

# **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  $+25^{\circ}C$ )
- Wide Operating Temperature  $(-55^{\circ}C \sim +85^{\circ}C)$

## **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°C)

#### **Nominal capacity**

≥3.65V

### 3500mAh (At +25°C, 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

1200mA

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

#### Maximum pulse discharge current

(At +25°C, 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) (For more severe conditions, consult HCB)

#### ≤30°C ≤75%RH

#### **Operating temperature range**

-55°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

Add: Special No 1. Taizhong Avenue, Gaoqiao Industrial Park, Wujiashan Economic Development Zone, Wuhan, P.R.China

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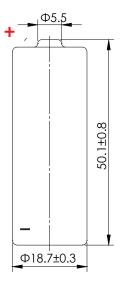
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Physical Characteristics	
Diameter	18.7±0.3mm
Height	50.1±0.8mm
Typical weight	32.0g
Lithium metal content	1.01g

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

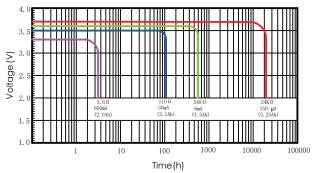


Dimensions in mm

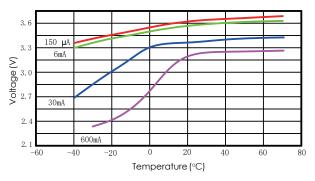
## WARNING:

- 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

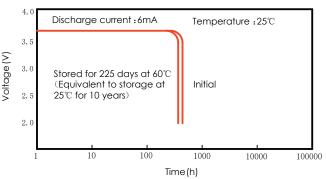




2. Voltage plateau versus Current and Temperature (at the mid-discharge)



## 3. Storage characteristics



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