# Primary lithium batteries LS 14250 LST 14250

3.6V Primary lithium-thionyl chloride (Li-SOCl<sub>2</sub>) High energy density ½ AA-size bobbin cells

For applications requesting good voltage response and operating life in -60°C/+85°C environments.





### **Key features**

- · High and stable operating voltage
- Low self-discharge rate (less than 1% after 1 year of storage at +20°C)
- · Stainless steel container and end caps (low magnetic signature) for LS 14250
- Hermetic glass-to-metal sealing
- Non-flammable electrolyte
- Compliant with IEC 86-4 safety standard and EN 50020 intrinsic safety standard
- Underwriters Laboratories (UL) Component Recognition
  - LS 14250 File Number MH 12609 - LST 14250 File Number MH 12802
- Non-restricted for transport

### **Main applications**

- Utility metering
- · Automatic meter reading
- · Alarms and security devices
- Tollgate systems
- Memory back-up
- Computer real-time clocks
- Tracking systems
- Automotive electronics
- Professional electronics

**Cell size references** 

½ UM3 - ½ R6 - ½ AA

1.10 Ah

## **Electrical characteristics**

(typical values relative to cells stored for one year or less at  $+30^{\circ}$ C max.)

Nominal capacity (at 1.5 mA + 20°C 2.0V cut off. The capacity restored by the cell varies

according to current drain, temperature and cut off).

Open circuit voltage	(at + 20°C)	3.67V
Nominal voltage	(at 0.1 mA + 20°C)	3.6V

Pulse capability: Typically up to 100 mA (100 mA/0.1 second pulses, drained every 2 mn at  $+20^{\circ}$ C from undischarged cells with 10  $\mu$ A base current, yield voltage readings above 3.0 V. 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 Saft)

Continuous current permitting 50% of the nominal capacity to be achieved at +20°C with 2.0V cut off. (Higher currents possible, consult Saft)

+30°C (+86°F) max Storage (recommended)

(for more severe conditions, consult Saft) -60°C/+85°C Operating temperature range

(Operation above ambient T may lead to reduced capacity and lower voltage readings at the beginning of pulses. Consult Saft)

> LST 14250 14.4 mm (0.57 in)

(-76°F/+185°F)

40 mA

Diameter (max) 14.65 mm (0.58 in) Height (max) 24.8 mm (0.98 in) 25.1 mm (0.99 in) Typical weight 8.9 g (0.3 oz) 9.4 g (0.3 oz) Li metal content approx. 0.3 g approx. 0.3 g

LS 14250

etc... Available termination suffix

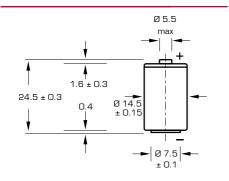
Physical characteristics

CN. CNR 2 PF, 3 PF, 3 PF RP, 4 PF CNA (AX)

radial tabs radial pins axial leads flying leads ...etc.



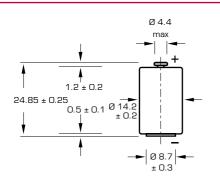
# LS 14250



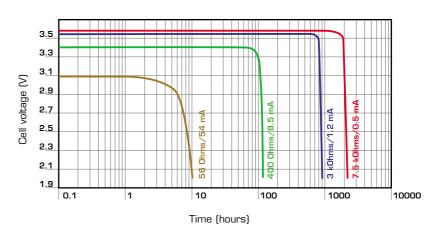
#### 3.6 + 70°C 3.5 3.4 3.3 voltage [V] 3.2 + 20°C 3.1 3.0 2.9 Cell 2.8 2.7 2.6 0.01 0.1 10 100 Current (mA)

LS 14250 Voltage plateau versus Current and Temperature (at mid-discharge)

# LST 14250



Dimensions in mm.



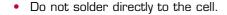
Typical discharge profiles at + 20°C

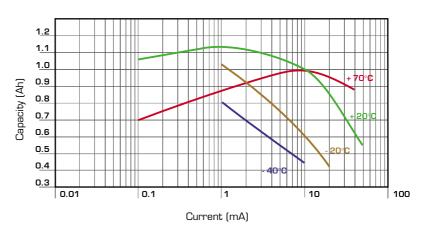
# Storage

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

# Warning

- Fire, explosion and severe burn hazard.
- Do not recharge, short circuit, crush, disassemble, heat above 100°C (212°F), incinerate, or expose contents to water.





LS 14250 Restored Capacity versus Current and Temperature (2.0V cut off)

### Saft

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