

# Primary Lithium Battery

## CR123ASE

3.0V [Li-MnO<sub>2</sub>]

123A-size bobbin cell



### BENEFITS

- High Voltage Response, Stable During Most of the Lifetime of the Application
- Energy Density up to 830Wh/L
- Wide Operating Temperature Range (-40 °C ~+85 °C)
- Low Self-discharge Rate (less than 1% per year after 1 year of storage at +25 °C)

### KEY FEATURES

- Optimized Battery Structure, Full Discharge Capacity
- Long Endurance
- No Passivation
- GB 8897.4-2008、IEC 60086.4:2014 and RoHS

### MAIN APPLICATIONS

- Security System
- Smart Metering
- RFID and Tracking System
- Wireless Transmitting
- Smart Home Devices
- Military Devices

### References Data

#### Electrical characteristics

**Open circuit voltage (at 23±2°C)** **≥3.10V**

**Nominal capacity** **1800mAh**

(At +25°C, battery discharged at continuous current 1mA until voltage reaches cut-off voltage 2.0V. The capacity can vary at different temperature, discharge current or cut-off voltage.)

**Maximum continuous current** **10mA**

(At +25°C, 2.0V cut-off, battery discharged for minimum 50% of rated capacity.)

**Maximum pulse discharge current** **100mA**

(At +25°C, 2.0V cut-off, battery discharged for minimum 50% of rated capacity with max pulse for 3 seconds after 27 seconds break. The discharged capacity may vary according to the pulse characteristics, the temperature, and the cell's previous history. Fitting the cell with a capacitor may be recommended in severe conditions, consult HCB.)

**Storage (recommended)** **≤+30°C**

(For more severe conditions, consult HCB) **≤75%RH**

**Operating temperature range** **-40°C~+85°C**

(Operation above ambient Temperature may lead to reduced capacity and lower voltage readings at the beginning of pulses. Consult HCB.)

### HCB BATTERY CO., LTD

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No.: HCB-MKT.PM-S[V2.0 2018 02]

# Primary Lithium Battery CR123ASE

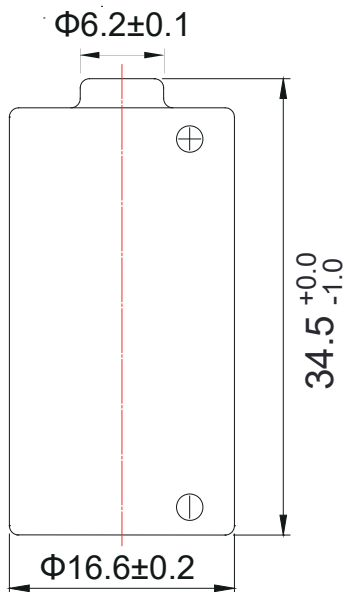


3.0V [Li-MnO<sub>2</sub>]  
123A-size bobbin cell

## Physical characteristics

<b>Diameter</b>	<b>16.6±0.2mm</b>
<b>Typical weight</b>	<b>22.0g</b>
<b>Li metal content</b>	<b>0.56g</b>

MSDS as per request  
Diode (1N4007, 1N5819)  
PTC (SRS175...)  
Tag, wire, connector, etc. available

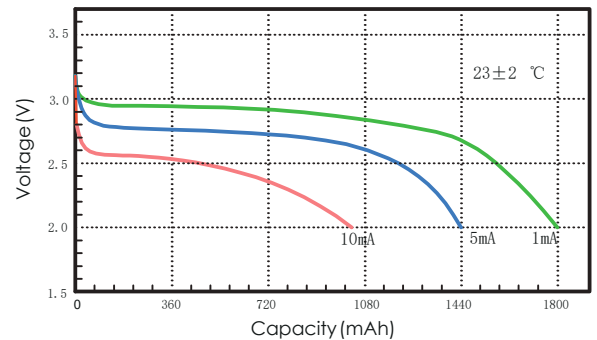


Dimensions in mm (GB1804-m)

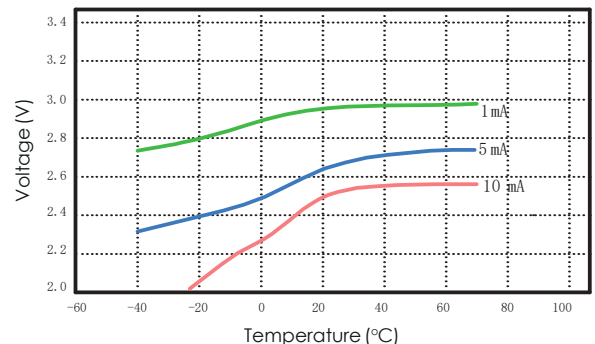
## WARNING:

- Do Not Short Circuit
- Do Not Recharge
- Do Not Puncture
- Do Not Crush
- Do Not Dismantle
- Do Not Incinerate
- Do Not Mix New and Used Batteries
- Do Not Heat Above 100°C

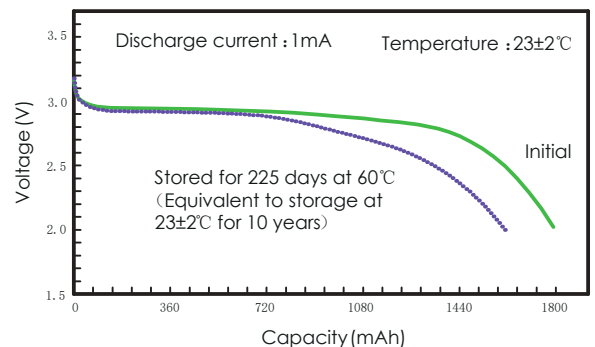
1. Typical discharge profiles at 23±2°C  
(at mid-discharge)



2. Typical discharge profiles with different temperature  
(at discharge stable phase)



3. Storage characteristics



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