Lithium Ion Rechargeable Battery
Technical Information

Revision 0.1
29th June 2012

Model Number: US18650VTC4
Cell Type: Cylindrical
Cell Name: US18650VTC4
Sony Code: 49922780

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

<table>
<thead>
<tr>
<th></th>
<th>at room temperature, 2.5V cut off</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Capacity</td>
<td>2100mAh</td>
</tr>
<tr>
<td>(0.2C discharge)</td>
<td>7.77Wh</td>
</tr>
<tr>
<td>Average capacity</td>
<td>3.70V (average discharge voltage)</td>
</tr>
<tr>
<td>Rated Capacity</td>
<td>2000mAh</td>
</tr>
<tr>
<td>(0.2C discharge)</td>
<td>7.40Wh</td>
</tr>
<tr>
<td>Minimum capacity</td>
<td></td>
</tr>
<tr>
<td>Capacity at 1C</td>
<td>2002mAh</td>
</tr>
<tr>
<td>7.30Wh</td>
<td></td>
</tr>
<tr>
<td>Average capacity</td>
<td></td>
</tr>
<tr>
<td>Capacity at 10A</td>
<td>2035mAh</td>
</tr>
<tr>
<td>7.01Wh</td>
<td></td>
</tr>
<tr>
<td>Average capacity</td>
<td></td>
</tr>
<tr>
<td>Nominal Voltage</td>
<td>3.7V</td>
</tr>
<tr>
<td>Internal Impedance</td>
<td>12mΩ Typ.</td>
</tr>
<tr>
<td>measured by AC1kHz</td>
<td></td>
</tr>
<tr>
<td>Cycle Performance</td>
<td>60% Min. of Initial capacity at 500 cycles</td>
</tr>
<tr>
<td>10A discharge</td>
<td></td>
</tr>
</tbody>
</table>

* 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)

Test Condition
Charge: 23°C, 4.2V, 2A (CC/CV), 2.5h
Discharge Load Characteristics (US18650VTC4)

Test Condition
Charge: 23deg.C, 4.2V, 2A(CC/CV), 2.5h
Discharge: 23deg.C, 0.4A, 2A, 10A, 20A, 30A, 2.5V cut off
Discharge Load Characteristics (US18650VTC4)

Test Condition
Charge: 23deg.C, 4.2V, 2A (CC/CV), 2.5h
Discharge: 23deg.C, 0.4A, 2A, 10A, 20A, 30A, 2.5V cut off
Temperature Dependence of Discharge Capacity (US18650VTC4)

Test Condition
Charge: 23deg.C, 4.2V, 2A(CC/CV), 2.5h
Discharge: -20~60deg.C, 10A, 2.5V cut off
Temperature Dependence of Discharge Curves (US18650VTC4)

Test Condition
Charge : 23deg.C, 4.2V, 2A(CC/CV), 2.5h
Discharge : -20~60deg.C, 10A, 2.5V cut off
Cycle Life Performance (US18650VTC4)
10A, 30A discharge

Test Condition
Charge: 23deg.C, 4.2V, 4A(CC/CV), 0.1A cut off
Discharge: 23deg.C, 10A, 30A, 2.5V cut off (T cut off : 75deg.C)
Dimension with Plastic Tube: US18650VTC4

- Top Diameter: 18.2 ± 0.15
- Body Diameter: 18.2 ± 0.15
- Length: 65.0 ± 0.2