Lithium Ion Rechargeable Battery Technical Information

Revision 0.2
30th Jun 2015

Model Number  US18650VTC6
Cell Type     Cylindrical
Cell Name     US18650VTC6
Sony Code     49939240

Sony Energy Devices Corporation
Device Solutions Business Group / Sony Corporation
1. General

1.1 Name and Code
1.1.1 Model Number : US18650VTC6
1.1.2 Cell Name : US18650VTC6
1.1.3 Sony Code : 49939240

1.2 Cell Shape and Weight
1.2.1 Cell Shape : Cylindrical
1.2.2 Size (with plastic tube) : Diameter 18.50mm max Length 65.20mm max
1.2.3 Weight : 46.6g Average

1.3 Safety Regulation
: Sony acquired UL1642.
: Sony acquired Korean regulation.
: Sony acquired Taiwan Commodity Inspection Act(CNS 15364)

2. Performance

<table>
<thead>
<tr>
<th>Nominal Capacity at 0.2ItA</th>
<th>3120mAh 11.23Wh</th>
<th>discharge 2.0V cut off at 23°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Capacity at 0.2ItA</td>
<td>3000mAh 10.8Wh</td>
<td>discharge 2.0V cut off at 23°C</td>
</tr>
<tr>
<td>Capacity at 1ItA (typ.)</td>
<td>2850mAh 10.12Wh</td>
<td>discharge 2.5V cut off at 23°C</td>
</tr>
<tr>
<td>Capacity at 10A (typ.)</td>
<td>2700mAh 9.18Wh</td>
<td>discharge 2.5V cut off at 23°C</td>
</tr>
<tr>
<td>Nominal Voltage</td>
<td>3.6V</td>
<td></td>
</tr>
<tr>
<td>Internal Impedance</td>
<td>13mΩ Typ.</td>
<td>measured by AC1kHz</td>
</tr>
<tr>
<td>Cycle Performance</td>
<td>53% Min. Initial capacity at 300 cycles</td>
<td>10A discharge</td>
</tr>
</tbody>
</table>

* Standard Charge Condition
  Charge Method : constant current constant voltage
  Charge Up Voltage : 4.2 ± 0.05V
  Charge Current : 3.0A
  Charge Time : 2.5h
  Ambient Temperature : 23°C
Discharge Load Characteristics (US18650VTC6)

Test Condition
Charge: 23°C, 4.2V, 3.0A (CC/CV), 2.5h cut
Discharge: 23°C, 0.6A, 3.0A, 10A, 20A, 2.5V cut off

Voltage [V]

Temperature [°C]

Discharge Capacity [mAh]
Temperature Dependence of Discharge Capacity (US18650VTC6)

Test Condition
Charge: 23deg.C, 4.2V, 2.5A(CC/CV), 2.5h cut
Discharge: -20~60deg.C, 10A, 2.5V cut
Temperature Dependence of Discharge Curves (US18650VTC6)

Test Condition
Charge: 23 deg. C, 4.2V, 3.0A (CC/CV), 2.5h cut
Discharge: -20 to 60 deg. C, 10A, 2.5V cut off
Cycle Life Performance (US18650VTC6)
10A discharge

Test Condition
Charge: 23°C, 4.2V, 4A (CC/CV), 100mA cut
Discharge: 23°C, 10A, 2.5V cut off, R 30°C cut
Dimension with Plastic Tube: US18650VTC6

ϕ18.35 +0.15 -0.20 (Diameter of Top)

ϕ7.4

65.0 +0.2 -0.2

ϕ18.35 +0.15 -0.2 (Diameter of Body)

(0.2)