Rechargeable Battery

EcoFire

The Professional Cylindrical Li-Ion Battery Manufacturer

Lithium Ion Rechargeable Cylindrical

1. General

1.1 Cell Name: 18650

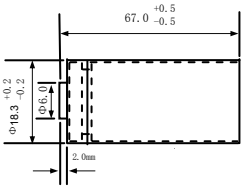
1.2 Size and Weight

1.2.1 Cell Shape: Cylindrical

1.2.2 Size

Diameter: 18.3 mm max

Length: 65.0 mm max



1.2.3 Weight : 36.0g 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	1080mAh (0.2C Discharge)
Internal Impedance	≤ 80mΩ(no PTC)
Discharge Cut-off Voltage	3.0V
Max Charge Voltage	4.20±0.05V
Standard Charge Current	0.5C
Rapid Charge Current	0.7C
Standard Discharge Current	0.2C
Rapid Disharge Current	0.5C
Max diacharge current	1.0C

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.

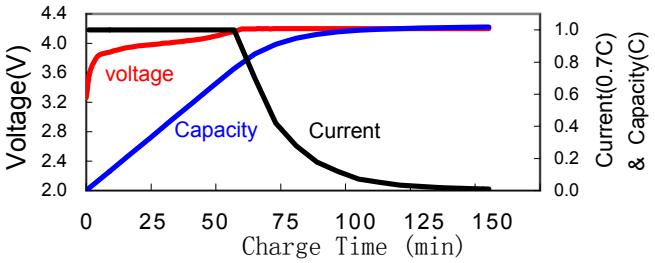
include the following:

* 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 0.7 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℃

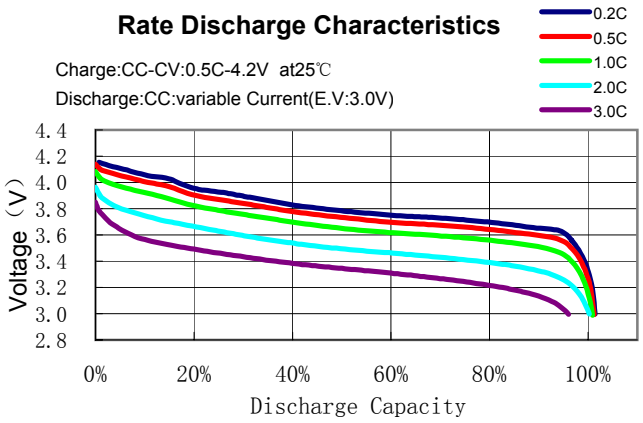
Charge:CC-CV:0.7C-4.2V



Rate Discharge Characteristics

Charge:CC-CV:0.5C-4.2V at25℃

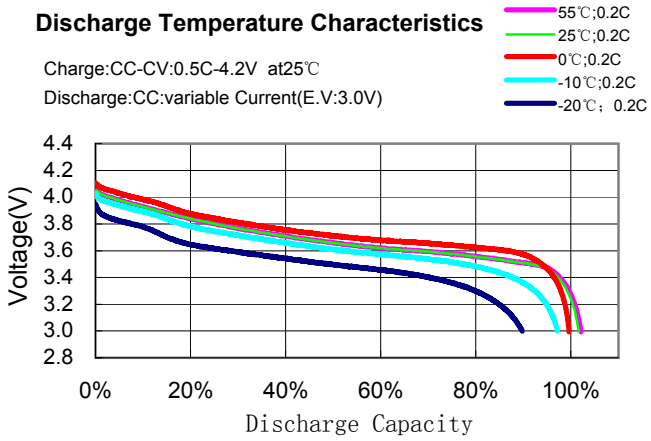
Discharge:CC:variable Current(E.V:3.0V)



Discharge Temperature Characteristics

Charge:CC-CV:0.5C-4.2V at25℃

Discharge:CC:variable Current(E.V:3.0V)



Cycle Characteristics

Measurement temperature:25℃

Cycle condition:charge:CC-CV:0.5C-4.2V

Discharge:CC:0.2C(E.V:3.0V)