

# **Lithium Ion Rechargeable Battery Technical Information**

**Revision 0.1  
29<sup>th</sup> June 2012**

<b>Model Number</b>	<b>US18650VTC4</b>
<b>Cell Type</b>	<b>Cylindrical</b>
<b>Cell Name</b>	<b>US18650VTC4</b>
<b>Sony Code</b>	<b>49922780</b>

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

## 1. General

### 1.1 Name and Code

1.1.1 Model Number : US18650VTC4  
1.1.2 Cell Name : US18650VTC4  
1.1.3 Sony Code : 49922780

### 1.2 Cell Shape and Weight

1.2.1 Cell Shape : Cylindrical  
1.2.2 Size (with plastic tube) : Diameter 18.35mm max  
Length 65.20mm max  
1.2.3 Weight : 45.0g Average

### 1.3 Safety Regulation

Sony will acquire UL1642.

## 2. Performance

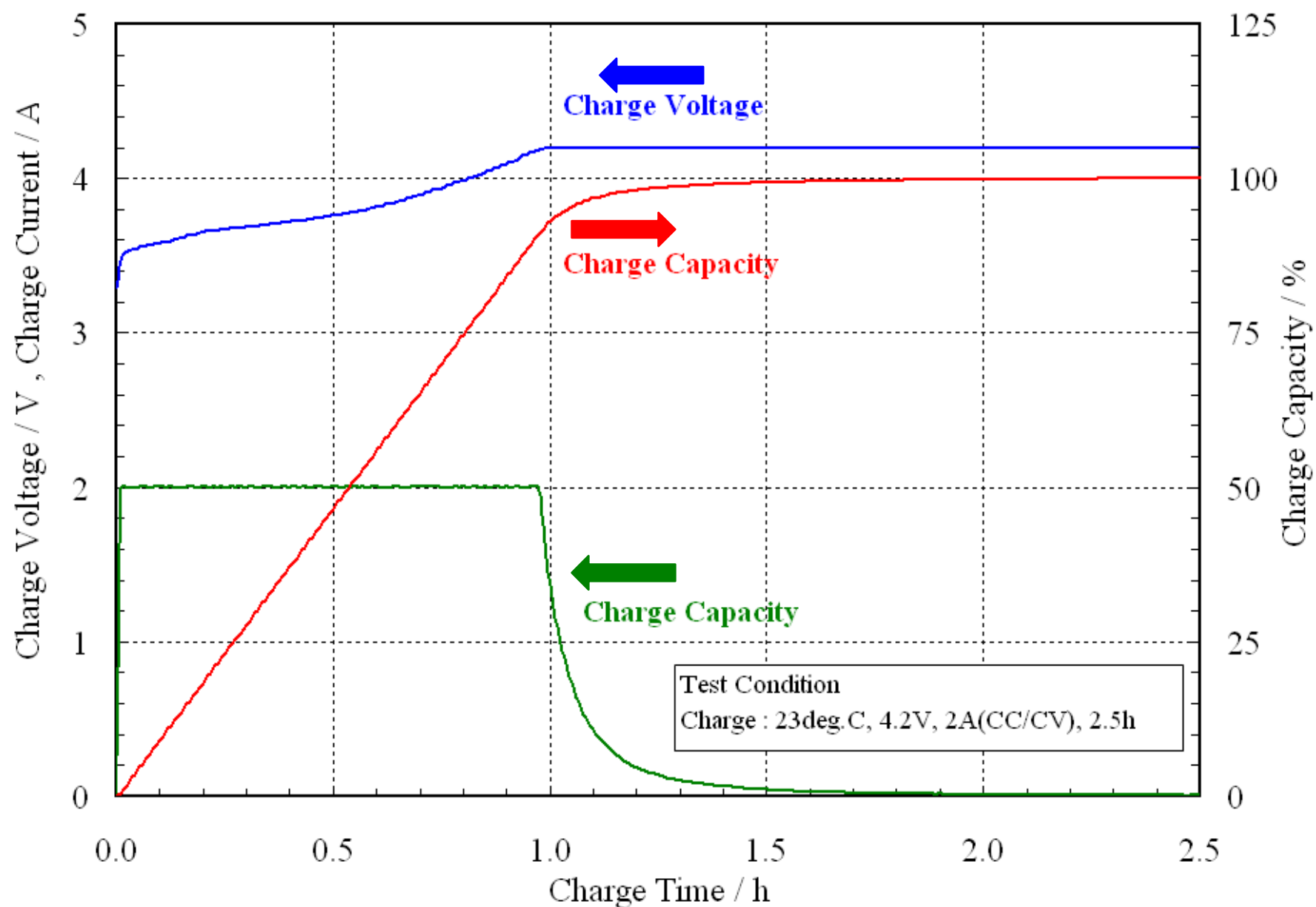
at room temperature, 2.5V cut off

Nominal Capacity (0.2C discharge)	2100mAh 7.77Wh	average capacity 3.70V (average discharge voltage)
Rated Capacity (0.2C discharge)	2000mAh 7.40Wh	minimum capacity
Capacity at 1C	2002mAh 7.30Wh	average capacity
Capacity at 10A	2035mAh 7.01Wh	average capacity
Nominal Voltage	3.7V	
Internal Impedance	12mΩ Typ.	measured by AC1kHz
Cycle Performance	60% Min. of Initial capacity at 500 cycles	10A discharge

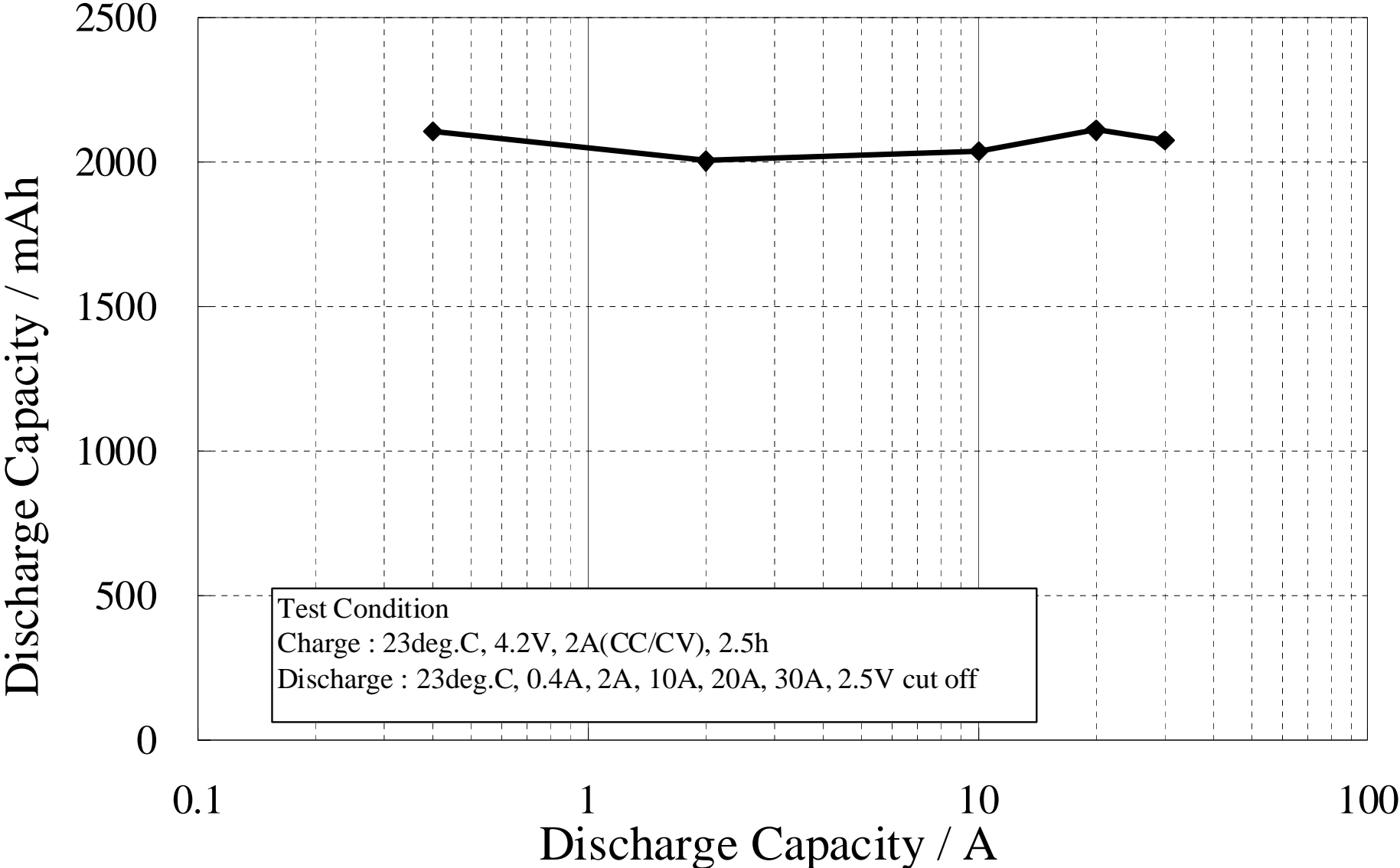
### \* Standard Charge Condition

Charge Method : constant current constant voltage  
Charge Up Voltage : 4.2± 0.05V  
Charge Current : 2.0A  
Charge Time : 2.5h  
Ambient Temperature : 23°C

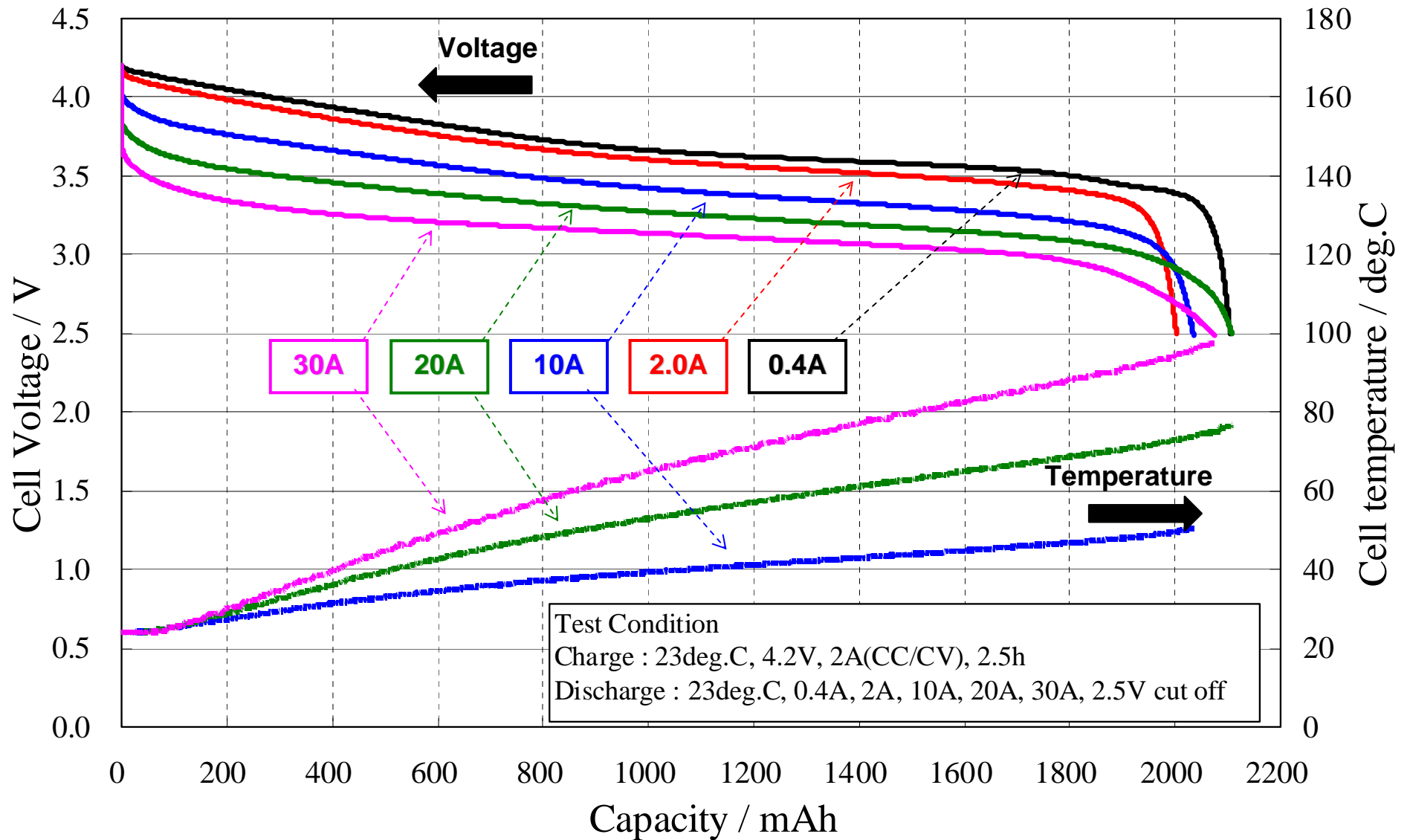
# Charge Characteristics (US18650VTC4)



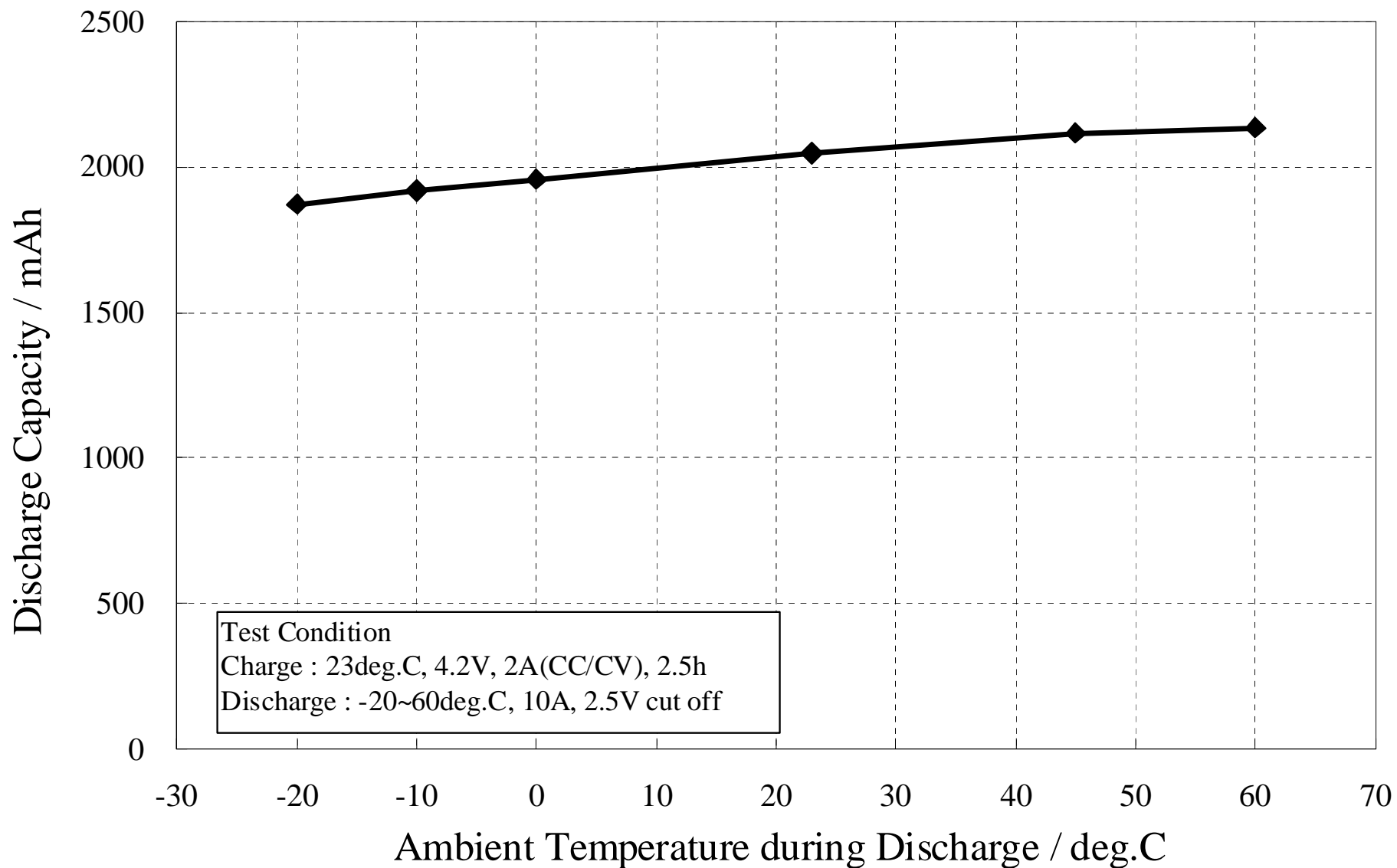
# Discharge Load Characteristics (US18650VTC4)



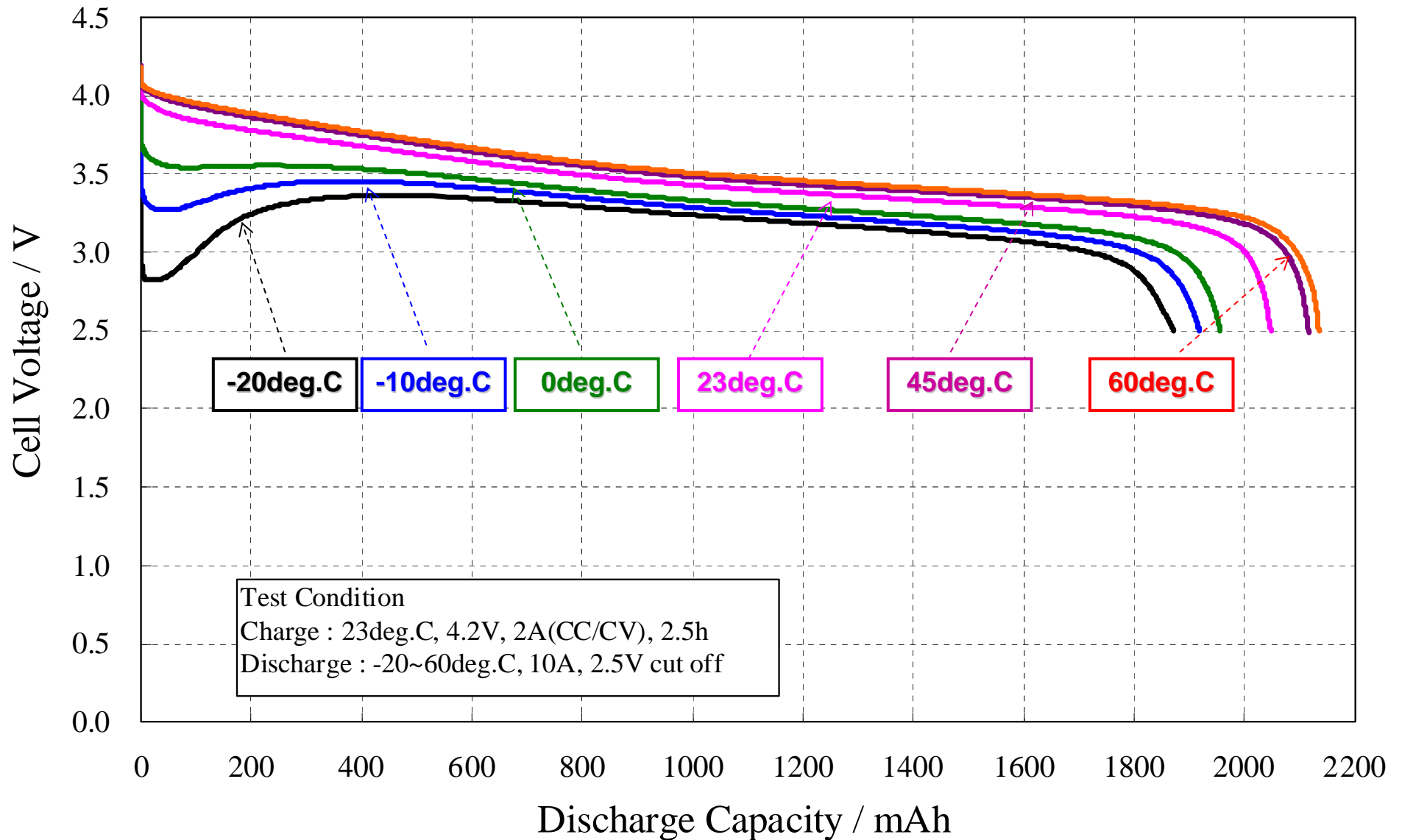
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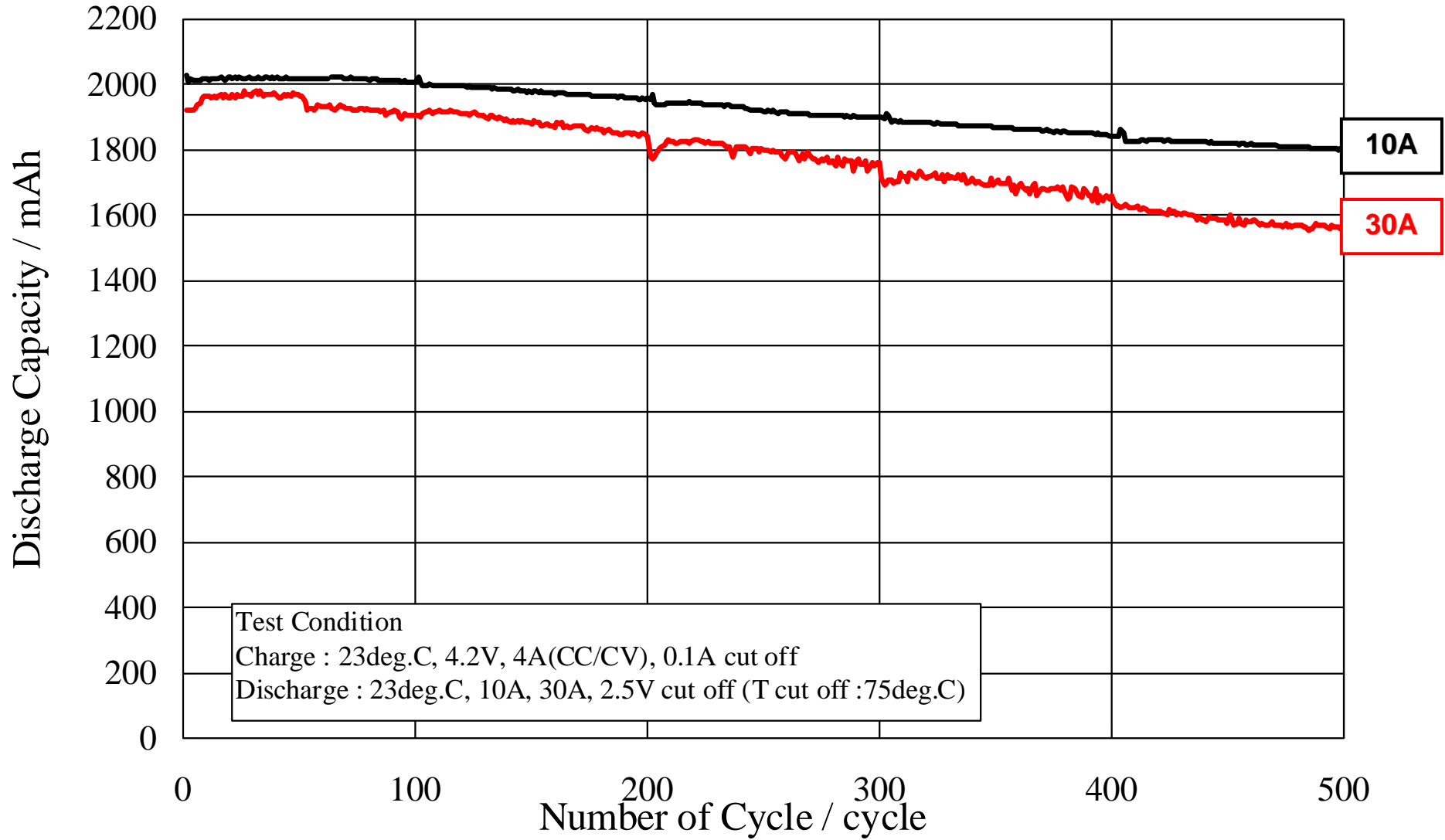
## Temperature Dependence of Discharge Capacity (US18650VTC4)



## Temperature Dependence of Discharge Curves (US18650VTC4)



# Cycle Life Performance (US18650VTC4) 10A, 30A discharge





# Dimension with Plastic Tube: US18650VTC4

