

High Power Lithium Manganese Cell

Lithium Ion Manganese Cells for high current discharge.

For all applications like wheelchairs, e-bikes, golfcaddies, etc.

1. General

1.1 Scope

1.2 Name and Code

1.2.1 Cell Name : BM18650Z

1.2.2 Model Number: BM18650Z1

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: 65.10 mm max

1.3.3 Weight: 44.5 g Average



1.4 Safety Regulation

UL tested and approved

2. Performance

at room temperature, 3.0V cut off

Nominal Capacity (0.2C discharge)	1600mAh 5.98Wh	average capacity 3.74V (average discharge voltage)
Rated Capacity (0.2C discharge)	1500mAh 5.64Wh	minimum capacity
Capacity at 0.2C	1500mAh 5.65Wh	average capacity
Capacity at 10C	1450mAh 4.95Wh	average capacity
Nominal Voltage	3.6V	
Internal Impedance	30mΩ Typ.	measured by AC1kHz
Cycle Performance	80 % Min. of Initial capacity at 300 cycles	1.5A discharge

* Standard Charge Condition

Charge Method : constant current, constant voltage

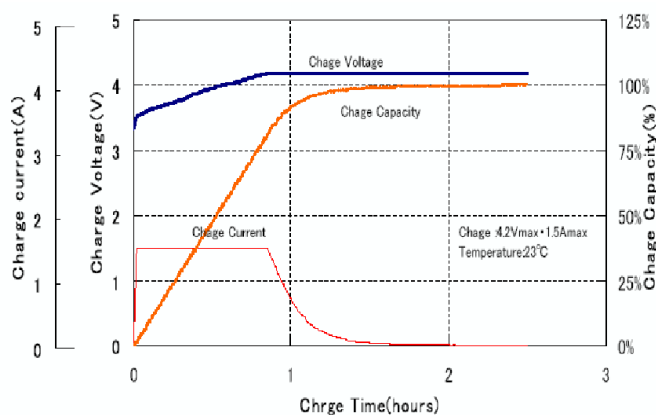
Charge Up Voltage : 4.2±0.05V

Charge Current : 1A

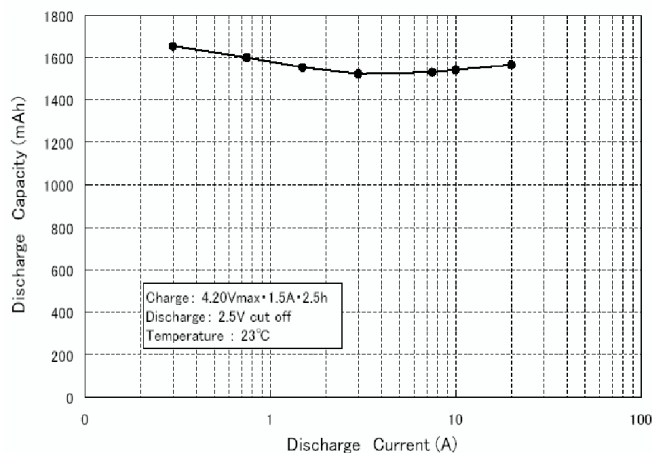
Charge Time : 3h

Ambiance Temperature : 23°C

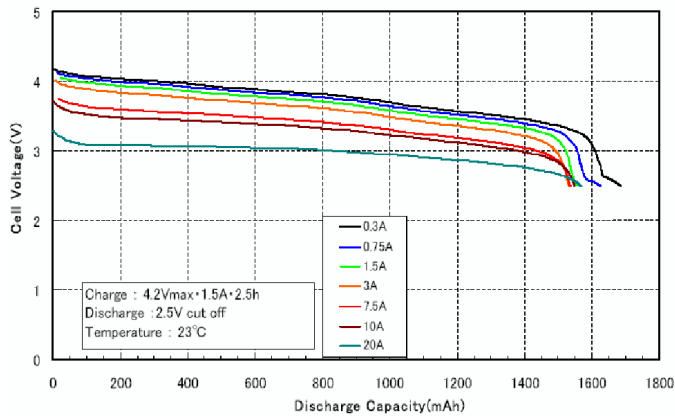
Charge Characteristics (BM18650Z1)



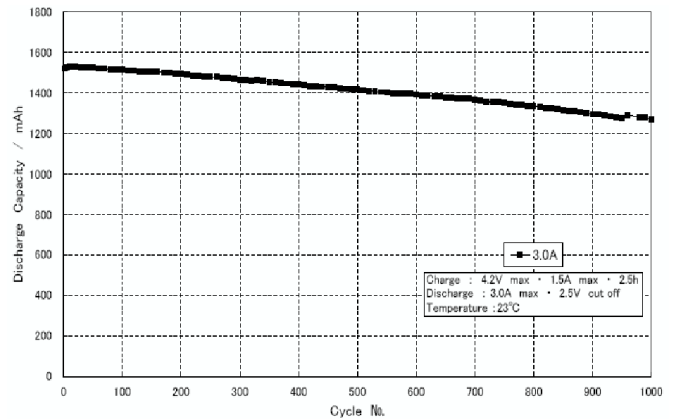
Discharge Load Characteristics (BM18650Z1)



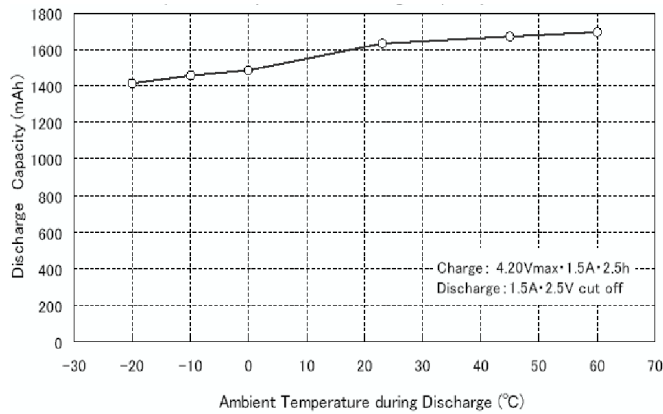
Discharge Load Characteristics (BM18650Z1)



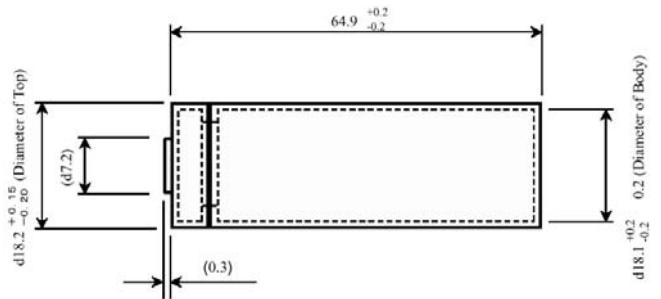
Cycle Life (BM18650Z1)



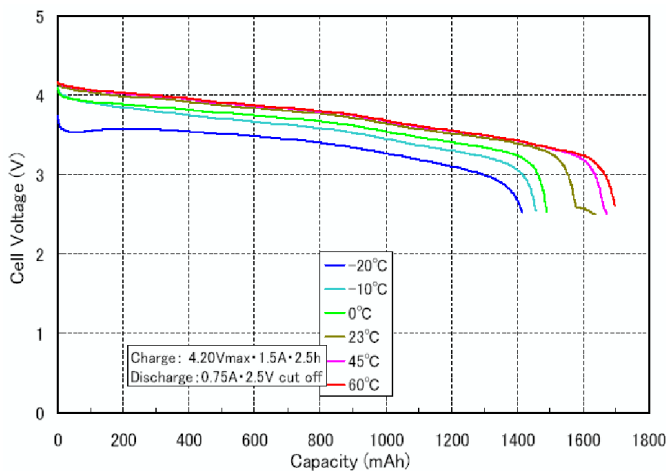
Temperature dependence of discharge Capacity (BM18650Z1)



Cell Size (with plastic tube)



Temperature dependence of discharge Curves (BM18650Z1)



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