

Lithium Ion Manganese Cell

For all applications like pedelecs, scooters, gardening tools, household applications etc.

1. General

1.1 Scope

This specification shall be applied to lithium ion manganese rechargeable battery cells named BM18650Z3.

BM18650Z3 utilized lithium ion manganese cathode material. It brings high-power combined with high-energy and longlife performance characteristic.

1.2 Name and Code

- 1.2.1 Cell Name : BM18650Z
- 1.2.2 Model Number: BM18650Z3

1.3 Cell Shape and Weight

- 1.3.1 Cell Shape: Cylindrical
- 1.3.2 Size (with plastic tube) :
 - Diameter: 18.35 mm max.
 - Length: 65.1 mm max.
- 1.3.3 Weight: 43.6 g average

1.4 Safety Regulation

UL 1642 acquired

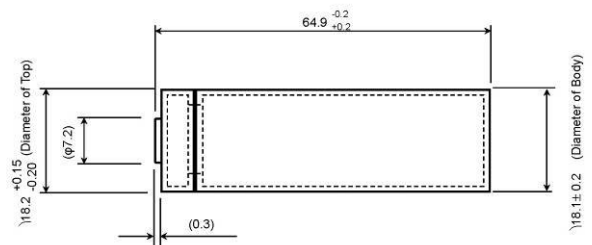
2. Performance

at room temperature, 2.5V cut off

Nominal Capacity (0.2ItA discharge)	2250mAh	
Rated Capacity (0.2ItA discharge)	2150mAh	minimum capacity
Capacity at (1C discharge)	2137mAh	average capacity
Capacity at (10A discharge)	2189mAh	average capacity
Nominal Voltage	3.7V	
Internal Impedance	31.5mΩ Typ.	average measured by AC1kHz



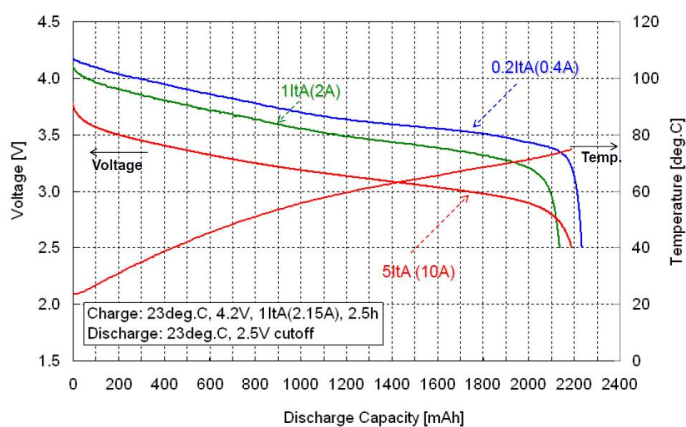
Cell Size (with plastic tube)



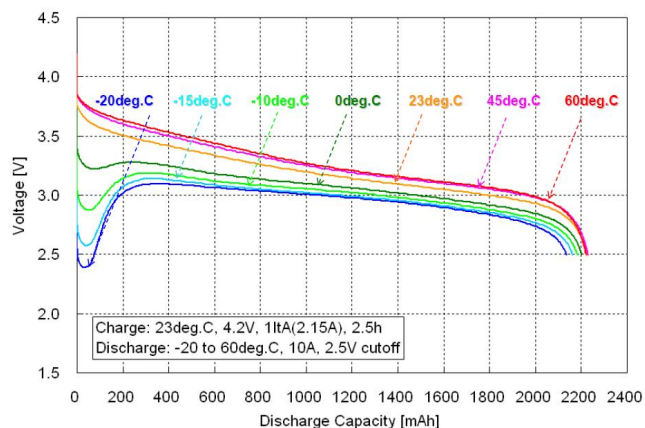
* Standard Charge Condition

Charge Method	: constant current, constant voltage
Charge Up Voltage	: 4.2±0.05V
Charge Current	: 2.15A
Charge Time	: 2.5h
Ambiance Temperature	: 23 °C

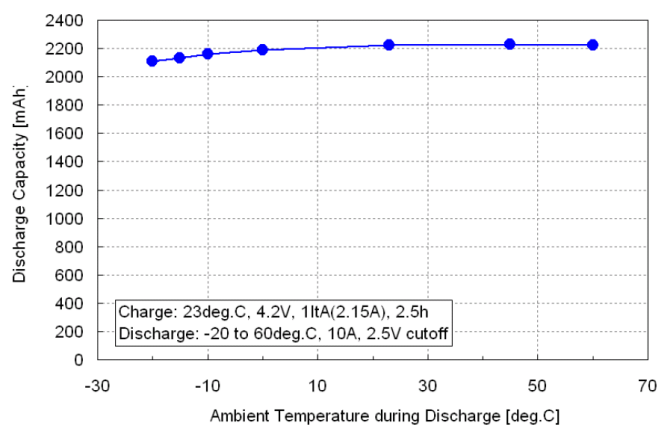
Discharge Curves



Temperature Dependence of Discharge Curves



Discharge Load Characteristics



Cycle Life Characteristics

