**LTC-EP-20504**

**3.1 Ah Li/SOCl₂ Battery**

**LTC-EP-20504**
Lithium Thionyl Chloride Battery

**Implantable Grade**
**Long Life Low Rate**
**Lithium Primary Battery**
**With Flat Discharge and Reliable Performance**

**Features & Benefits**
- Manufactured in the USA
- ISO 13485 Certified manufacturing
- Stainless steel construction provides corrosion resistance
- Fully welded hermetically sealed design
- High energy density
- Flat discharge characteristics provide optimum voltage regulation
- Long shelf life
- Recommend storage from -20°C to 28°C for optimum capacity retention

**Typical Applications**
- Various medical monitors
- Neurostimulators

**Specifications**

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part Number</td>
<td>LTC-EP-20504</td>
</tr>
<tr>
<td>Nominal Open Circuit Voltage, 25°C</td>
<td>3.67 Volts</td>
</tr>
<tr>
<td>Nominal Working Voltage, 25°C</td>
<td>3.50 Volts @ 350 hr. rate</td>
</tr>
<tr>
<td>Nominal Capacity (350 hr. rate), 25°C</td>
<td>3.1 Ah to 2.5V cutoff</td>
</tr>
<tr>
<td>Dimensions</td>
<td>See Detail on Back</td>
</tr>
<tr>
<td>Volume</td>
<td>0.746 in³ (12.22 cc)</td>
</tr>
<tr>
<td>Weight</td>
<td>28.60 g</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C to 95°C</td>
</tr>
<tr>
<td>Cell Shape</td>
<td>Prismatic</td>
</tr>
<tr>
<td>Case Material</td>
<td>Stainless Steel 304L</td>
</tr>
<tr>
<td>Positive Terminal*</td>
<td>Ni Plated 446 Stainless Steel</td>
</tr>
<tr>
<td>Negative Terminal*</td>
<td>52 Alloy Nickel</td>
</tr>
<tr>
<td>Case Polarity</td>
<td>Negative</td>
</tr>
<tr>
<td>Options</td>
<td>Custom Markings, Potting, Custom Packaging, Solder Tinning</td>
</tr>
</tbody>
</table>

**Environmental Tests**

<table>
<thead>
<tr>
<th>Transportation Safety</th>
<th>UN Recommendations on the Transportation of Dangerous Goods ST/SG/AC.10/11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery Safety</td>
<td>Underwriters Laboratory Recognized Component</td>
</tr>
</tbody>
</table>

*Custom connections such as Nickel Tabs or Wires can be welded to the terminals to ensure ease on connections.
LTC-EP-20504

LTC-EP-20540 Discharge Capacity @ 37°C
11.3 mA Rate

Cell 1  Cell 2  Cell 3

Voltage (V)

Capacity (Ah)

2.0 2.5 3.0 3.5 4.0 4.5

4X R.100 [2,54mm]

2.008 ± 0.010
[51,00±0,25]

.650 ± 0.20
[16,51±0,51mm]

.895 ± 0.007/-0.12
[22,73±0,18/-0,30mm]

.380 ± 0.010
[9,65±0,25mm]

.085 ± 0.010/-0.05
[2,16+0,25/-0,13mm]

.463 ± 0.010
[11,76±0,25mm]

2X 0.030 [0,76mm]

EaglePicher Technologies, LLC
8225 East 26th Street
Joplin, Missouri 64804, USA
tel 417.623.8000
www.eaglepicher.com

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