Primary lithium battery
LO 39 SHX

3.0 V Primary lithium-sulfur dioxide (Li-SO₂)
Very high drain and pulse capability
F-size spiral cell

Benefits
• High and stable discharge voltage
• Superior 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
• Emergency car door opening system

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal capacity (at 1 A + 20°C 2.0 V cut-off)</td>
<td>11.5 Ah</td>
</tr>
<tr>
<td>Nominal energy</td>
<td>32.2 Wh</td>
</tr>
<tr>
<td>Nominal voltage (at 0.6 A + 21°C/+7°F)</td>
<td>2.8 V</td>
</tr>
<tr>
<td>Maximum recommended continuous current</td>
<td>3.0 A</td>
</tr>
<tr>
<td>Pulse capability : Typically up to 60 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)</td>
<td></td>
</tr>
<tr>
<td>Storage (recommended) (possible without leakage)</td>
<td>+30°C/+86°F max -60°C/+85°C (-76°F/+185°F)</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>-60°C/+70°C (-76°F/+158°F)</td>
</tr>
</tbody>
</table>

Physical characteristics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter (max)</td>
<td>31.9 mm (1.25 in)</td>
</tr>
<tr>
<td>Height (max; finish with radial tabs)</td>
<td>100.3 mm (3.95 in)</td>
</tr>
<tr>
<td>Typical weight</td>
<td>125 g (4.4 oz)</td>
</tr>
<tr>
<td>Li metal content</td>
<td>3.9 g</td>
</tr>
</tbody>
</table>

Standard cell comes with resin potting at the positive end and two radial 0.15 mm - thick nickel tabs
Other finish 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).

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For more details on primary lithium technologies please refer to Primary Lithium Batteries Selector Guide Doc No 31048-2.
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