2 x ER18505M : A Size Spiral Cell

Technical Datasheet

Features

- High and flat operating voltage
  - High power and higher energy for the whole battery life
- High drain capability
  - Higher power applications
- Low self-discharge rate (<1% per year at 20°C)
  - Battery life higher than 10 years, depending on the application
- Hermetic glass-to-metal sealing
  - Avoid leakage, key for higher than 10 year battery life
- Non-flammable electrolyte
  - Safer operation in case of abuse
- PTC device
  - Safe operation in the event of a short circuit

Technical Specifications

<table>
<thead>
<tr>
<th>Part No.</th>
<th>1000250</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell Type</td>
<td>Primary, non-rechargeable</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Lithium Thionyl Chloride</td>
</tr>
<tr>
<td>Voltage Range</td>
<td>2.0 to 3.7V</td>
</tr>
<tr>
<td>Nominal Voltage</td>
<td>3.6V</td>
</tr>
<tr>
<td>Nominal Capacity</td>
<td>2 x 3Ah @ 10mA to 2.0V @ 23°C</td>
</tr>
<tr>
<td>Max. Continuous Discharge Current</td>
<td>600mA continuous</td>
</tr>
<tr>
<td>Max. Pulse Discharge Current</td>
<td>Up to 1000mA (life and temperature dependent)</td>
</tr>
<tr>
<td>Weight</td>
<td>68g</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-55°C to 70°C</td>
</tr>
<tr>
<td></td>
<td>70°C to 85°C (max 24 hours)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-55°C to 70°C</td>
</tr>
<tr>
<td></td>
<td>70°C to 85°C (max of 24 hours)</td>
</tr>
<tr>
<td>Exterior/Housing</td>
<td>Black heatshrink</td>
</tr>
<tr>
<td>Terminals/Connector</td>
<td>55mm flying leads with Molex Micro-Fit Connector</td>
</tr>
<tr>
<td>Safety</td>
<td>AL-MSDS/RD-002</td>
</tr>
<tr>
<td></td>
<td>Material Safety Datasheet - MSDS041</td>
</tr>
<tr>
<td></td>
<td>Safety Guide UBM-5112</td>
</tr>
</tbody>
</table>

Transportation

Class 9 - A complete description of transportation regulations, lithium weights and transportation classifications is available on the Ultralife website.

Quality Assurance

This product is listed under the Component Recognition Program of Underwriters Laboratories (UL) and has passed UN transportation testing, which is required for international transportation of all lithium batteries.

Typical Applications

Visonic PowerMax Siren Battery 2XER18505M

The Visonic MCS-740 alarm siren comes fitted with two ER18505M lithium battery packs. This model is 3.5Ah which lasts 2-3yrs in normal operation and is not rechargeable.

The MCS-740 and SR-740 PG2 must have 2 battery packs installed.

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Dimensions

Typical Performance Graphs

Constant Load Discharge Voltage versus Discharge Time at 25°C
ER18505M

- 50-400mA: 1.8Ah-4.5h
- 160-200mA: 2.0Ah-10h
- 560-60mA: 2.4Ah-20h
- 3300-10mA: 2.7Ah-270h
- 3.6kΩ, 1mA: 3.0Ah-3000h
- 36Ω, 0.1mA: 2.8Ah-28000h

Voltage versus Temperature at Different Discharge Currents
ER18505M

- 0.1mA
- 1mA
- 20mA
- 200mA

High and flat voltage at high and low drain
High voltage at high drain even at -30°C

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