

LS 14500 Primary Li-SOCI, cell

High energy density 3.6 V AA-size bobbin cell

Saft's LS 14500 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 (1122 Wh/I and 520 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-tometal seal
- Stainless steel can
- Non-flammable electrolyte
- RoHS and REACH compliance
- Manufactured in France, China, UK

Designed to meet all major quality, safety and environment 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 Excellence System, continuous evaluation program

Typical Applications

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



| Electrical characteristics ¹ | |
|---|--------------------------------|
| Nominal capacity (under 14 mA, +20°C, 2.0 V cut-off) ³ | 2.6 Ah |
| Open circuit voltage (at +20°C) | 3.67 V |
| Nominal voltage (under 0.2 mA, + 20°C) | 3.6 V |
| Nominal energy | 9.36 Wh |
| Pulse capability ⁴ | Up to 250 mA |
| Maximum recommended continuous current | 50 mA |
| For battery sizing, consult Saft | |
| Operating conditions | |
| Operating temperature range⁵ | -60°C / +85°C (-76°C / +185°F) |
| Storage temperatures (max recommended) ⁶ | +30°C (+86°F) |
| Physical characteristics ² | |
| Diameter (max) | 14.62 mm (0.575 in) |
| Height (max) | 50.28 mm (1.98 in) |
| Typical weight | 17 g (0.31 oz) |
| Li metal content | approx. 0.7 g |
| 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

¹Typical values relative to cells stored up to one year at + 30°C max. ²Sleeved cell.

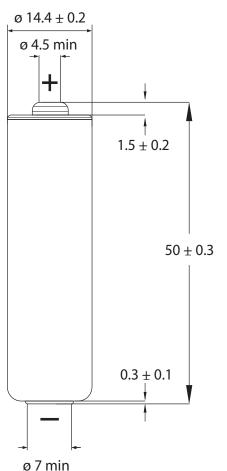


Thereven cell. ³Dependent upon current drain, temperature, cut-off and cell orientation. ⁴Under 250 mA / 0.1 second pulses, drained every 2 minutes at + 20°C from undischarged cells during 24 h, with 10 µA base current, yield voltage readings above 3.0 V after initial stabilisation. The readings may 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.

Operation above ambient temperature may lead to reduced capacity and lower voltage readings. Consult Saft. ⁶For more severe conditions, consult Saft.



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Dimensions in mm

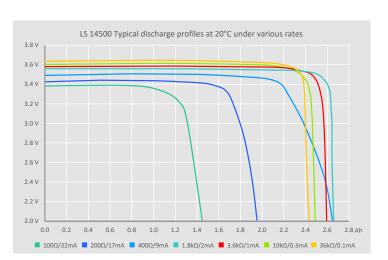
Storage

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

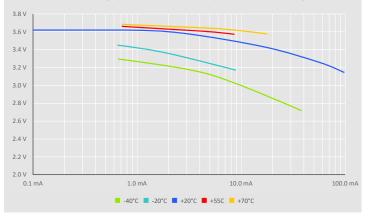
Warning

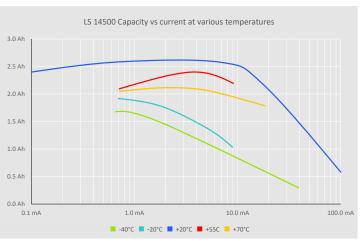
- Fire, explosion and severe burn hazard.
- Do not recharge, short circuit, crush, disassemble, heat above 100°C (212°F), incinerate, or expose contents to water.
- Do not solder directly to the cell (use tabbed cell versions instead).
- Do not mix new and used cells or cells from different origins.
- · Mind the polarities of the cell.





LS 14500 Voltage plateau vs current and temperature (at mid-discharge)





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