

Primary lithium batteries

LO 25 SX

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

High drain capability
"Fat" D-size spiral cell



Benefits

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

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)
- Restricted for transport *(class 9)*
- 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
- Beacons and Emergency Location Transmitters
- Sonobuoys
- Missiles

Cell size reference

"Fat" D

Electrical characteristics

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

Nominal capacity 8.0 Ah
(at 0.27 A +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 0.6 A +20°C) 2.8 V

Maximum recommended continuous current 2.5 A
(to avoid over-heating. Higher currents possible, consult Saft)

Pulse capability : Typically up to 10 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)* 39.5 mm (1.56 in)

Height *(max; finish without radial tabs)* 50.3 mm (1.97 in)

Typical weight 96 g (3.39 oz)

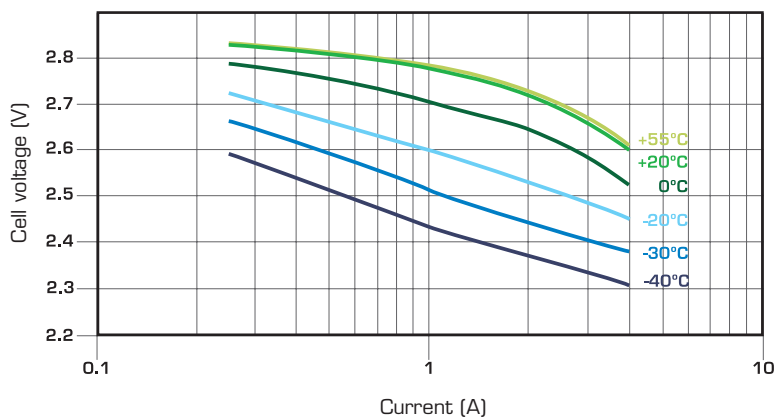
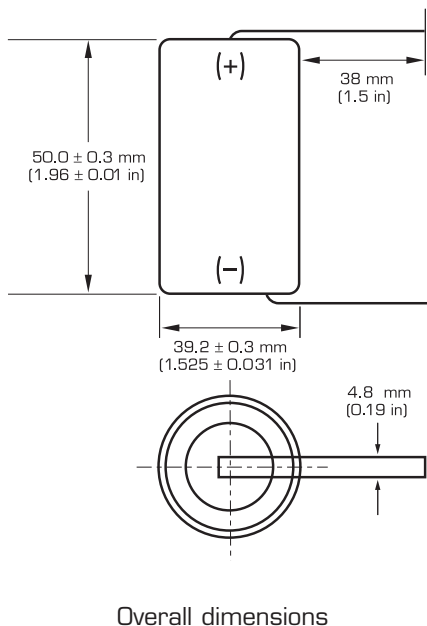
Li metal content 2.6 g

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

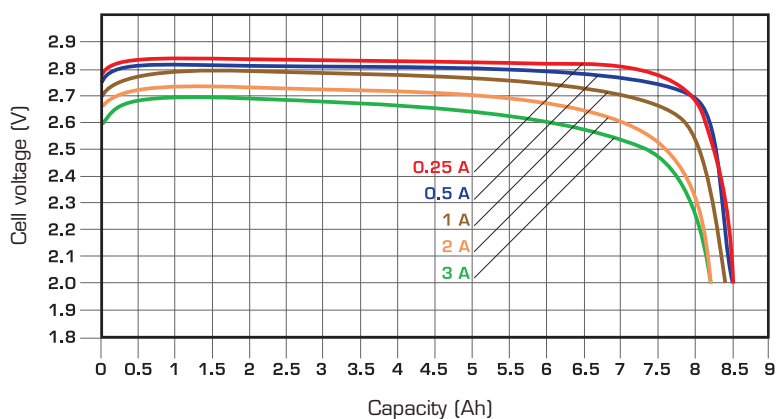
Different configurations available on request.



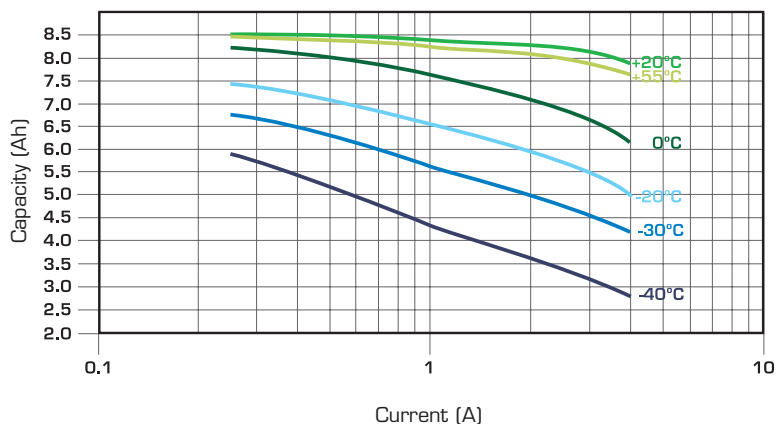
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Voltage at mid-discharge versus Current and Temperature (2.0 V cut off)



Typical discharge profiles at +20°C



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

Handling precautions

- Cell is pressurised.
- 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).

