

Primary lithium battery

LS 14250W

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

High energy density

1/2 AA-size bobbin cell

For demanding environments up to +95°C



For applications requesting superior voltage response and operating life in **W**idely fluctuating temperature environments up to +95°C.

Benefits

- High voltage, stable during most of the application's lifetime
- Superior voltage readings after exposure at elevated temperature
- Voltage readings during pulsing moderately affected by T fluctuations
- Low self-discharge rate (*less than 1 % per year of storage at +20°C*)
- Easy integration into compact systems
- Superior resistance to atmospheric corrosion

Key features

- Stainless steel container and end caps (*low magnetic signature*)
- Hermetic glass-to-metal sealing
- Non-flammable electrolyte
- Non-restricted for transport

Main applications

- Electronic toll collection
- Utility metering
- Automatic meter reading
- Alarms and security devices
- Tracking systems
- Automotive electronics
- Professional electronics

Cell size references

1/2 R6 – 1/2 AA

Electrical characteristics

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

Nominal capacity 1.20 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 0.1 mA +20°C) 3.6 V

Pulse capability : Typically up to 100 mA (*100 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 35 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/+95°C
(Operation above ambient T may lead to reduced capacity and lower voltage readings at the beginning of pulses. Consult Saft)
[-76°F/+203°F]

Physical characteristics

Diameter (max) 14.65 mm (0.58 in)

Height (max) 24.8 mm (0.98 in)

Typical weight 8.9 g (0.3 oz)

Li metal content approx. 0.3 g

Available termination suffix

CN, CNR

2 PF, 3 PF, 3 PF RP, 4 PF

CNA (AX)

FL

radial tabs

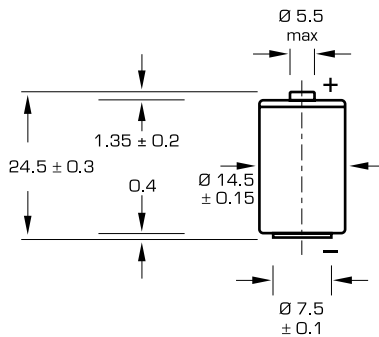
radial pins

axial leads

flying leads ...etc.

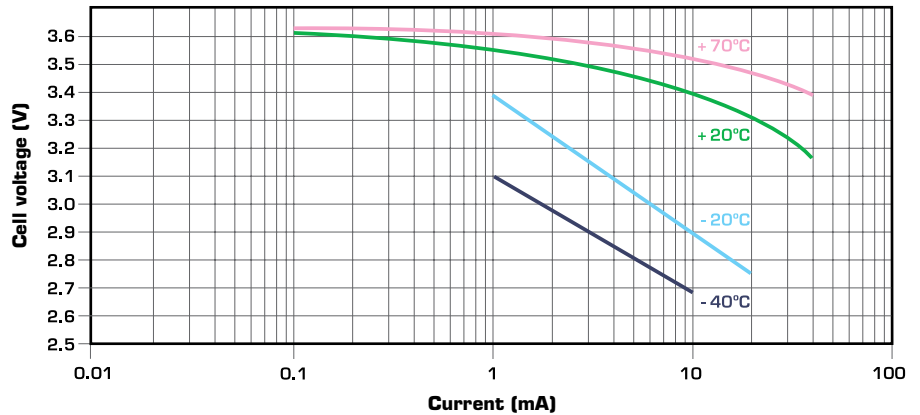


LS 14250W

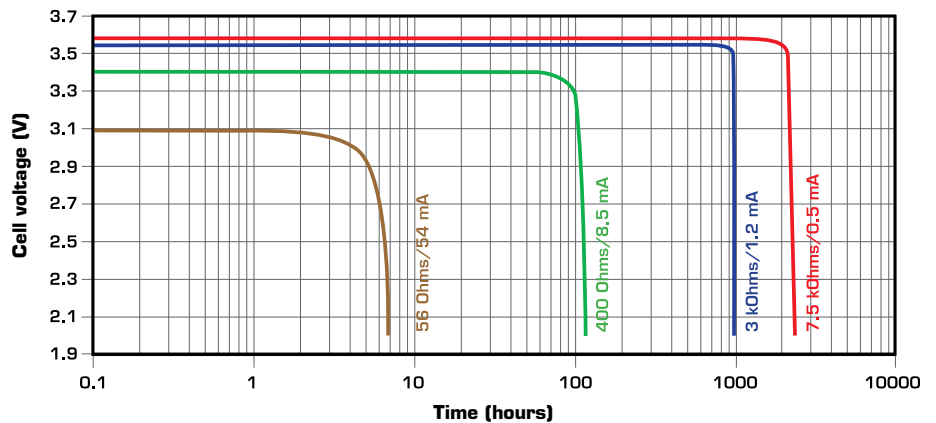


Dimensions in mm.

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



Typical discharge profiles at + 20°C



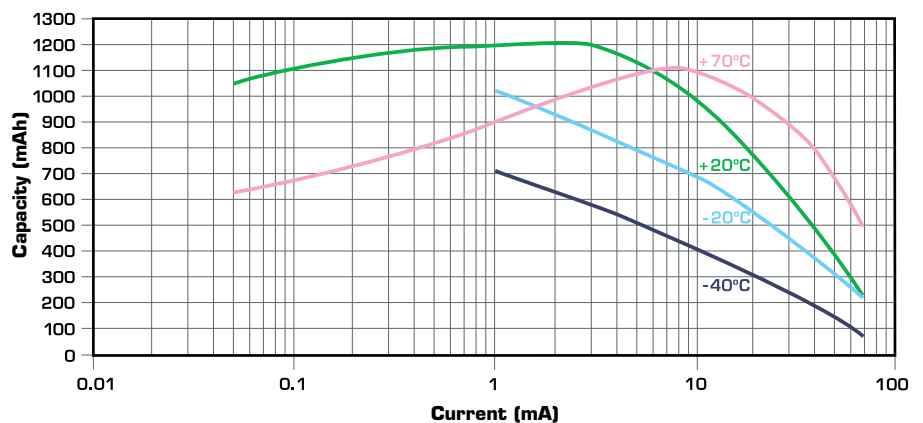
Storage

- 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*).

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



Saft

Specialty Battery Group

12, rue Sadi Carnot
93170 Bagnolet - France
Tel.: +33 (0)1 49 93 19 18
Fax: +33 (0)1 49 93 19 69

www.saftbatteries.com

Doc. N° 31087-2-0608

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

Photo credit: Saft

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

Produced by Arthur Associates Limited.



SAFT