

# **Lithium Ion Rechargeable Battery Technical Information**

**Revision 0.1.2  
5<sup>th</sup> Feb. 2016**

<b>Model Number</b>	<b>US18650VC7</b>
<b>Cell Type</b>	<b>Cylindrical</b>
<b>Cell Name</b>	<b>US18650VC7</b>
<b>Sony Code</b>	<b>49941610</b>

**Sony Energy Devices Corporation  
Device Solutions Business Group / Sony Corporation**

## 1. General

### 1.1 Name and Code

1.1.1 Model Number : US18650VC7  
1.1.2 Cell Name : US18650VC7  
1.1.3 Sony Code : 49941610

### 1.2 Cell Shape and Weight

1.2.1 Cell Shape : Cylindrical  
1.2.2 Size (with plastic tube) : Diameter 18.50mm max  
Length 65.25mm max  
1.2.3 Weight : 47.2g Average (TBD)

### 1.3 Safety Regulation

: Sony acquire UL1642  
: Sony IEC62133 2<sup>nd</sup> edition  
: Sony will acquire Korean regulation  
: Sony will acquire Taiwan Commodity Inspection Act(CNS 15364)

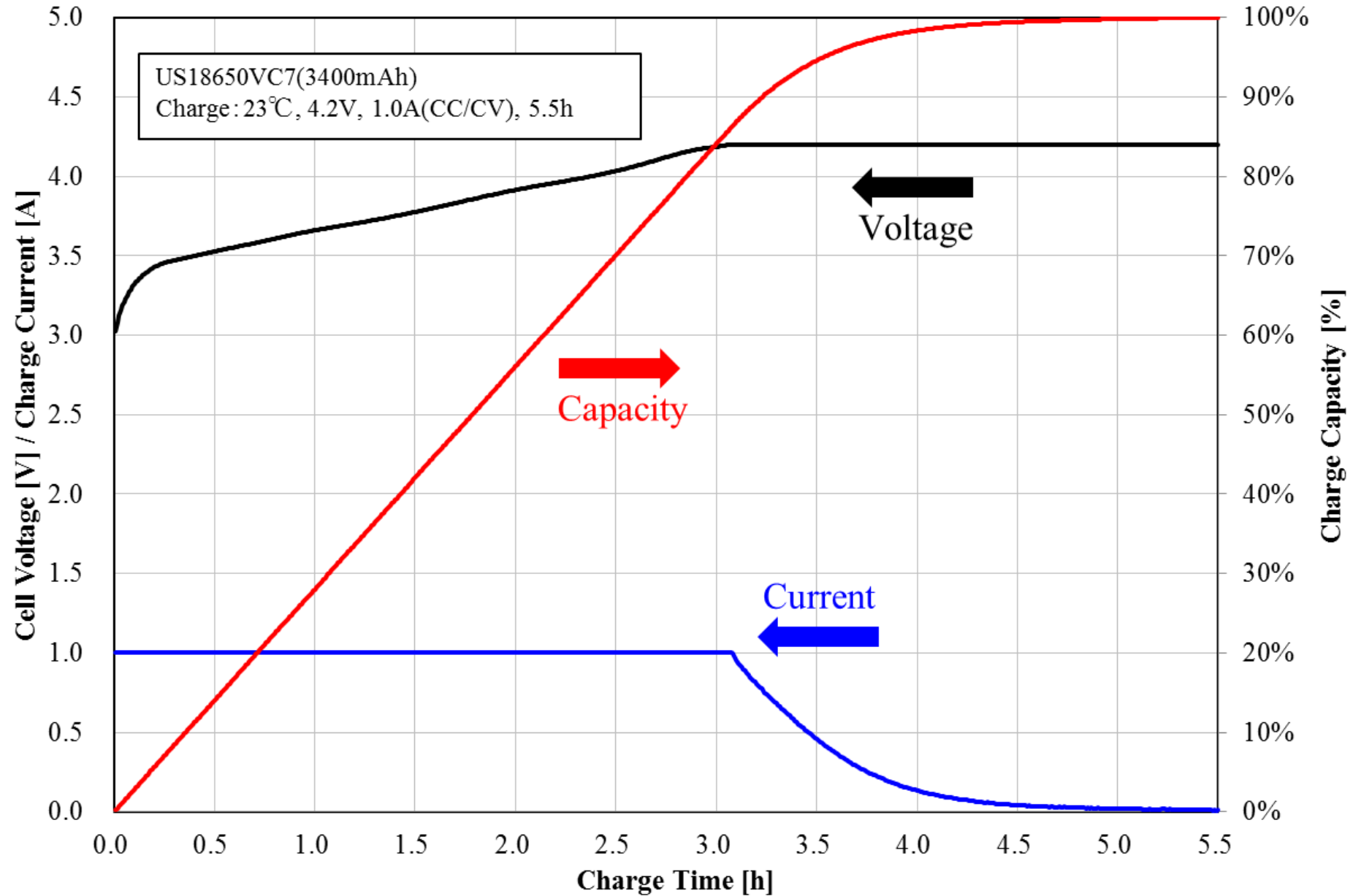
## 2. Performance

Nominal Capacity (0.2ItA discharge)	3500mAh 12.60Wh	average capacity 3.6V (average discharge voltage) at room temperature,2.0V cut off
Rated Capacity (0.2ItA discharge)	3400mAh 12.24Wh	minimum capacity at room temperature,2.0V cut off
Capacity at 0.5ItA	3230mAh	average capacity at room temperature,2.5V cut off
Capacity at 5A	2720mAh	average capacity at room temperature,2.5V cut off
Nominal Voltage	3.6V	
Internal Impedance	23mΩ Typ.	measured by AC1kHz
Cycle Performance	70% Min. of Initial capacity at 300 cycles	Charge at 1.0A, Cut off current 100mA, Discharge at 5A, 2.5V cut off, at room temperature.

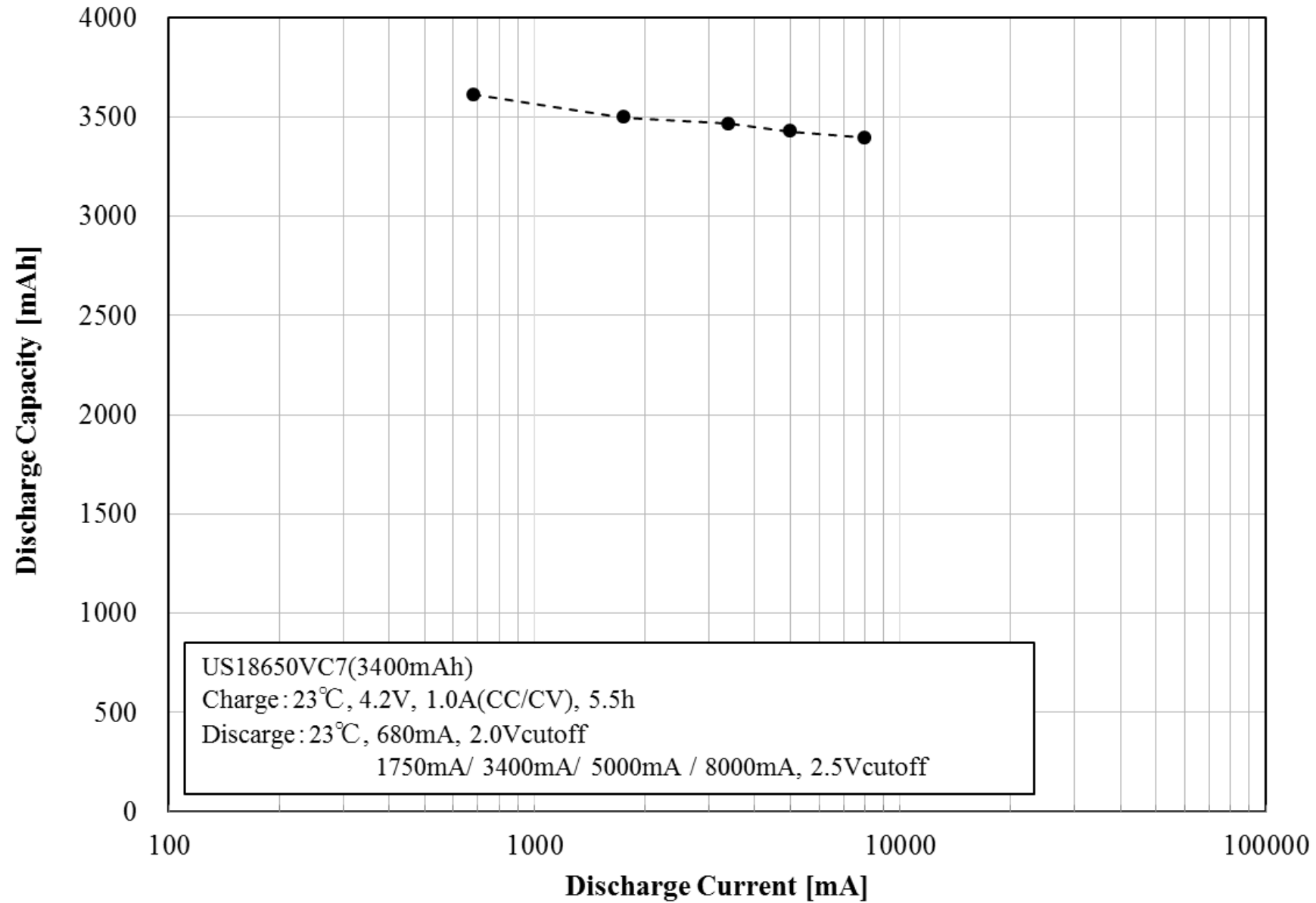
### \* Standard Charge Condition

Charge Method : constant current constant voltage  
Charge Up Voltage : 4.2± 0.05V  
Charge Current : 1.0A  
Charge Time : 5.5h  
Ambient Temperature : 23°C

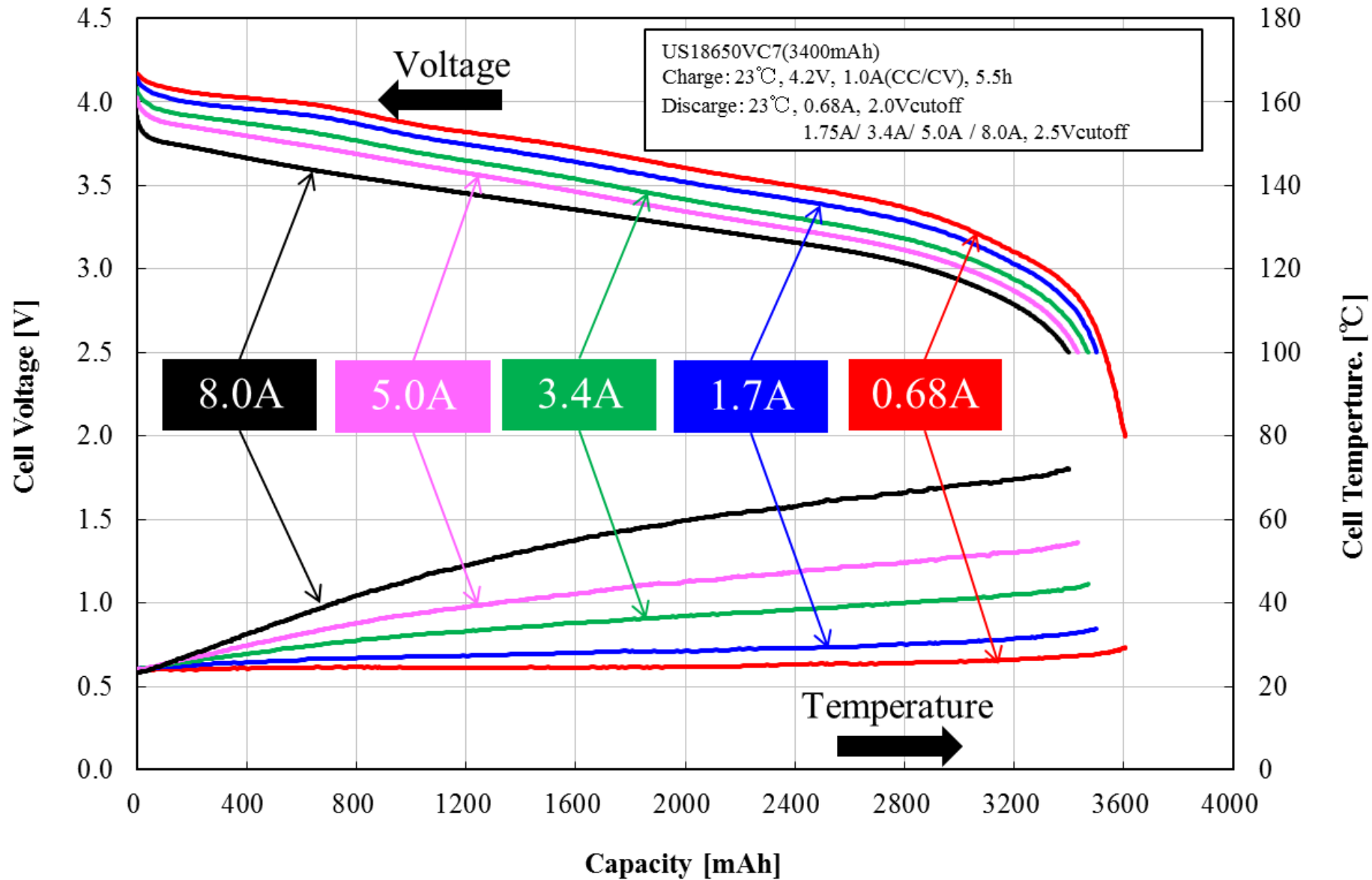
# Charge Characteristics (US18650VC7)



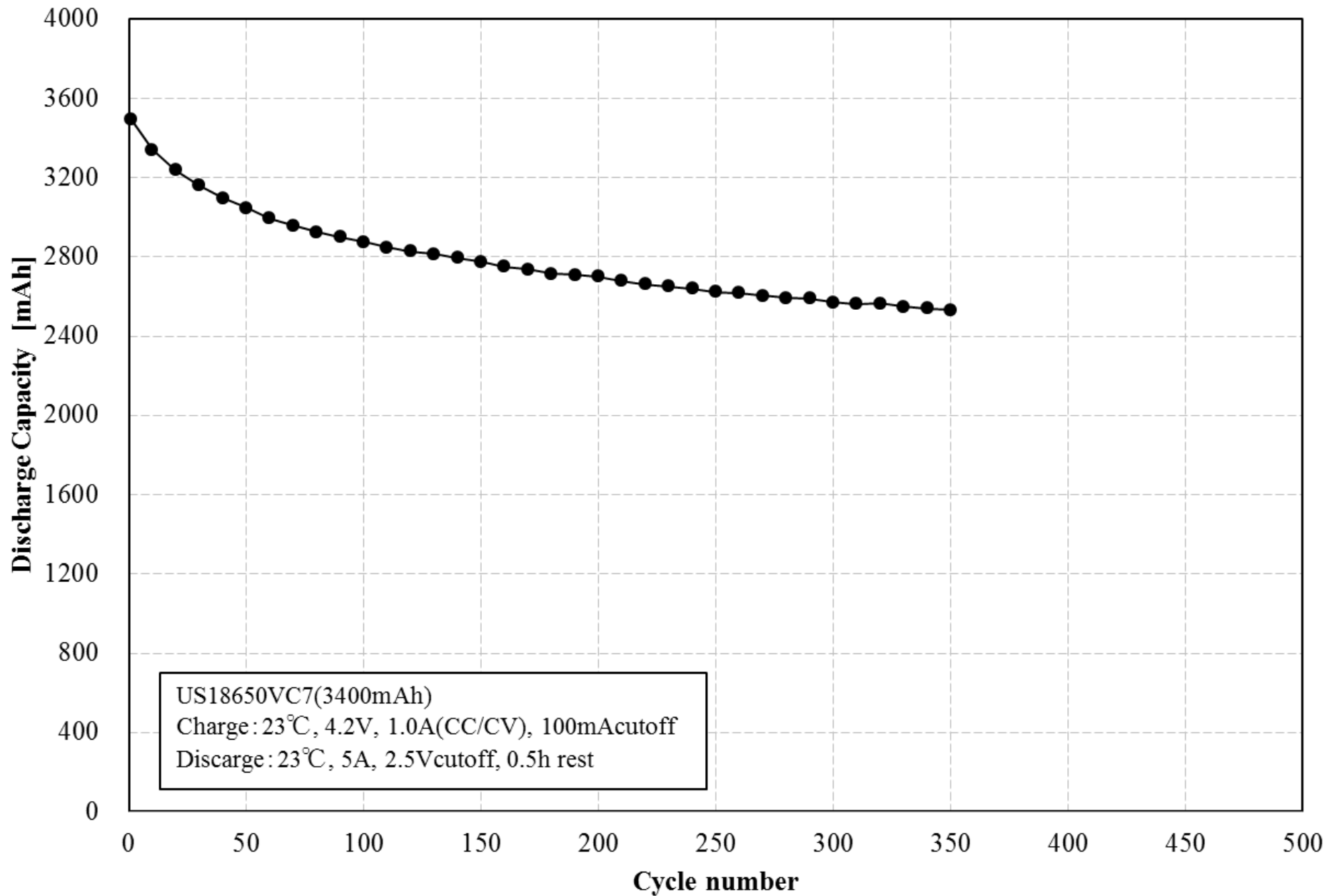
# Discharge Load Characteristics (US18650VC7)



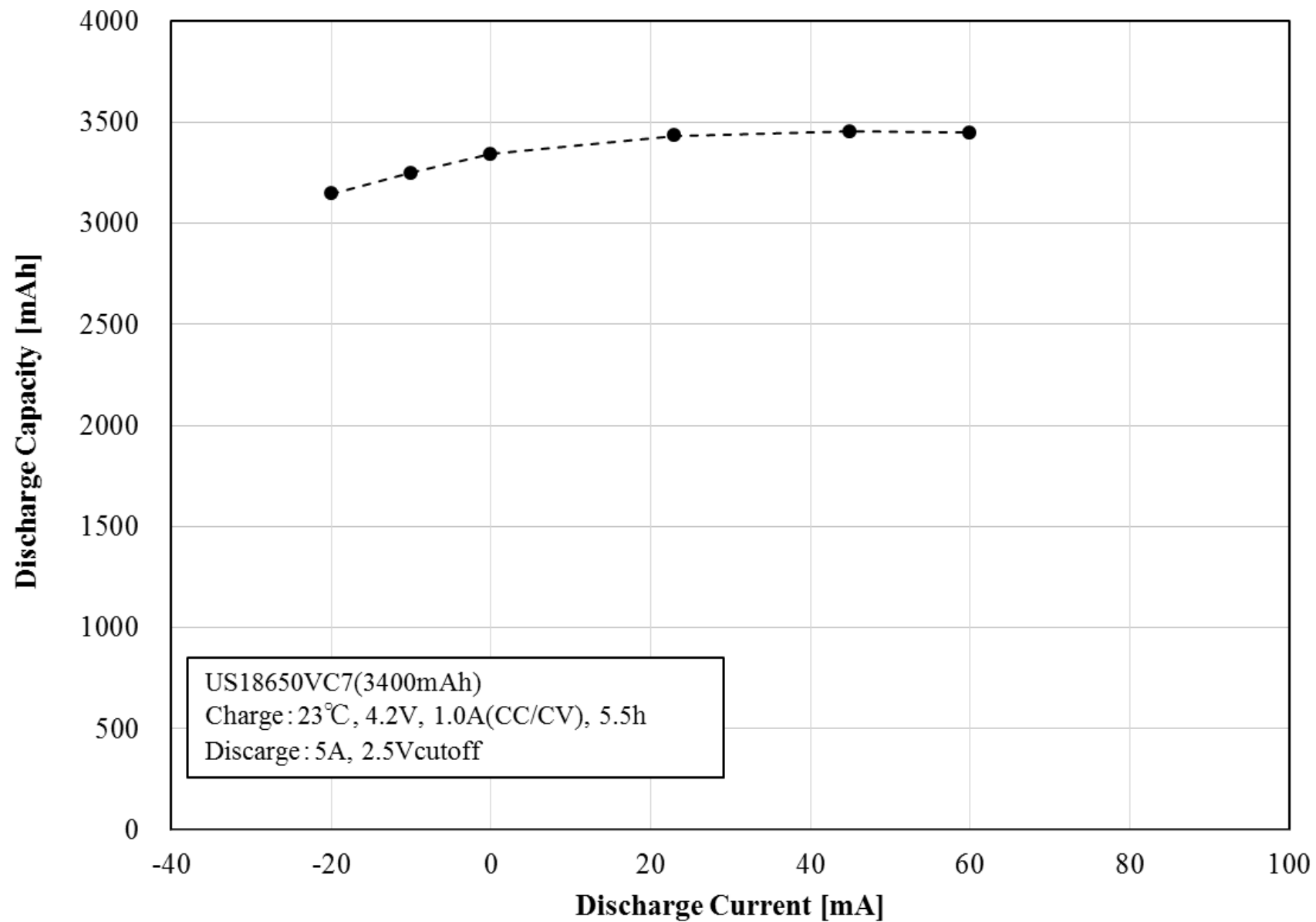
# Discharge Load Characteristics (US18650VC7)



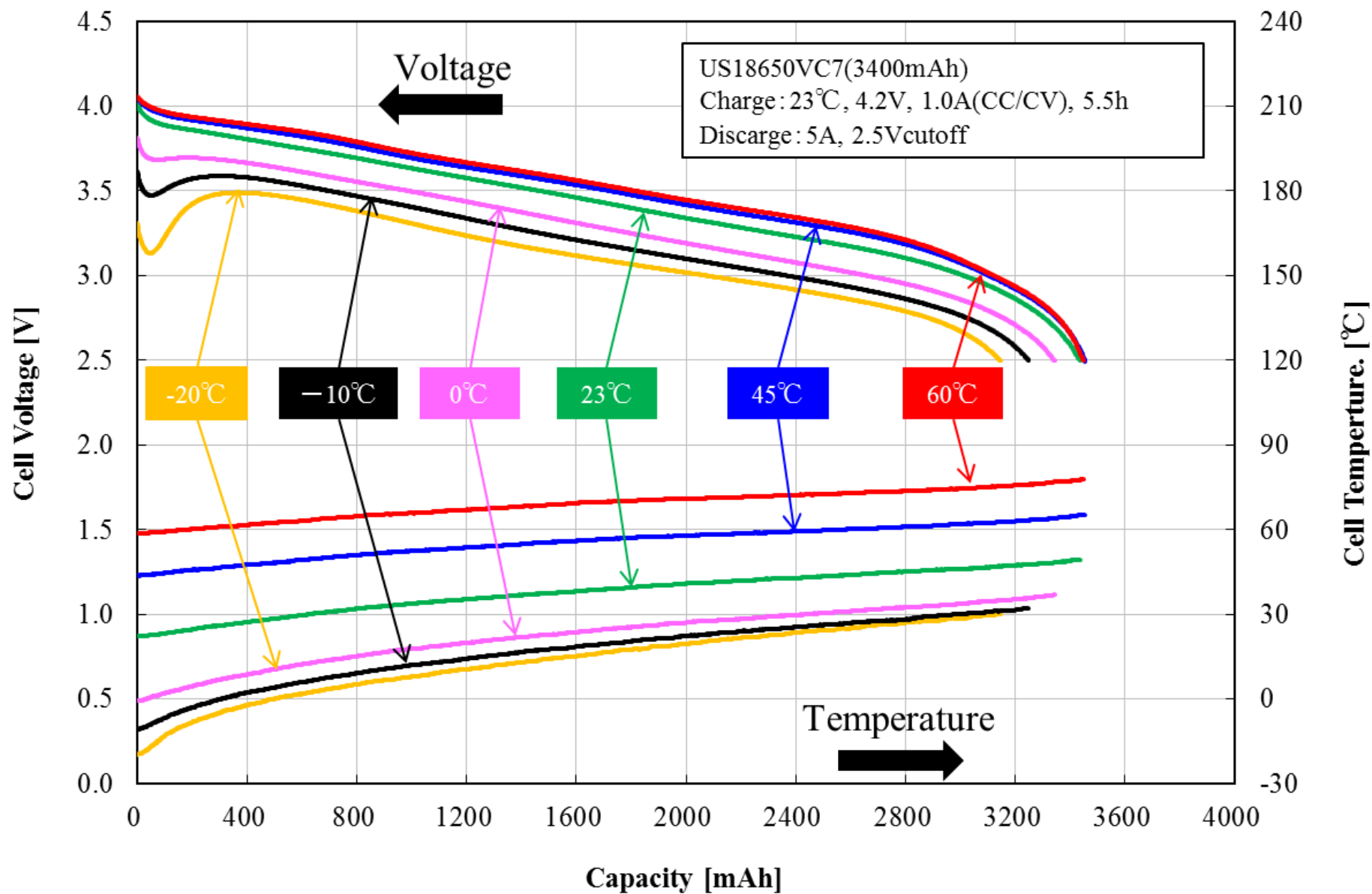
# Cycle Life Performance (US18650VC7)



# Temperature Dependence of Discharge Capacity (US18650VC7)



# Temperature Dependence of Discharge Capacity (US18650VC7)





# Dimension with Plastic Tube (US18650VC7)

