

Primary lithium battery

LSG 14250

3.6 V Primary lithium-thionyl chloride (Li-SOCl₂)
 High energy density
 1/2 AA-size bobbin cell



Benefits

- High voltage, stable during most of the application's lifetime
- Wide operating temperature range
- Low self-discharge rate
(less than 1% per year of storage at +20°C)
- Easy integration into compact systems

Key features

- Stainless steel container
- Hermetic glass-to-metal sealing
- Non-flammable electrolyte
- Non-restricted for transport

Main applications

- Utility metering
- Automatic meter reading
- Alarms and security devices
- Toll collection
- Memory back-up
- Computer real-time clocks
- Tracking systems
- Automotive electronics
- Professional electronics

Cell size references

1/2 UM3 - 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 1.2 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)

Continuous current permitting 50% of the nominal capacity to be achieved at +20°C with 2.0 V cut off. 35 mA

(Higher currents are possible, consult Saft)

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

Operating temperature range -60°C/+85°C

(Operation above ambient T may lead to reduced capacity and lower voltage readings at the beginning of pulses. Consult Saft)

Physical characteristics

Diameter (max) 14.2 mm

Height (max) 25.15 mm

Typical weight 8.8 g (0.3 oz)

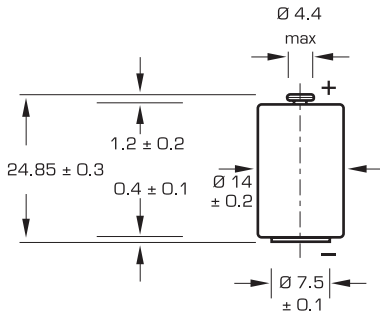
Li metal content approx. 0.3 g

Available termination suffix

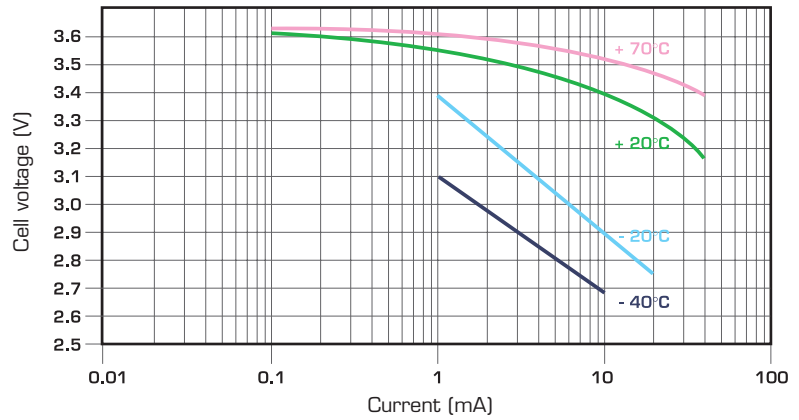
CN, CNR	radial tabs
2 PF, 3 PF, 3 PF RP, 4 PF	radial pins
FL	flying leads ...etc.



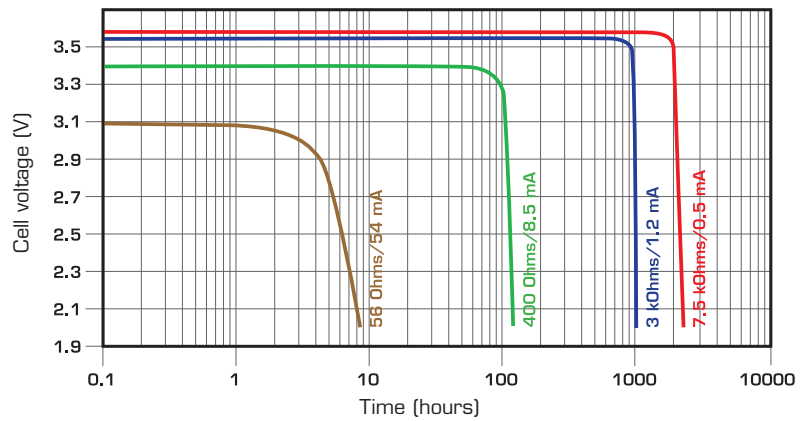
LSG 14250



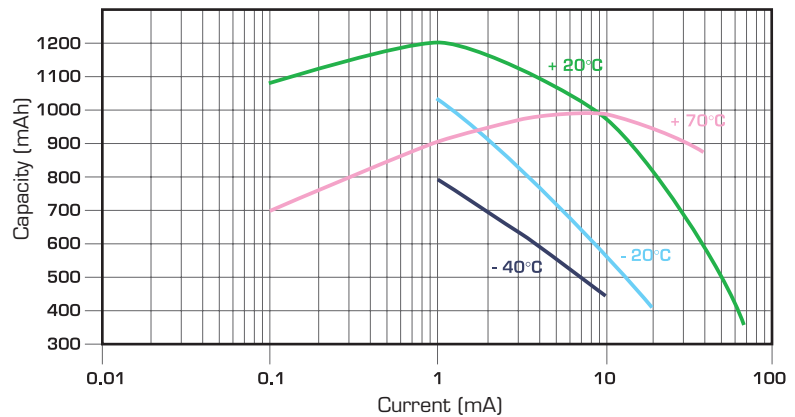
Dimensions in mm.



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)

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, incinerate, or expose contents to water.
- Do not solder directly to the cell (use tabbed cell versions instead).

Saft

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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.

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