

# DATA SHEET OF



## Lithium BackUp Batteries

CUSTOMER	
MODEL	ER10450
DATE	2009
SPECIFICATION	Memory Backup Lithium Batteries Li/SOCl <sub>2</sub> 3.6V 700 mAh [ AAA ]
CUSTOMER REF:	
Industrial Packaging	Industrial Bulk



### Hong Kong Batteries Manufactory Limited

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# LITHIUM BATTERY

## Primary lithium batteries ER10450

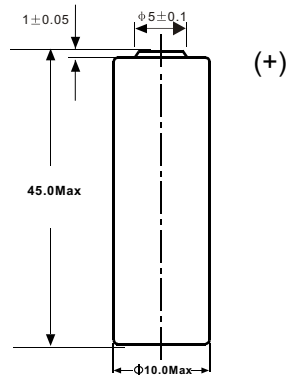
**3.6V Primary lithium-thionyl chloride  
(Li-SOCl<sub>2</sub>) Energy type  
bobbin cell**

For low drain / long time applications requesting superior voltage response in -55°C~+85°C environments.

Cell size references	(AAA)
Alternative models	(AAA)
Electrical characteristics (typical values relative to cells stored for one year or less at +30°C max.)	
Nominal capacity (at 1 mA +20°C 2.0V cut off. The capacity restored by the cell varies according to current drain, temperature and cut off).	0.7Ah
Open circuit voltage (at +20°C)	3.66V
Nominal voltage (at 1mA +20°C)	3.6V
Pulse capability: Typically up to 30 mA (30 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. )	
Max. Continuous current	10mA
Max. Pulse current	30mA
Storage (recommended) (for more severe conditions)	+30°C max
Operating temperature range (Operation above ambient T may lead to reduced capacity and lower voltage readings at the beginning of pulses)	-55°C / +85°C
Physical characteristics	
Diameter (max)	10mm(0.38 in)
Height (max)	45mm(1.8 in)
Typical weight	9g(0.3oz)
Available termination suffix	radial tabs, radial pins, axial leads, flying leads

# LITHIUM BATTERY

## ER10450



### Key features

- ▶ High and stable operating voltage
- ▶ Superior drain capability
- ▶ Low self-discharge rate (less than 1% after 1 year of storage at +20°C)
- ▶ Optional stainless steel container for low magnetic and nickel plated steel container for more safe design
- ▶ Hermetic glass-to-metal sealing
- ▶ Non-flammable electrolyte

### 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

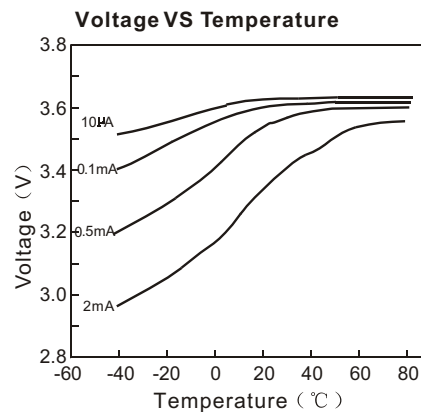
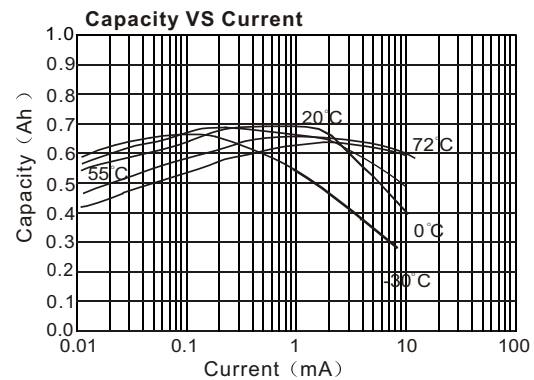
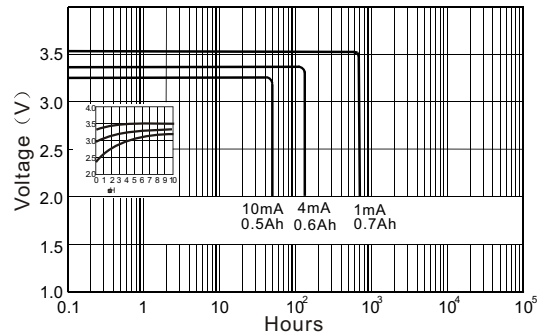
- ▶ The storage area should be clean, cool (not exceeding +30°C), dry and ventilated.

### Warning

- ▶ Do not use if the battery casing was mangled.
- ▶ Please discharge the battery few minutes with 100mA, if the battery voltage is lower than your need or consult us.
- ▶ Don't use different models of battery in series.
- ▶ Soldering the tag should be finished in few seconds.
- ▶ Do not try to recharge.

## Characteristic curves

### Discharge performance (25°C)

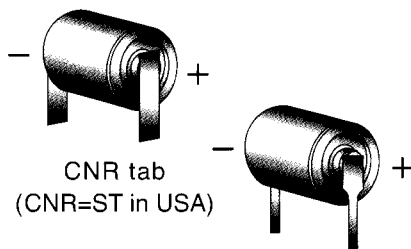


# Lithium Thionyl Chloride Cylindrical Batteries 3.6V

## Welded Terminals

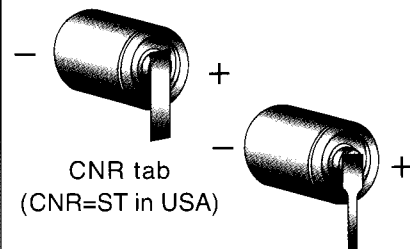


STD without tabs



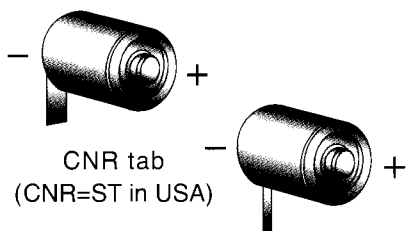
CNR tab  
(CNR=ST in USA)

CN tab



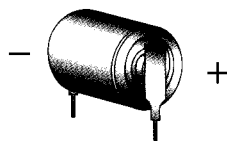
CNR tab  
(CNR=ST in USA)

CN tab

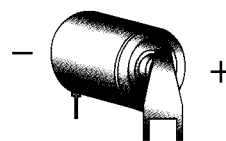


CNR tab  
(CNR=ST in USA)

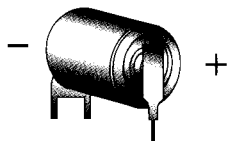
CN tab



2 PF tabs



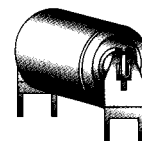
3 PF tabs



3 PF RP tabs



CNA axial tabs (AX in USA)



4 PF tabs