

# 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

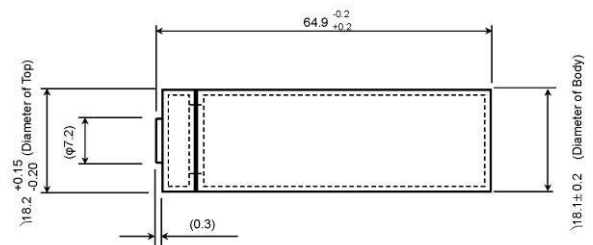
## 2. Performance

at room temperature, 2.5V cut off

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



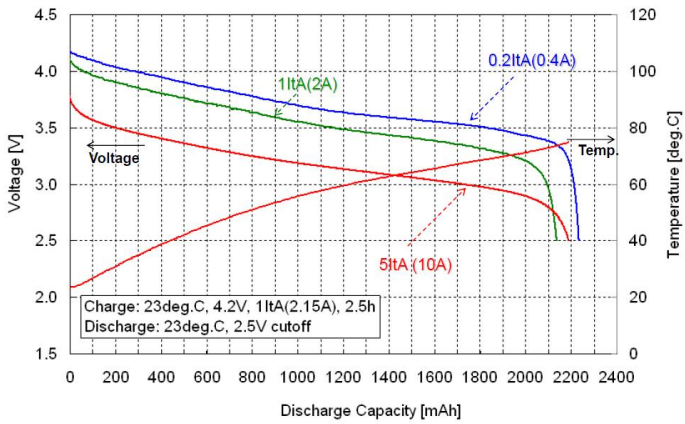
### Cell Size (with plastic tube)



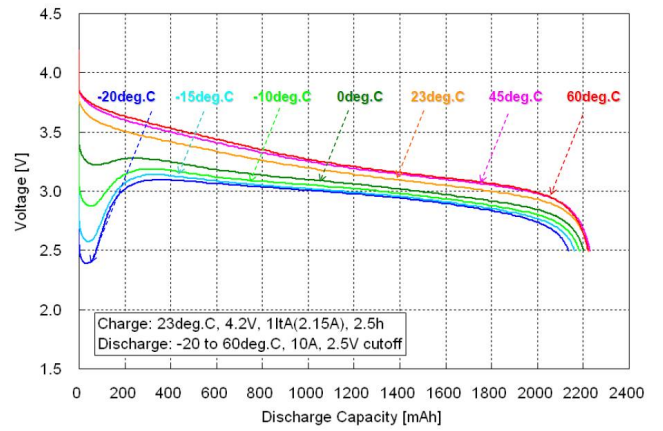
\* Standard Charge Condition

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

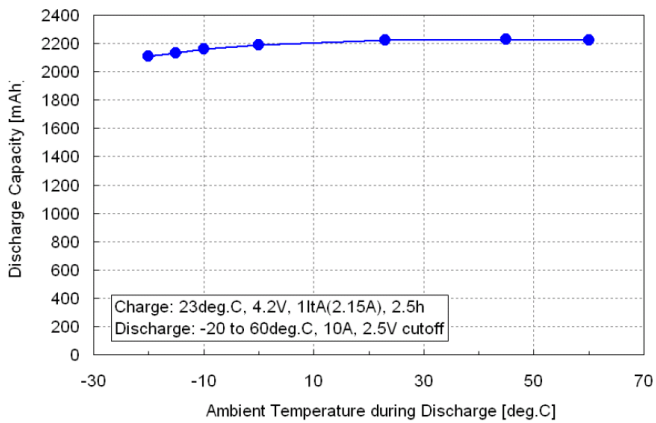
### Discharge Curves



### Temperature Dependence of Discharge Curves



### Discharge Load Characteristics



### Cycle Life Characteristics

