

## LITHIUM BATTERY

### Primary lithium batteries ER18505M

**3.6V Primary lithium-thionyl chloride  
(Li-SOCl<sub>2</sub>) Energy  
A-size spiral cell**

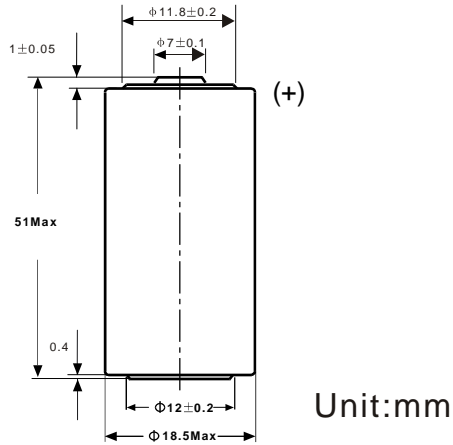
For high drain/high pulses applications requesting superior voltage response in -55°C~+85°C environments.

#### Cell size references (A)

|   |   |
|---|---|
| Electrical characteristics<br>(typical values relative to cells stored for one year or less at +30°C max.)  |   |
| Nominal capacity<br>(at 1 mA +20°C 2.0V cut off. The capacity restored by the cell varies according to current drain, temperature and cut off).   | 3.0Ah   |
| Open circuit voltage (at +20°C)   | 3.66V   |
| Nominal voltage (at 1mA +20°C)  | 3.6V  |
| Pulse capability: Typically up to 1000 mA (1000 mA/0.1 second pulses, drained every 2 mn at +20°C from undischarged cells with 10 µA base current, yield voltage readings above 3.0V. The readings 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 pbq) |   |
| Max. Continuous current   | 600mA   |
| Max. Pulse current  | 1000mA  |
| Storage (recommended)<br>(for more severe conditions, consult pbq)  | +30°C max   |
| Operating temperature range<br>(Operation above ambient T may lead to reduced capacity and lower voltage readings at the beginning of pulses. Consult pbq)  | -55°C / +85°C                                       |
| Physical characteristics  |   |
| Diameter (max)  | 18.5mm(0.706 in)                                    |
| Height (max)  | 50.5mm(2 in)  |
| Typical weight  | 32g(1.047oz)  |
| Available termination suffix  | radial tabs, radial pins, axial leads, flying leads |

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## ER18505M



### Key features

- ▶ High and stable operating voltage
- ▶ Superior drain capability
- ▶ Low self-discharge rate (1 ~ 2% after 1 year of storage at +20°C)
- ▶ Hermetic glass-to-metal sealing
- ▶ Notch technology for safety vent
- ▶ Non-flammable electrolyte
- ▶ Finished product with PTC to avoid short-circuit

### Main applications

- ▶ Radiocommunication and other military applications
- ▶ Alarms and security systems
- ▶ Beacons and emergency location transmitters
- ▶ GPS
- ▶ Metering systems
- ▶ Sonobuoys
- ▶ LED lighting applications
- ▶ Others

### Storage

- ▶ The storage area should be clean, cool (not exceeding +30°C), dry and ventilated.

### Warning

- ▶ Do not use if the battery casing was mangled.
- ▶ Don't use different models of battery in series.
- ▶ Do not try to recharge.

### Characteristic curves

