

Primary lithium battery

LS 14500C

3.6 V Primary lithium-thionyl chloride (Li-SOCl₂)

High energy density

AA-size bobbin cell

(recommended for cool temperature environments)

Preferably for moderate temperature uses (i.e. indoor applications with occasional T excursions up to +70°C) requesting superior voltage response and operating life.



Key features

- High and stable operating voltage
- Superior voltage response during pulsing at ambient T
- Up to 20 % more capacity than the standard version
- Low self-discharge rate (less than 1 % after 1 year of storage at + 20 °C)
- Stainless steel container and end caps (low magnetic signature)
- Hermetic glass-to-metal sealing
- Non-flammable electrolyte
- Compliant with IEC 86-4 safety standard and IEC 60079-11 intrinsic safety standard
- Underwriters Laboratories (UL) Component Recognition (File Number MH 12609)
- Non-restricted for transport

Main applications

- Utility metering
- Alarms and security devices
- Memory back-up
- Tracking systems
- Professional electronics

Cell size references

R6 – AA

Electrical characteristics

(typical values relative to cells stored for one year or less at + 30°C max.)

Nominal capacity 2.7 Ah

(at 1 mA + 20°C 2.0 V cut-off. The capacity restored by the cell varies according to current drain, temperature and cut-off)

Open circuit voltage (at + 20°C) 3.67 V

Nominal voltage (at 0.5 mA + 20°C) 3.6 V

Nominal energy 9.72 Wh

Pulse capability: Typically up to 150 mA (150 mA/0.1 second pulses, drained every 2 mn at + 20 °C from undischarged cells with 10 µA base current, yield voltage readings above 3.0 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)

Maximum recommended continuous current 25 mA
(Higher currents are possible, consult Saft)

Storage (recommended) + 30°C (+ 86°F) max
(for more severe conditions, consult Saft)

Operating temperature range - 60°C/+ 70°C
(Operation at T different from ambient may lead to reduced capacity and lower voltage plateau readings. Consult Saft)
(- 76°F/+ 158°F)

Physical characteristics

Diameter (max) 14.65 mm (0.58 in)

Height (max) 50.3 mm (1.98 in)

Typical weight 16.2 g (0.6 oz)

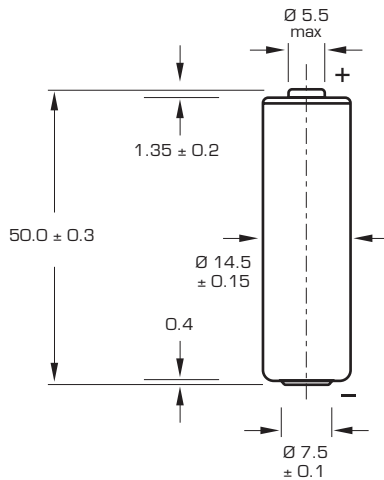
Li metal content approx. 0.7 g

Available termination suffix: CN, CNR radial tabs
2 PF, 3 PF, 3 PF RP, 4 PF radial pins
CNA (AX) axial leads
FL flying leads ...etc.



saft

LS 14500C



Dimensions in mm.

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*).

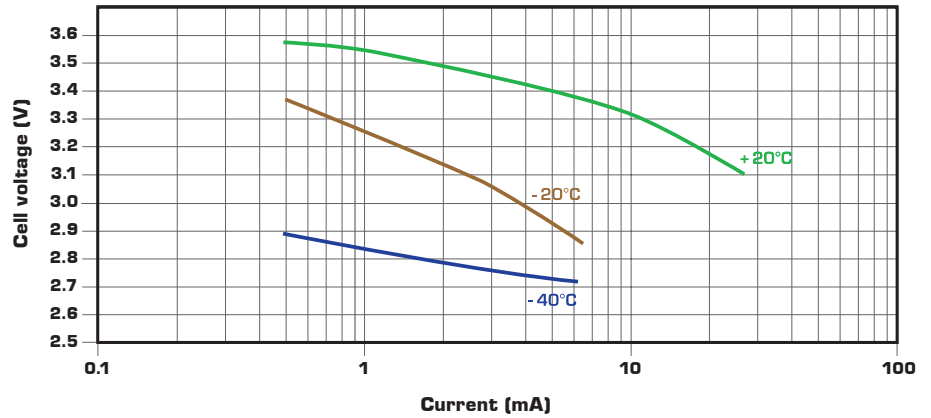
Saft

Specialty Battery Group

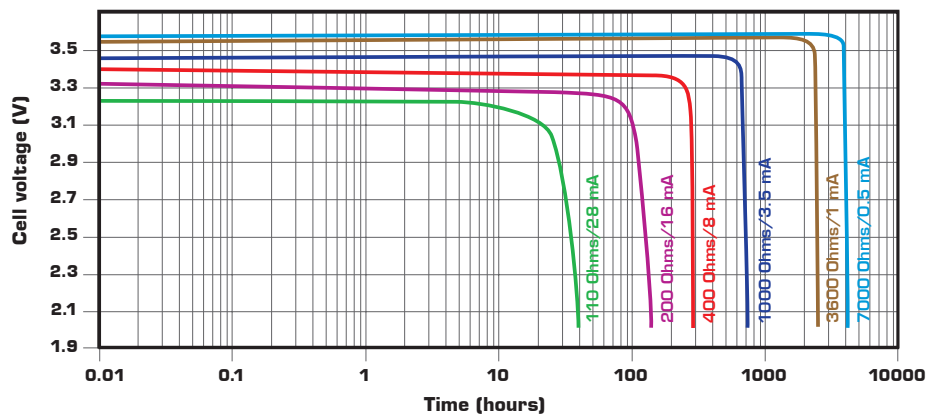
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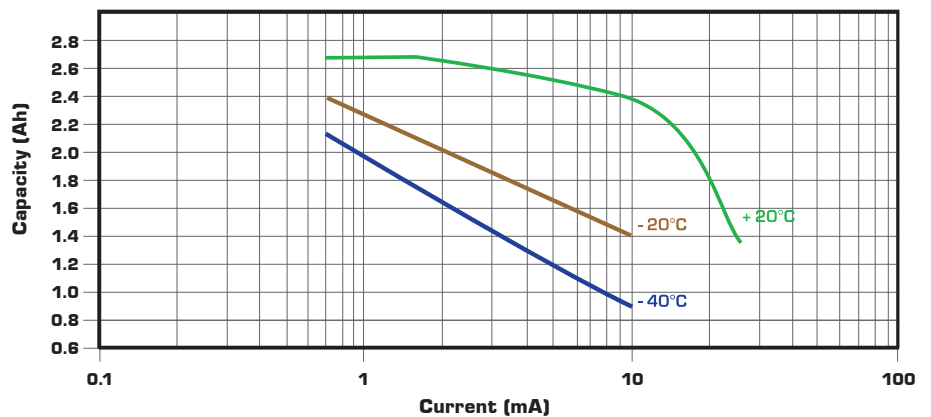
Voltage plateau versus Current and Temperature (at mid-discharge)



Typical discharge profiles at + 20°C



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



Doc. N° 31012-2-1008

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

For more details on primary lithium technologies please refer to Primary Lithium Batteries Selector Guide Doc N° 31048-2.

Published by the Communications Department.

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Société anonyme au capital de 31 944 000 €
RCS Bobigny B 383 703 873

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