

# LS 14250

## Primary Li-SOCl<sub>2</sub> cell



<https://www.mega-piles.com/>

### High energy density 3.6 V ½ AA-size bobbin cell

Saft's LS 14250 cell is ideally suited for long-term applications (typically from 5 to 20+ years), featuring low base currents and periodic pulses.

#### Benefits

- High capacity and high energy (1024 Wh/l and 480 Wh/kg)
- High voltage response, stable during most of the lifetime of the application
- Wide operating temperature range (-60 °C / +85 °C)
- Low self-discharge rate compatible with long operating life (less than 1% per year of storage, at +20°C, after 1 year)
- Superior resistance to corrosion
- Low magnetic signature

#### Key features

- Bobbin construction
- Well controlled passivation
- Hermetic construction with glass-to-metal seal
- Stainless steel container
- Non-flammable electrolyte
- RoHS and REACH compliance
- Made in France, China, UK

#### Designed to meet all major quality, safety and environment standards

- Safety: UL 1642, IEC 60086-4
- ATEX: IEC 60079-11 part 10.5 (T4 rating at +60 °C)
- Transport: UN 3090 and UN 3091
- Quality: ISO 9001, Saft World Class continuous program

#### Typical applications

- Utility Metering
- Internet of Things
- Tracking
- Monitoring sensors
- Alarms and security
- Medical devices



#### Electrical characteristics

(Typical values relative to cells stored up to one year at +30 °C max)

Nominal capacity (under 1 mA, +20 °C, 2.0 V cut-off) <sup>(1)</sup>	1.2 Ah
Open circuit voltage (at +20 °C)	3.67 V
Nominal voltage (under 0.1 mA, +20 °C)	3.6 V
Nominal energy	4.32 Wh
Pulse capability <sup>(2)</sup>	Up to 100 mA
Maximum recommended continuous current	30 mA

#### Operating conditions

Operating temperature range <sup>(3)</sup>	-60 °C / +85 °C (-76 °F / +185 °F)
Storage temperatures	Max. recommended <sup>(4)</sup> +30 °C (+86 °F)

#### Physical characteristics

Diameter (max)	14.62 mm (0.57 in)
Height (max)	25.13 mm (.99 in)
Typical weight	9 g (0.31 oz)
Li metal content	approx. 0.3 g

#### Termination

Available termination suffix	CN, CNR	radial tabs
	2 PF, 3 PF, 3 PF RP, 4 PF	radial pins
	CNA	axial leads
	FL	flying leads
	Other configurations upon request	

<sup>(1)</sup> Dependent upon current drain, temperature, cut-off and cell orientation.

<sup>(2)</sup> Under 100mA / 0.1 second pulses, drained every 2 minutes at +20 °C during 24 hours, from undischarged cells with 10 µA base current, yield voltage readings above 3.0 V after initial stabilisation. 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 or for high pulse currents. Consult Saft.

<sup>(3)</sup> Operation above ambient temperature may lead to reduced capacity and lower voltage readings. Consult Saft.

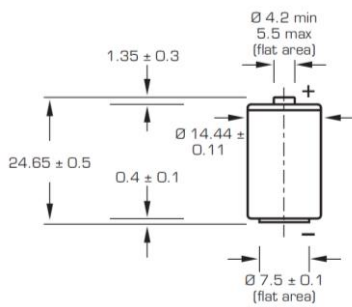
<sup>(4)</sup> For more severe conditions, consult Saft.

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## LS 14250 dimensions



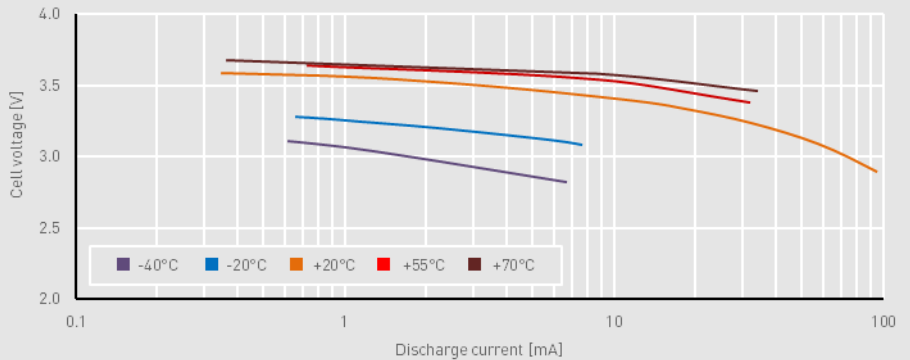
## Storage

- The storage area should be clean, cool (preferably not exceeding  $+30^\circ\text{C}$ ), dry and ventilated

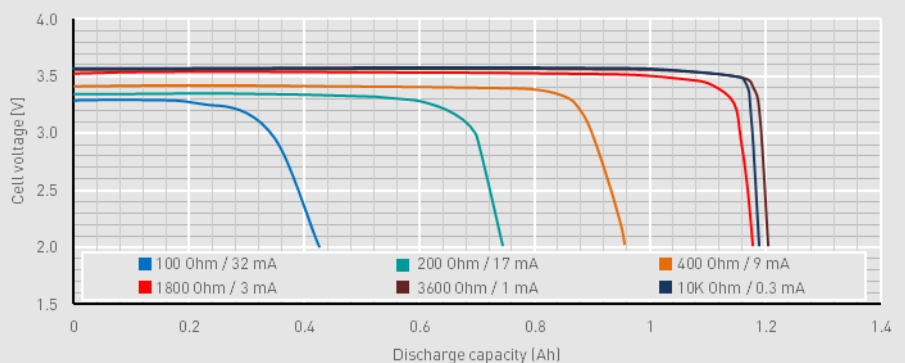
## Warning

- Fire, explosion and burn hazard,
- Do not recharge, short circuit, crush, disassemble, heat above  $+100^\circ\text{C}$  ( $212^\circ\text{F}$ ), incinerate, or expose contents to water
- Do not solder directly to the cell (use tabbed cell versions instead)

Voltage plateau versus current and temperature (at mid-discharge)



Typical discharge profiles at  $+20^\circ\text{C}$



Capacity vs. current at various temperatures

