

LS 14250

Primary Li-SOCl₂ cell

3.6 V ½ AA size bobbin cell high energy density

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, compatible with a 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.
- Manufactured in France, China, UK.

Designed to meet all major quality, safety and environmental standards.

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

Typical applications

- Utility Metering.
- Internet of Things.
- Tracking systems.
- Alarms and security.
- Connected sensors.
- Medical devices.



Electrical characteristics ^[i]

| | |
|---|--------------|
| Nominal capacity (under 1 mA, +20 °C, 2.0 V cut-off) ^[iii] | 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 ^[iv] | Up to 100 mA |
| Maximum recommended continuous current | 30 mA |

Operating conditions

| | |
|--|------------------------------------|
| Operating temperature range ^[v] | -60 °C / +85 °C (-76 °F / +185 °F) |
| Storage temperatures (max recommended) ^[vi] | +30 °C (+86 °F) |

Physical characteristics ^[ii]

| | |
|------------------|--------------------|
| Diameter (max) | 14.62 mm (0.57 in) |
| Height (max) | 25.13 mm (0.99 in) |
| Typical weight | 9 g (0.31 oz) |
| Li metal content | approx. 0.3 g |

Termination suffix

| | |
|--------------------------|--------------|
| CN, CNR | Radial tabs |
| 2 PF, 2 PF, 3PF RP, 4 PF | Radial pins |
| CNA | Axial leads |
| FL | Flying leads |

Other configurations upon request

[i] Typical values relative to cells stored up to one year at +30 °C max.

[ii] Sleeved cell.

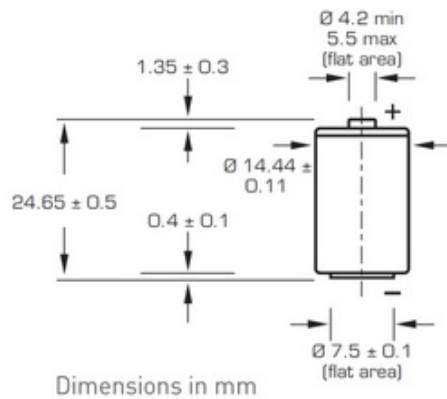
[iii] Dependent upon current drain, temperature, cut-off and cell orientation.

[iv] Under 100 mA / 0.1 second pulses, drained every 2 minutes at +20 °C from undischarged cells during 24 hours, 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.

[v] Operation above ambient temperature may lead to reduced capacity and lower voltage readings. Consult Saft.

[vi] For more severe conditions, consult Saft.

LS 14250



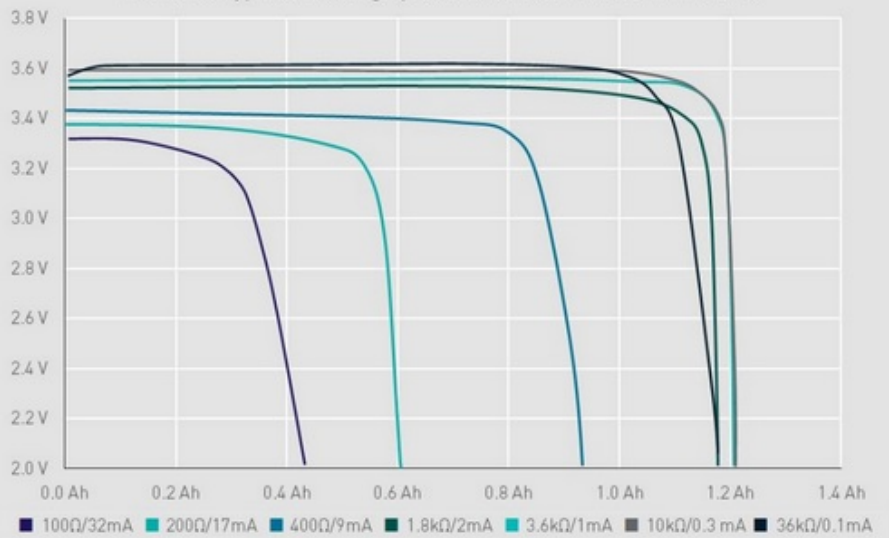
Storage

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

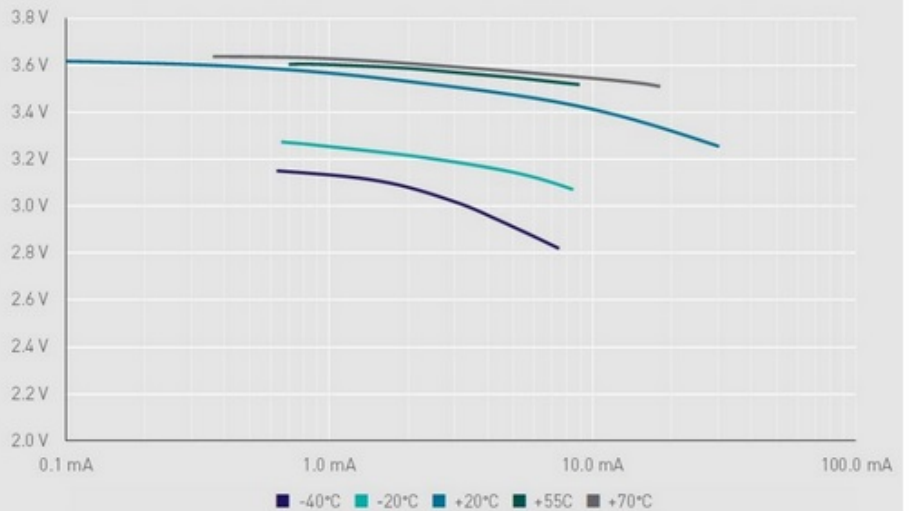
Warning

- Fire, explosion and burn hazard.
- Do not recharge, short circuit, crush, disassemble, heat above 100 °C (212°F), incinerate, or expose contents to water.
- Do not solder directly to the cell (use tabbed cell versions instead).

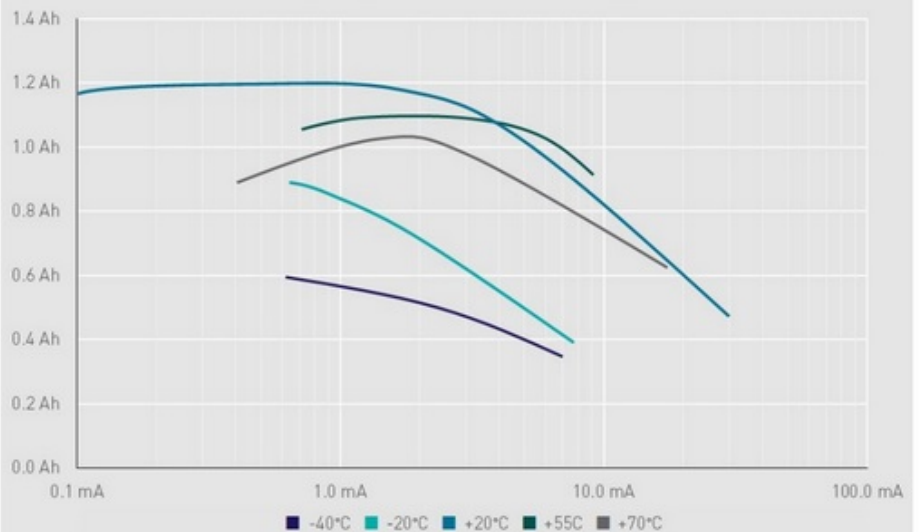
LS 14250 Typical discharge profiles at 20°C under various rates



LS 14250 voltage plateau vs current and temperature (at mid-discharge)



LS 14250 Capacity vs current at various temperatures



Saft

26, Quai Charles Pasqua,
92300 Levallois Perret -France
Tel.: +33 (0)1 49 93 19 18
Fax: +33 (0)1 49 93 19 69
www.saftbatteries.com

Saft America, Inc.

313 Crescent Street
Valdese, NC 28690—USA
Tel.: +1 (828) 874 41 11
Fax: +1 (828) 879 39 81
www.saftbatteries.com

Doc N°: 31072-2-0821

Edition: August 2021

Information in this document is subject to change without notice and becomes contractual only after written confirmation by Saft.

Published by the Communication Department

Photo credit: Saft

Produced by CE Marketing Department

SAFT