

Primary lithium battery

LO 35 SX

3.0 V Primary lithium-sulfur dioxide (Li-SO₂)

High drain capability

²/₃ C-size spiral cell



Benefits

- High and stable discharge voltage
- High pulse capability
- Performance not affected by cell orientation
- Long storage possible before use
- Ability to withstand extreme temperature
- Non-restricted for transport

Key features

- Low self-discharge rate
(less than 3 % after 1 year of storage at + 20°C)
- Hermetic glass-to-metal sealing
- Built-in safety vent
(at the negative end of the cell)
- UL Component Recognition
(File Number MH 15076)
- Meets shock, vibration and other environmental requirements of military specifications
- Made in the USA

Main applications

- Radiocommunications and other military applications
- Automotive telematics

Cell size reference

²/₃ C

Electrical characteristics

(typical values for cells stored for one year or less)

Nominal capacity 2.20 Ah

(under 650 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) 3.0 V

Nominal voltage (at 250 mA + 20°C) 2.8 V

Maximum recommended continuous current 2.0 A
(to avoid over-heating. Higher currents possible, consult Saft)

Pulse capability : Typically up to 5 A

(The voltage 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)

Storage (recommended) + 30°C (+ 86°F) max.
(possible without leakage) - 60°C/+ 85°C
[- 76°F/+ 185°F]

Operating temperature range - 60°C/+ 70°C
[- 76°F/+ 158°F]

(Short excursions up to + 85°C possible at currents below 1 A)

Physical characteristics

Diameter (max) 25.9 mm (1.020 in)

Height (max; finish without radial tabs) 35.9 mm (1.413 in)

Typical weight 30 g (1.06 oz)

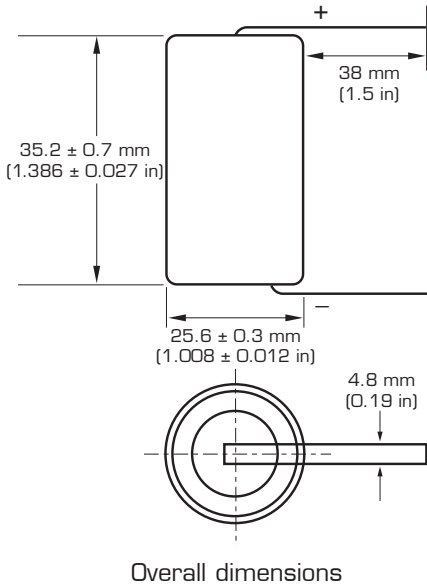
Li metal content 0.8 g

Standard cell comes with resin potting in the topshell area and two radial 0.15 mm - thick nickel tabs

Other configurations available on request.



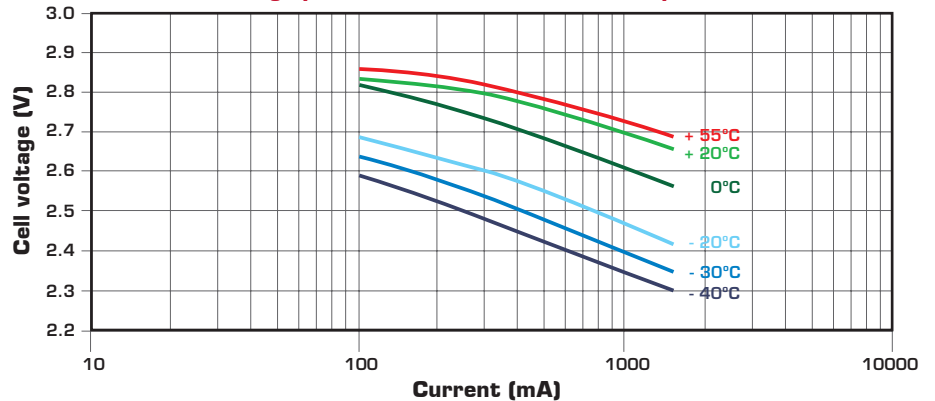
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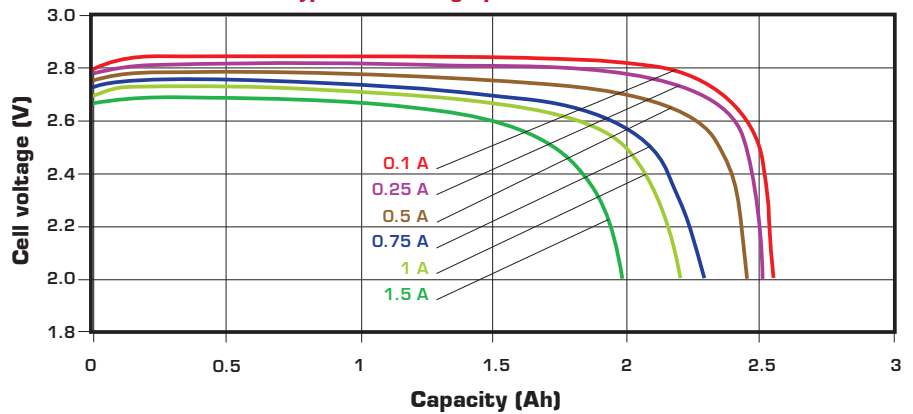
Handling precautions

- Cell is pressurised at ambient temperature.
- Do not puncture, open or mutilate.
- Do not obstruct the safety vent mechanism.
- Do not short circuit or charge.
- Do not expose to fire or temperatures above +70°C (+158°F).

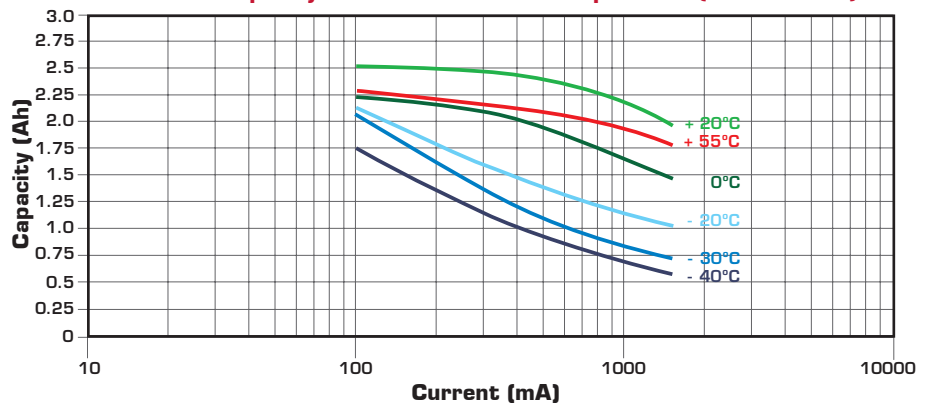
Voltage plateau versus Current and Temperature



Typical discharge profiles at +20°C



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



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

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