

Primary Lithium Battery ER18505

3.6V Lithium-thionyl chloride[Li-SOCl₂]
Fat A-size bobbin cell



Benefits

- High and Stable Voltage
- Energy Density up to 590Wh/kg
- Long Shelf Life (less than 1% per year after 1 year of storage at +25 °C)
- Wide Operating Temperature (-55°C ~+85°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

New cell:
Refer to the cells that are stored within two months
at no higher than +25°C.*

Electrical Characteristics

| | |
|---|-------------|
| Open circuit voltage (at 25°C) | 3.65V |
| Nominal capacity | 4000mAh |
| (At +25°C, battery discharged at continuous current 2mA until voltage reaches cut-off voltage 2.0V. The capacity can vary at different temperature, discharge current or cut-off voltage.) | |
| Maximum continuous current | 120mA |
| (New cell*, at +25°C, 2.0V cut-off, battery discharged for minimum 50% of nominal capacity.) | |
| Maximum pulse discharge current | 180mA |
| 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) | 30°C |
| (For more severe conditions, consult HCB) | 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.) | |

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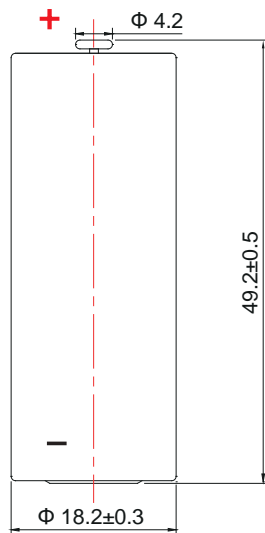
3.6V Lithium-thionyl chloride[Li-SOCl₂]
Fat A-size bobbin cell

Physical Characteristics

| | |
|-----------------------|------------|
| Diameter | 18.2±0.3mm |
| Height | 49.2±0.5mm |
| Typical weight | 31.0g |
| Lithium metal content | 1.18g |

MSDS as per request
Diode (1N4007, 1N5819)
PTC (SRS175...)

Tag, wire, connector, etc. available



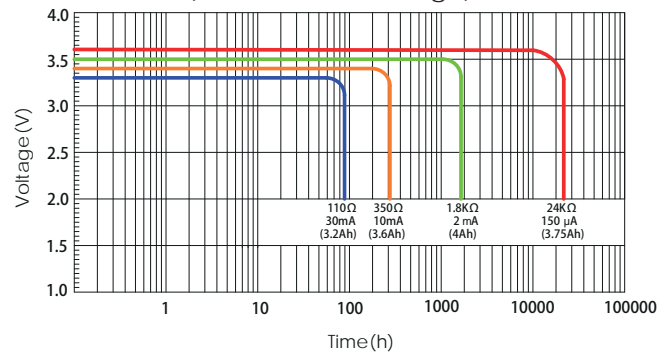
Dimensions in mm

WARNING:

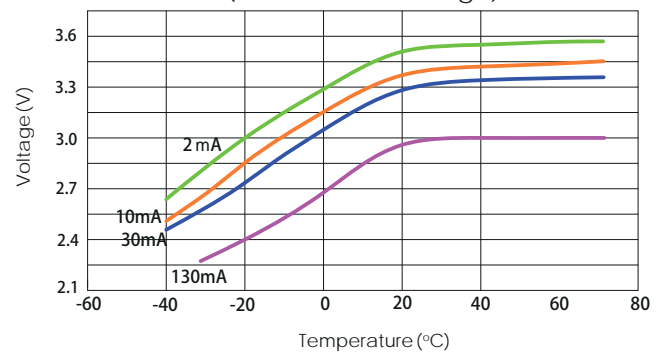
- Do not short circuit
- Do not dismantle
- Do not recharge
- Do not incinerate
- Do not puncture
- Do not mix new and used batteries
- Do not crush
- Do not heat above 100°C

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

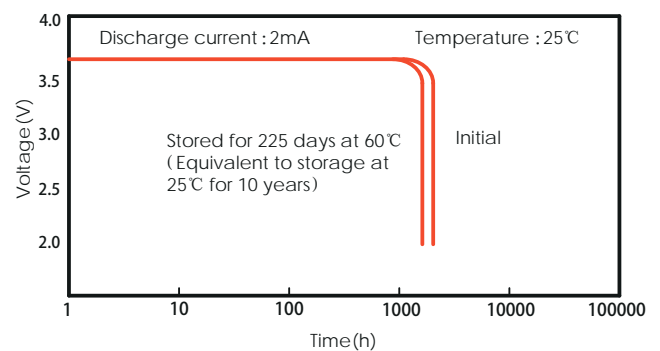
1. Typical discharge profiles at 25°C (at the mid-discharge)



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



3. Storage characteristics



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