

Rechargeable Battery

The Professional Cylindrical Li-Ion Battery Manufacturer

High Energy Lithium Ion Rechargeable Cylindrical

1. General

1.1 Cell Name: 18650

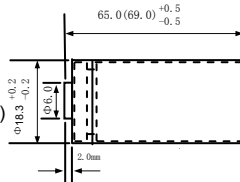
1.2 Size and Weight

1.2.1 Cell Shape: Cylindrical

1.2.2 Size

Diameter: 18.5 mm max
 Length: 65.5 mm max (WO PCM)
 Length: 69.5 mm max (With PCM)

1.2.3 Weight : 37.0g Average



1.3 Safety Regulation

In this specification reference is made to:

GB/T18287-2000, UL1642

2. performance

Nominal Capacity (1.0C Discharge)	1200mAh 4.44Wh
Minimum Capacity	1140mAh (0.2C Discharge)
Internal Impedance	≤ 120mΩ(no PTC)
Discharge Cut-off Voltage	3.0V
Max Charge Voltage	4.20±0.05V
Standard Charge Current	0.2C
Rapid Charge Current	0.4C
Standard Discharge Current	0.2C
Rapid Discharge Current	0.5C
Max discharge current	0.7C

Important:

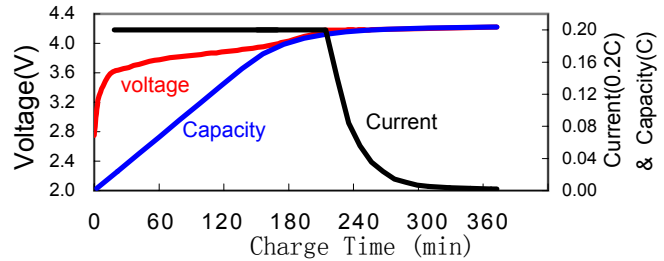
Every lithium ion battery pack must have a safety board which monitors the charge and discharge of the pack, and prevents dangerous things from happening.

include the following:

- * Reverse polarity protection.
- * must not be charged when temperature is lower than 0° C or above 45° C.
- * Charge current must not be too high, typically below 0.4 C.
- * Discharge current protection to prevent damage due to short circuits.
- * Charge voltage--a permanent fuse opens if too much voltage is applied to the battery terminals
- * Overcharge protection--stops charge when voltage per cell rises above 4.20 volts.
- * Overdischarge protection--stops discharge when battery voltage falls below 3.0 volts per cell
- * A fuse opens if the battery is ever exposed to temperatures above 90° C.

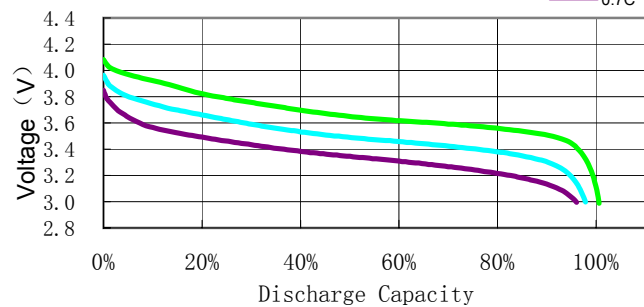
Charge Characteristics

Measurement temperature:25°C
 Charge:CC-CV:0.2C-4.2V



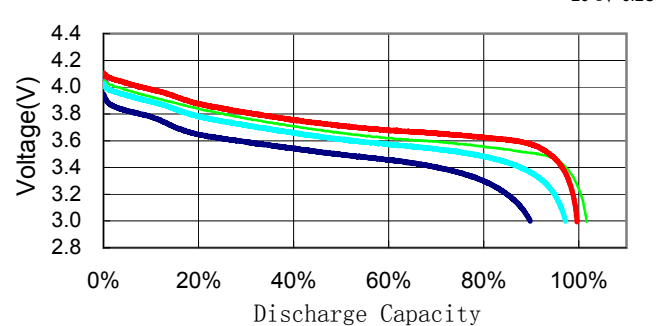
Rate Discharge Characteristics

Charge:CC-CV:0.2C-4.2V at25°C
 Discharge:CC:variable Current(E.V:3.0V)



Discharge Temperature Characteristics

Charge:CC-CV:0.2C-4.2V at25°C
 Discharge:CC:variable Current(E.V:3.0V)



Cycle Characteristics

Measurement temperature:25°C
 Cycle condition:charge:CC-CV:0.2C-4.2V
 Discharge:CC:0.2C(E.V:3.0V)

