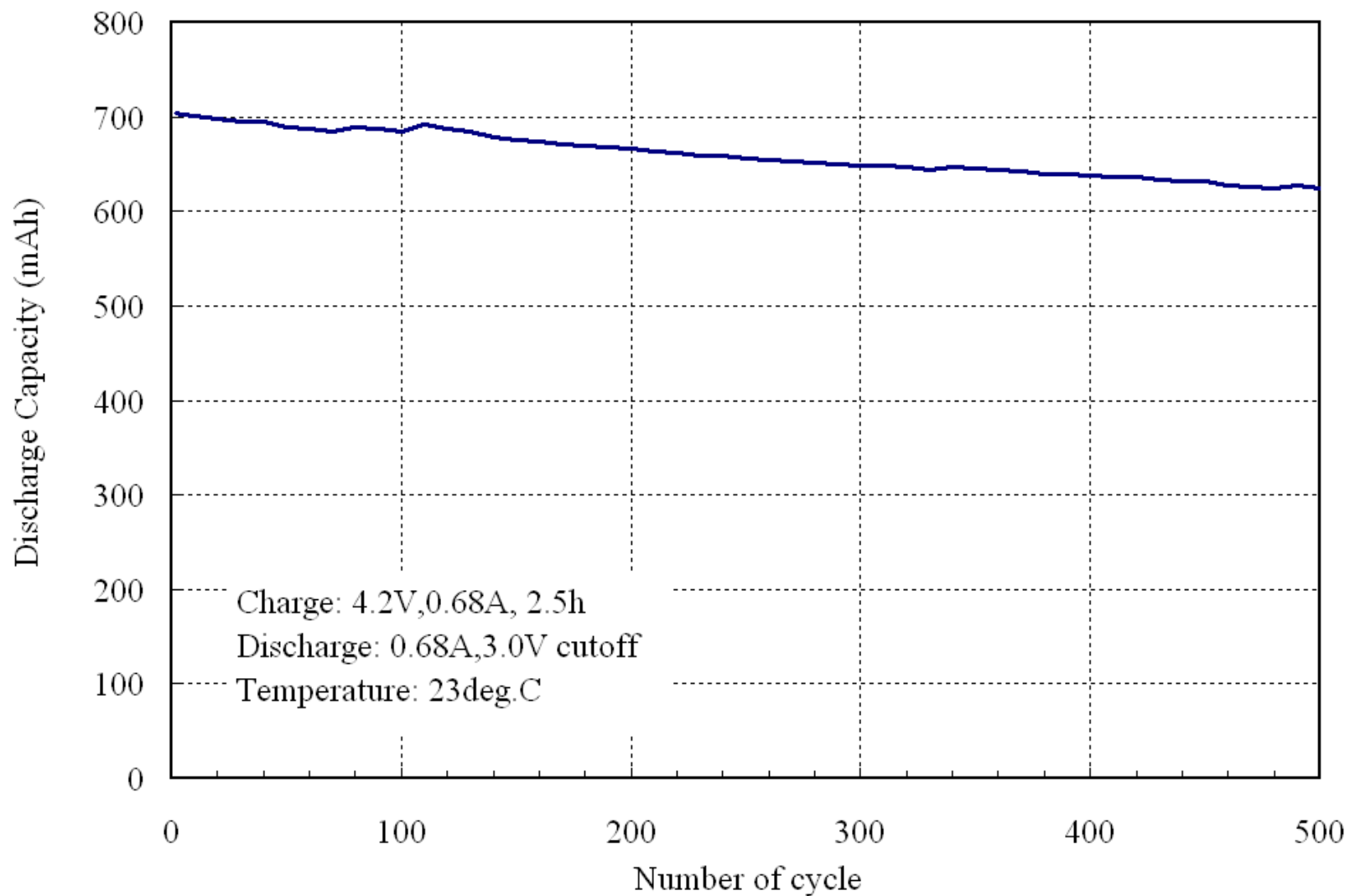
# Temperature Dependence of Discharge Capacity (US14500VR2B)



# Temperature Dependence of Discharge Curves (US14500VR2B)



## Cycle Life Performance (US14500VR2B)





## Dimension with Plastic Tube: US14500VR2B

Cell Size (with plastic tube)

