

# Primary lithium battery

## LO 34 SX



3 V Primary lithium sulfur dioxide (Li-SO<sub>2</sub>)  
 High drain capability  
 1/3 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

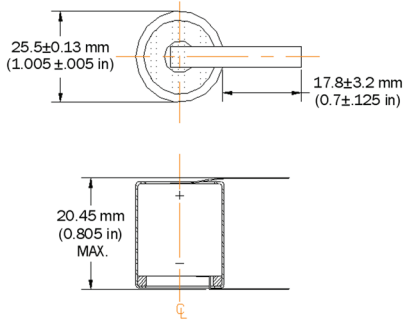
- Low self-discharge rate  
*(less than 3% after 1 year of storage at + 20° C)*
- Hermetic glass-to-metal sealing
- Built-in safety vent  
*(at the negative end of the cell)*
- UL Component Recognition  
*(File Number MH 15076)*
- Meets shock, vibration and other environmental requirements of military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

Cell size reference	1/3 um2	1/3 R14	1/3 C
<b>Electrical characteristics</b>			
Nominal capacity		1.0 Ah	
Open circuit voltage		3 V	
Nominal voltage (at 28 mA)		2.8 V	
Rated capacity (at 28 mA discharge)			
70°F (21°C)		1.0 Ah	
- 20°F (- 29°C)		0.6 Ah	
Maximum recommended continuous current		0.5 A	
Pulse capability: Typically up to 1 A <i>(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.)</i>			
Storage (% of rated capacity)			
1 year		70°F (21°C): >95%	
1 month		160°F (71°C): >90%	
Operating temperature range		- 40°F (- 40°C) to 160°F (71°C)	
<b>Physical characteristics</b>			
Diameter (max)		25.6 mm (1.01 in)	
Height (with radial tabs)		20.45 mm (0.085 in)	
Typical weight		.56 oz./16 gr.	
Weight of Li		0.35 gr	
Volume		0.575 in <sup>3</sup> /9.4 cc	
Standard cell comes with resin potting in the topshell area and two radial 0.15 mm inch - thick radial tabs. Other configurations available on request.			



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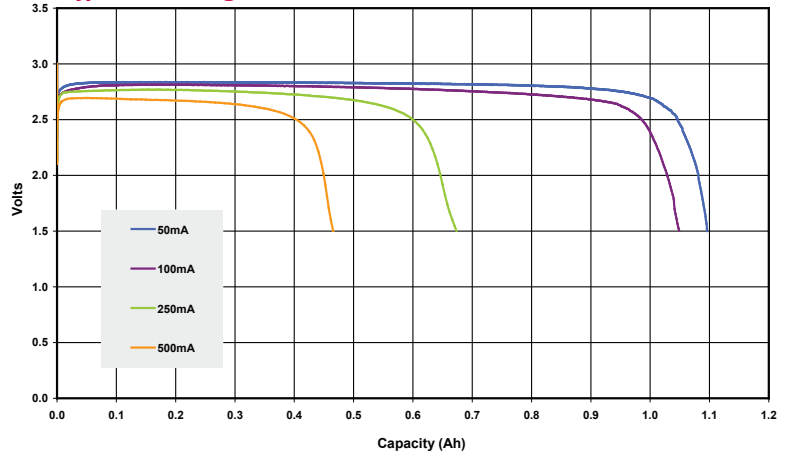
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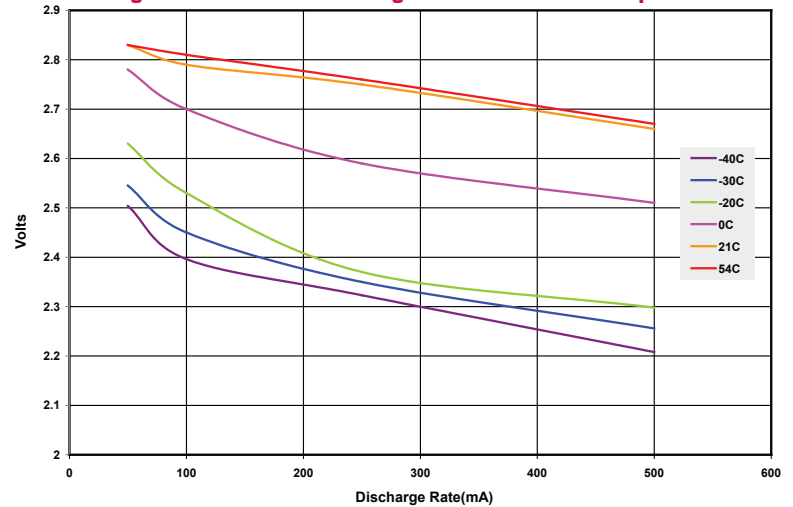
## Handling precautions

- Cell is pressurized at ambient temperature
- Do not puncture, open or mutilate
- Do not obstruct safety vent mechanism
- Do not short circuit or charge
- Do not expose to fire or temperatures above  $160^{\circ}\text{F}$  ( $71^{\circ}\text{C}$ )

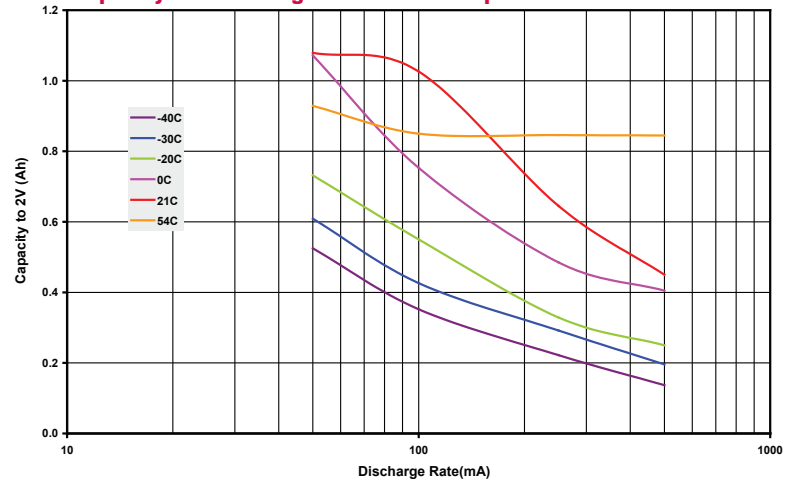
## Typical discharge curves at $21^{\circ}\text{C}$



## Voltage at midlife vs. discharge rate at various temperatures



## Capacity vs. discharge at various temperatures



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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 technologies, please refer to the Primary Lithium Batteries Selector Guide Doc N° 31048-2.

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