Lithium Ion Rechargeable Battery Technical Information

Revision 0.2 26th August 2013

Model Number Cell Type Cell Name Sony Code

US18650VTC5 Cylindrical US18650VTC5 49928190

Sony Energy Devices Corporation Device Solutions Business Group / Sony Corporation

1. General

1.1 Name and Code

 1.1.1 Model Number
 : US18650VTC5

 1.1.2 Cell Name
 : US18650VTC5

 1.1.3 Sony Code
 : 49928190

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 : 44.3g Average

1.3 Safety Regulation

Sony will acquire UL1642.

2. Performance

Nominal Capacity (0.2C discharge)	2600mAh 9.36Wh	average capacity 3.60V (average discharge voltage) at room temperature,2.0V cut off
Rated Capacity (0.2C discharge)	2500mAh 9.00Wh	minimum capacity at room temperature,2.0V cut off
Capacity at 1C	2563mAh 9.23Wh	average capacity at room temperature,2.5V cut off
Capacity at 10A	2577mAh 8.80Wh	average capacity at room temperature,2.5V cut off
Nominal Voltage	3.6V	
Internal Impedance	13.0mΩ Typ.	measured by AC1kHz
Cycle Performance	70% Min. of Initial capacity at 300 cycles	10A discharge at room temperature,2.5V cut off

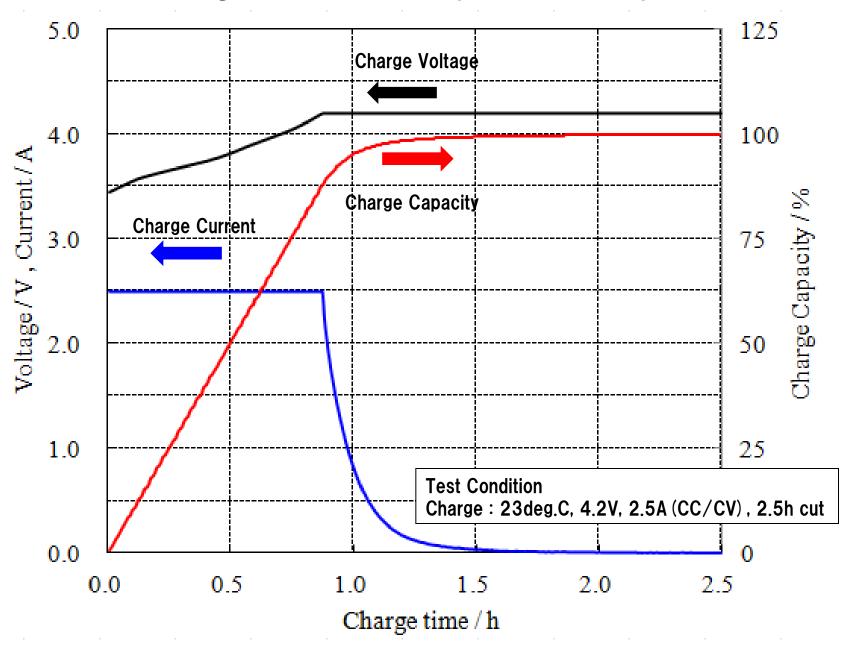
* Standard Charge Condition

Charge Method : constant current constant voltage

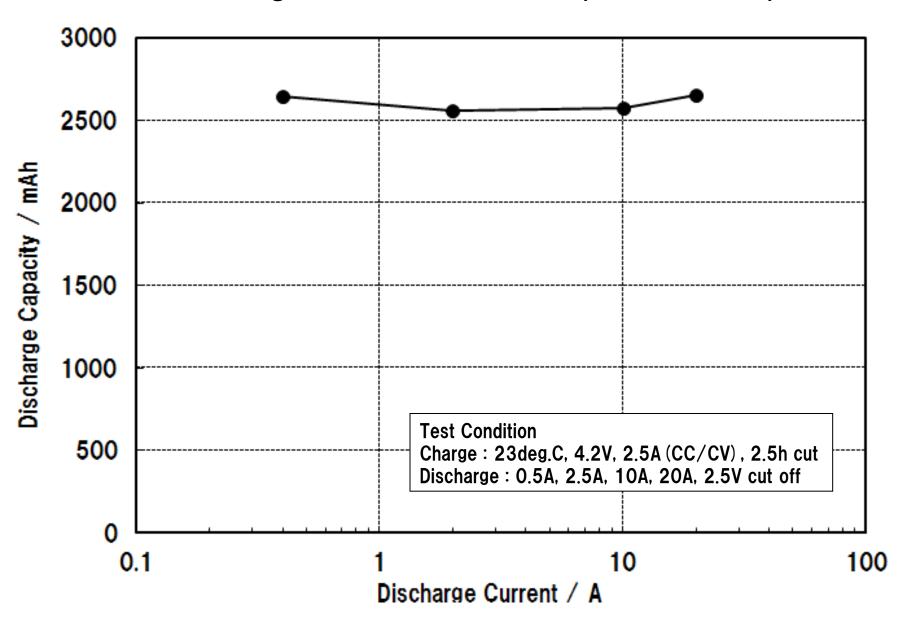
Charge Up Voltage : 4.2 ± 0.05V

Charge Current : 2.5A
Charge Time : 2.5h
Ambient Temperature : 23°C

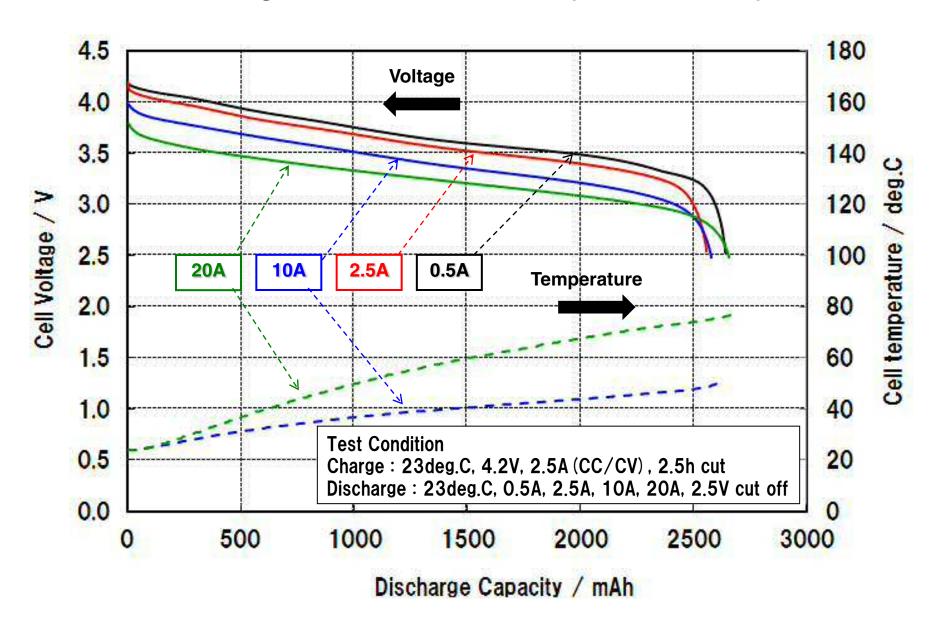
Charge Characteristics (US18650VTC5)



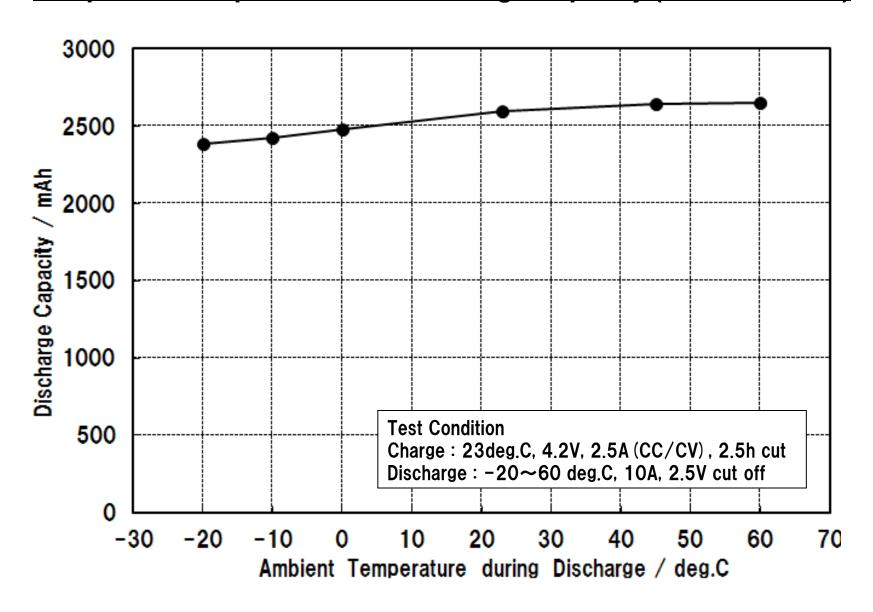
Discharge Load Characteristics (US18650VTC5)



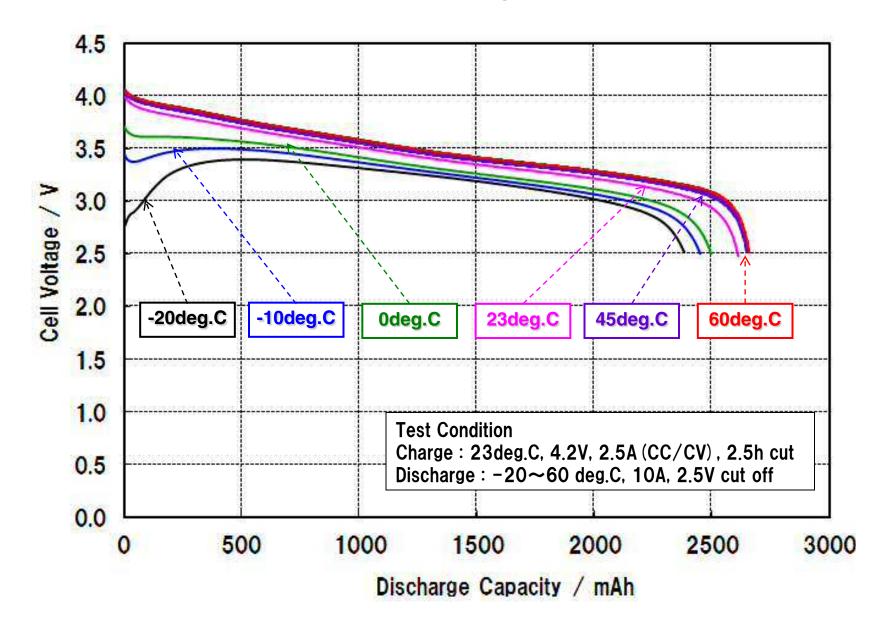
Discharge Load Characteristics (US18650VTC5)



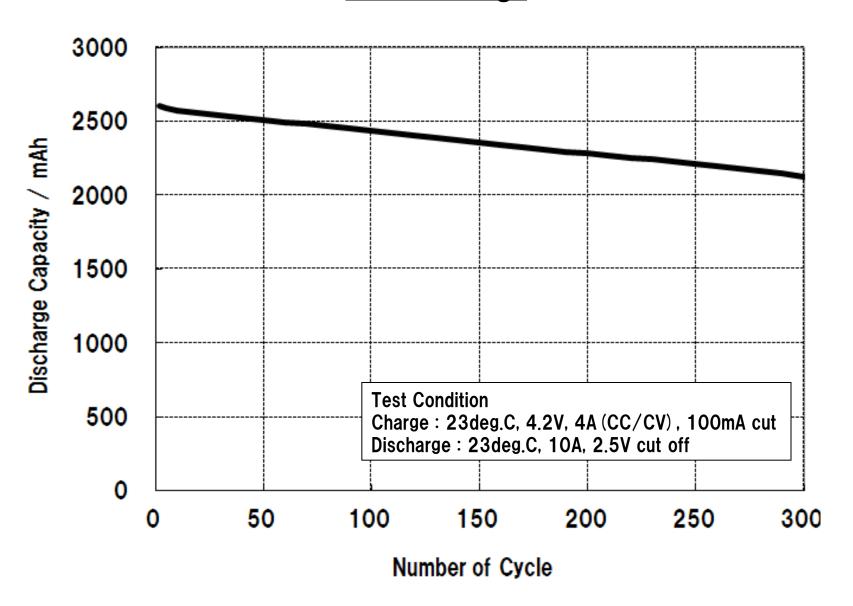
Temperature Dependence of Discharge Capacity (US18650VTC5)



<u>Temperature Dependence of Discharge Curves (US18650VTC5)</u>



Cycle Life Performance (US18650VTC5) 10A discharge



Dimension with Plastic Tube: US18650VTC5

