



# Primary Lithium Battery

## ER18505M

3.6V Lithium-thionyl chloride[Li-SOCl<sub>2</sub>]

Fat A-size Spiral cell



### Benefits

- High and Stable Voltage
- Energy Density up to 899Wh/L
- Long Shelf Life (less than 1% per year after 1 year of storage at +25℃)
- Wide Operating Temperature (-55℃~+85℃)

### Key Features

- Stainless Steel Container
- Glass to Metal Hermetic Sealing
- Non-flammable Electrolyte
- CE, UL(MH10060) and UN38.3 Certified

### Main Applications

- Security System
- Smart Metering
- RFID / IoT System
- Wireless Transmitting
- Smart Home Devices
- Military Devices

### Electrical Characteristics

Open circuit voltage (at 25℃) ≥3.65V

Nominal capacity 3500mAh  
(At +25℃, battery discharged at continuous current 6mA until voltage reaches cut-off voltage 2.0V. The capacity can vary at different temperature, discharge current or cut-off voltage.)

Maximum continuous current 600mA  
(At +25℃, 2.0V cut-off, battery discharged for minimum 50% of nominal capacity.)

Maximum pulse discharge current 1200mA  
(At +25℃, 2.0V cut-off, battery discharged for minimum 50% of nominal 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℃  
(For more severe conditions, consult HCB) ≤75%RH

Operating temperature range -55℃~+85℃  
(Operation above ambient temperature may lead to reduced capacity and lower voltage readings at the beginning of pulses. consult HCB.)

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**HCB**  
昊诚锂电

## Physical Characteristics

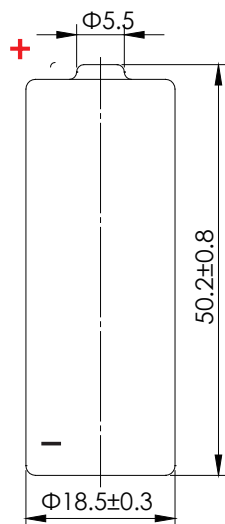
Diameter	18.5±0.3mm
Height	50.2±0.8mm
Typical weight	32.0g
Lithium metal content	1.01g

MSDS as per request

Diode (1N4007, 1N5819)

PTC (SRS175...)

Tag, wire, connector, etc. available



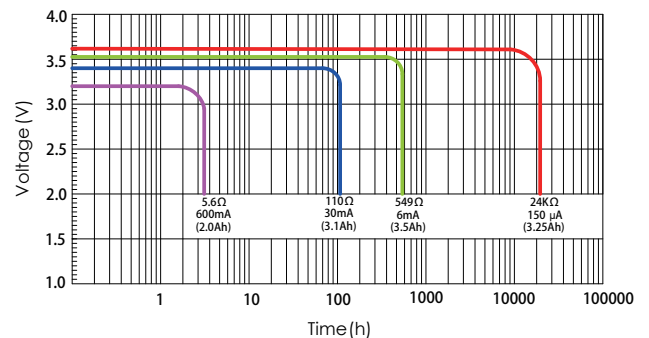
Dimensions in mm

## WARNING:

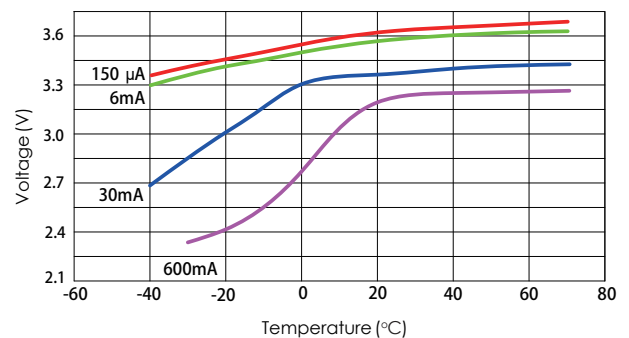
- Do not short circuit
- Do not recharge
- Do not puncture
- Do not crush
- Do not dismantle
- Do not incinerate
- Do not mix new and used batteries
- Do not heat above 100°C

This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specifications are subject to modification without notice. Contact HCB for the latest information

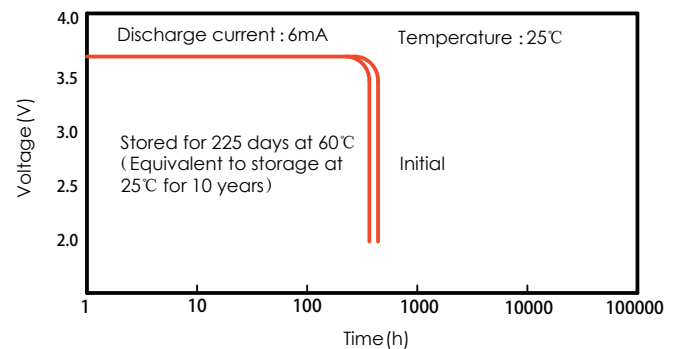
1. Typical discharge profiles at 25°C  
(at the mid-discharge)



2. Voltage plateau versus Current and Temperature  
(at the mid-discharge)



3. Storage characteristics



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Version No.: HCB-MKT. PM-5[V2.0 2023 05]