

Lithium Ion Rechargeable Battery

Technical Information

Revision 0.2
9 December 2011

Model Number	US18650V3
Cell Type	Cylindrical
Cell Number	US18650V3
Sony Code	49●●●●

Sony Energy Devices Corporation
Device Solutions Business Group / Sony Corporation

1. General

1.1 Name and Code

1.1.1 Model Number : US18650V3

1.1.2 Cell Name : US18650V3

1.1.3 Sony Code : 49●●●●

1.2 Cell Shape and Weight

1.2.1 Cell Shape : Cylindrical

1.2.2 Size (with plastic tube) : Diameter 18.35mm max
Length 65.10mm max

1.2.3 Weight : 43.6g Average

1.3 Safety Regulation

▲Sony acquired UL1642.

2. Performance

at room temperature, 2.5V cut off

Nominal Capacity (0.2C discharge)	2250mAh 8.33Wh	average capacity 3.7V (average discharge voltage)
Rated Capacity (0.2C discharge)	2150mAh 7.96Wh	minimum capacity
Capacity at 1C	2137mAh 7.69Wh	average capacity
Capacity at 10A	2189mAh 7.00Wh	average capacity
Nominal Voltage	3.7V	
Internal Impedance	31.5mΩ Typ.	measured by AC1kHz
Cycle Performance	88 % of Initial capacity at 500 cycles	5A discharge

* Standard Charge Condition

Charge Method : constant current constant voltage

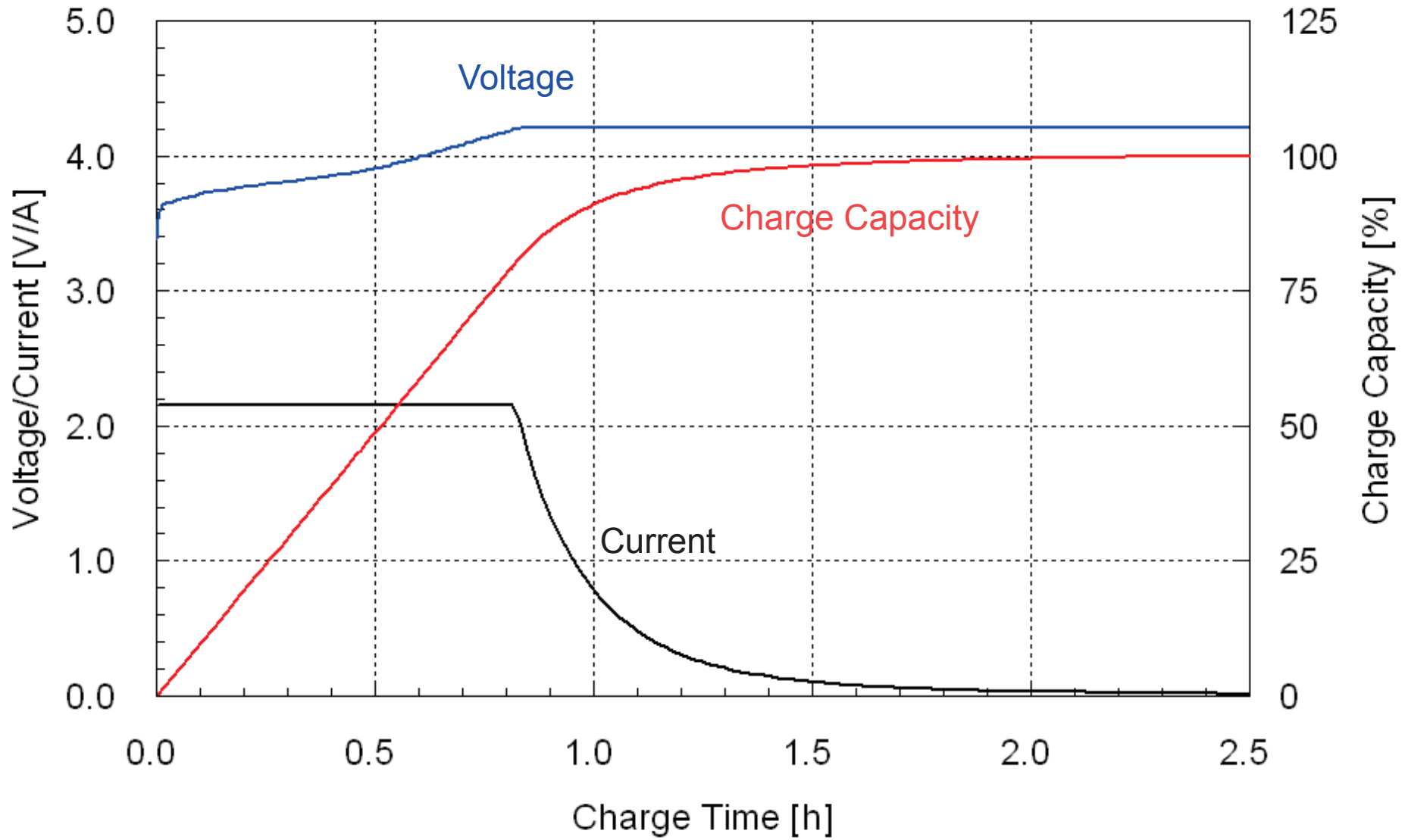
Charge Up Voltage : 4.2± 0.05V

Charge Current : 2.15A

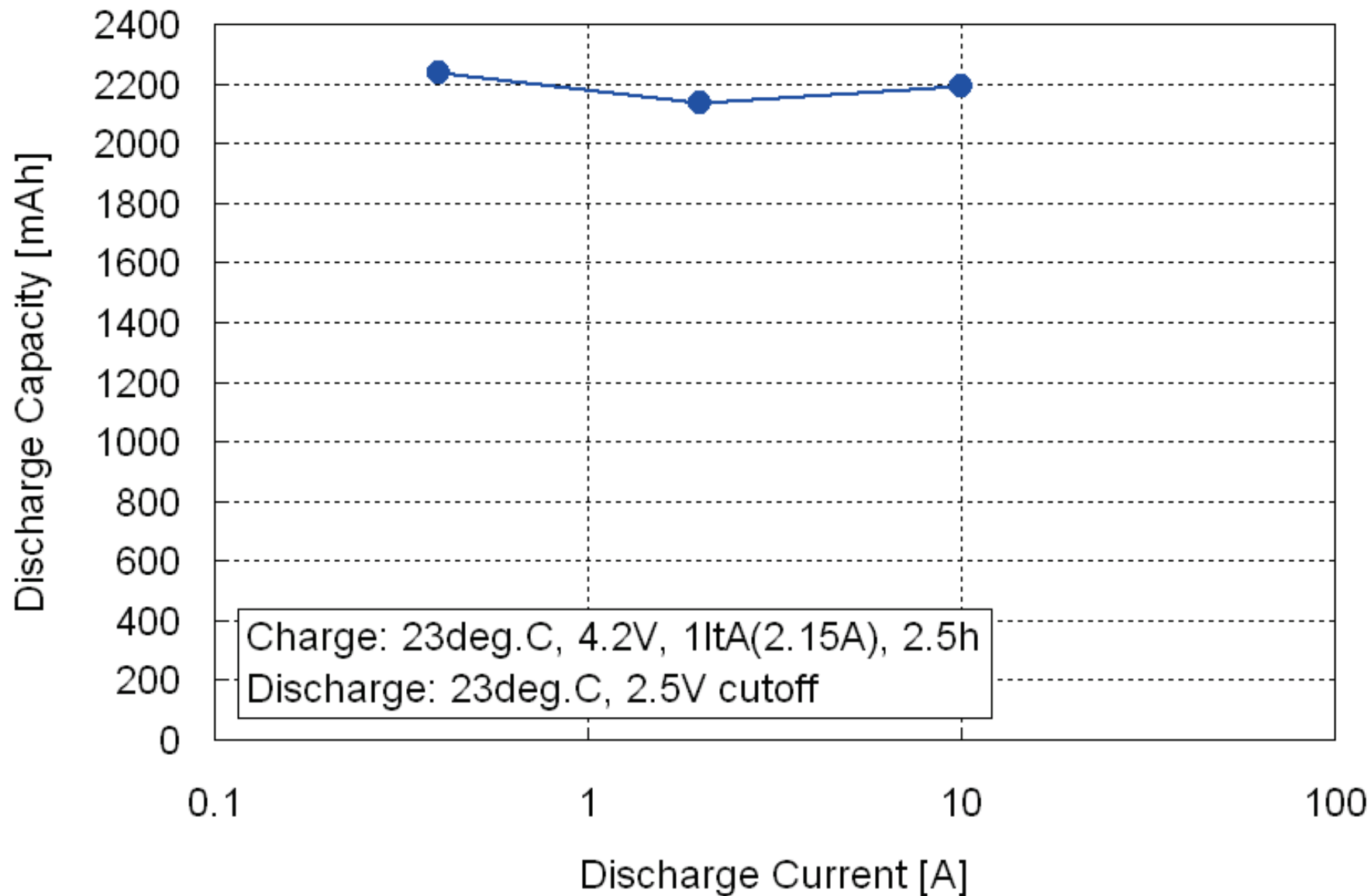
Charge Time : 2.5h

Ambiance Temperature : 23°C

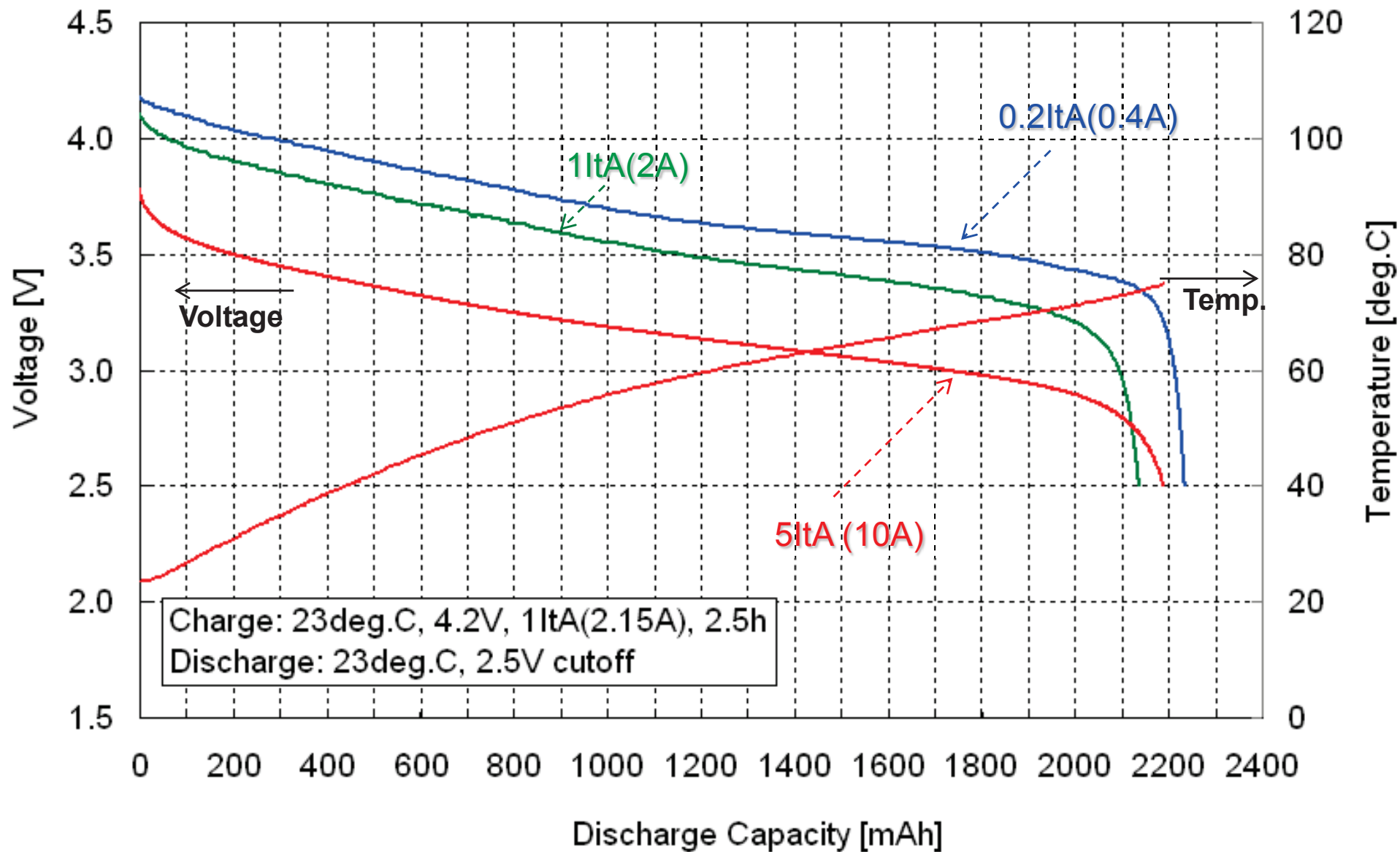
Charge Characteristics (US18650V3)



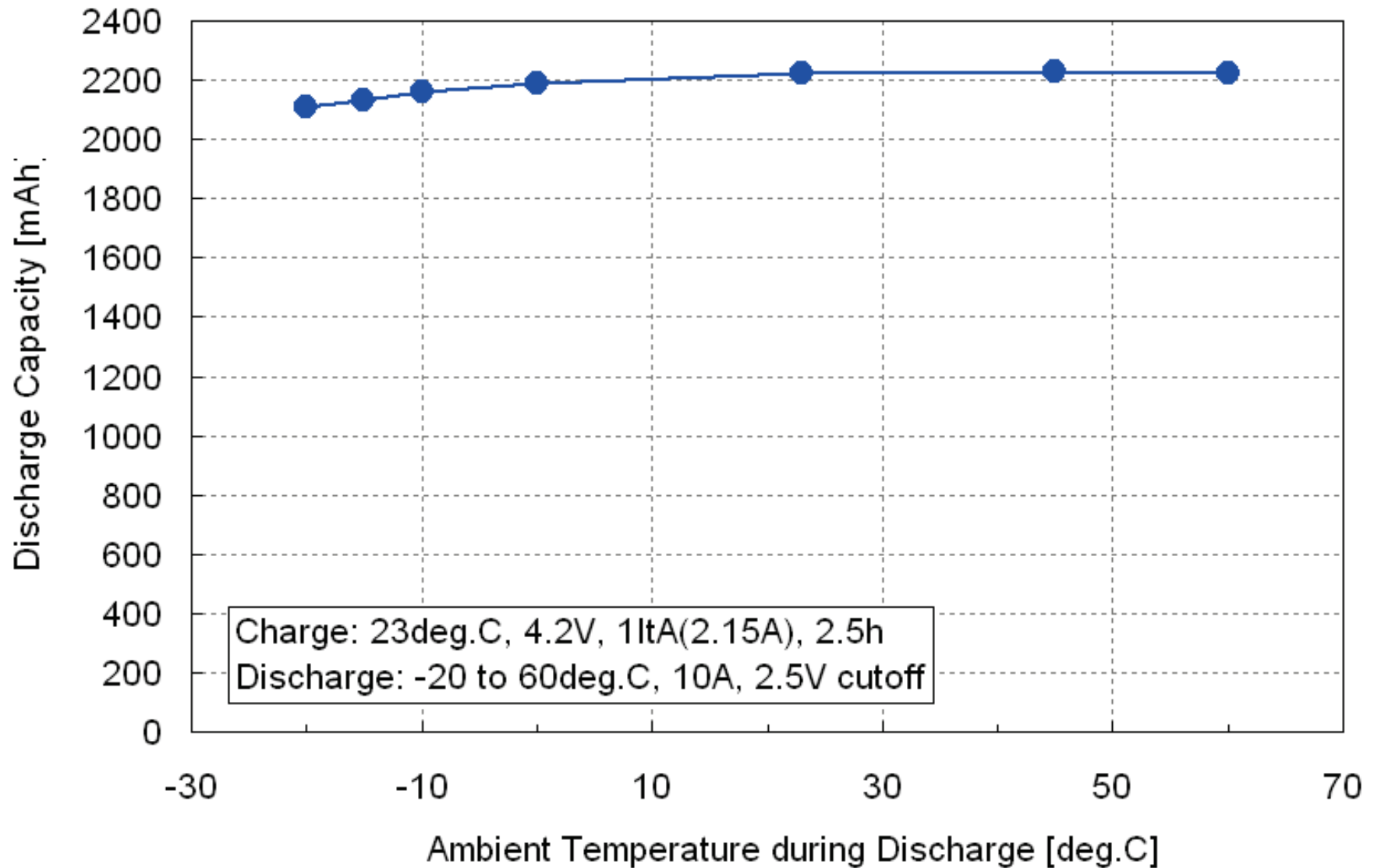
Discharge Load Characteristics (US18650V3)



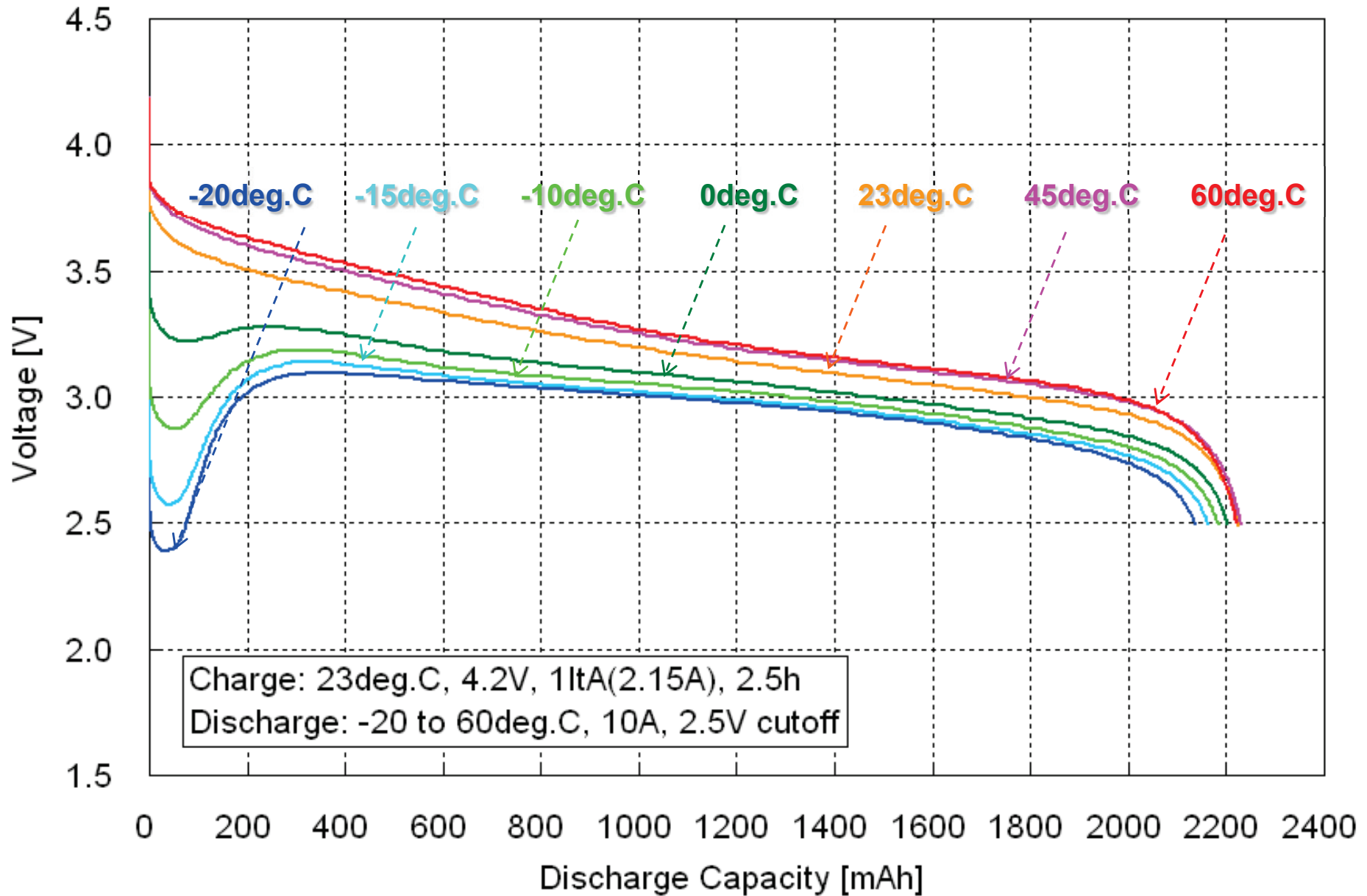
Discharge Load Characteristics (US18650V3)



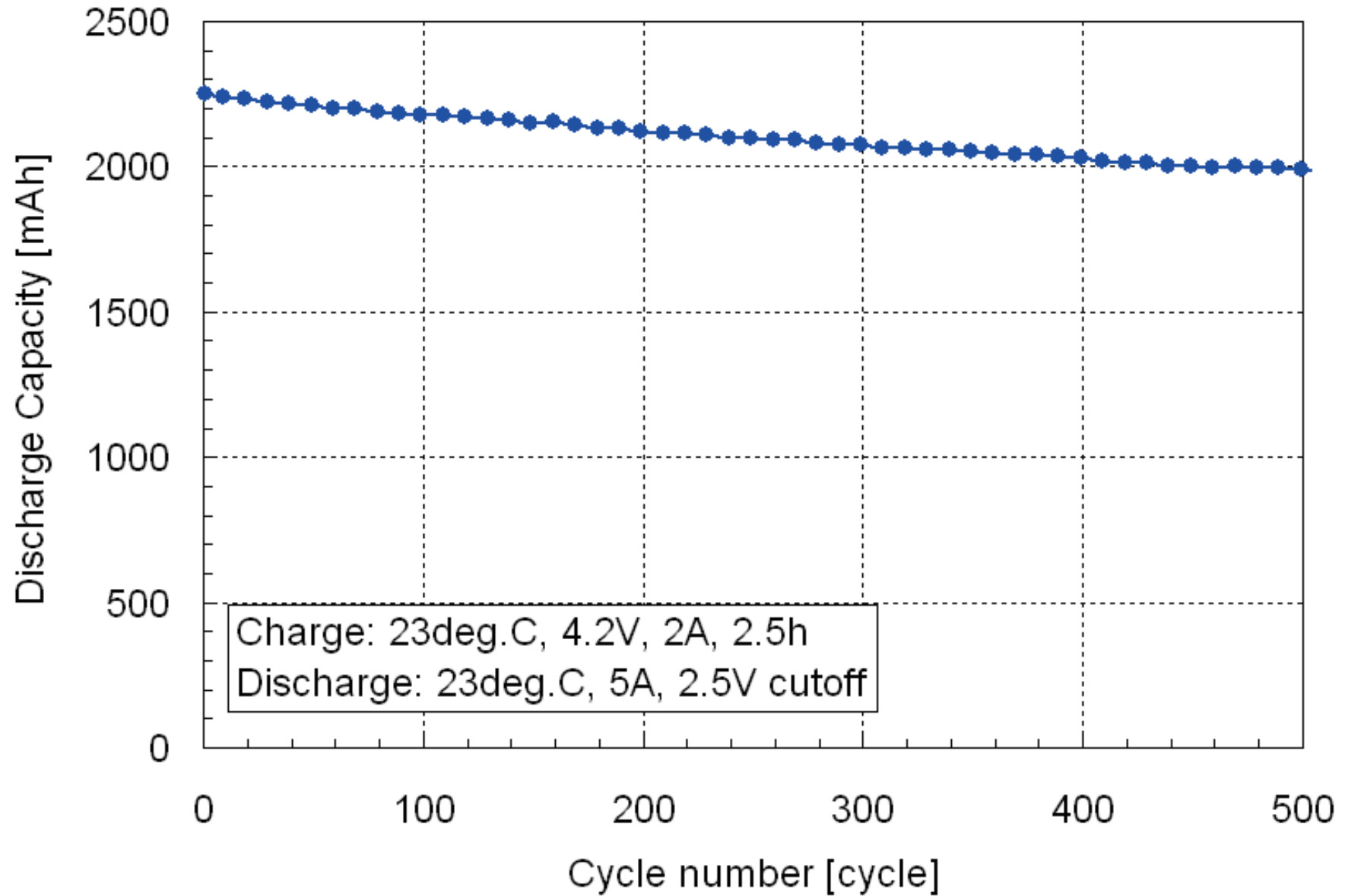
Temperature Dependence of Discharge Capacity (US18650V3)



Temperature Dependence of Discharge Curves (US18650V3)



Cycle Life Performance (US18650V3)



Dimension with Plastic Tube: US18650V3

