AA Size Lithium Ion Rechargeable Battery

Notice: Charging circuit and application load profile have to be approved by Tadiran prior to the use of this cell.

Physical Characteristics
- Length: 53 mm. Max
- Diameter: 15.1 mm Max
- Weight: 18.8 gr. Max

Electrical Characteristics (for batteries stored at RT for 1 year or less)

**Charge**
- Max, Charge Voltage: 4.1 V
- Charge Method: CCCV (Constant Current/Constant Voltage)
- Max Charge Current @ -20 to +50 °C: 100 mA
- Max Charge Current @ -40 to +85 °C: 20 mA
- Charge / Discharge operating temp.: -40 to +85 °C

**Discharge**
- Max. Continuous Discharge Current: 4.0 A @ 20 °C (without PTC)
- Maximum Pulse to 3.4V: 6.0 A 1sec
- End of Discharge: 2.2 V @ RT. (discharge below 2.2 V at 20 °C may increase the cell internal impedance)

Performance

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Capacity when charged to 4.1 V</td>
<td>1000 mAh</td>
<td>Discharge at 50 mA to 2.5 V at 20 °C</td>
</tr>
<tr>
<td></td>
<td>900 mAh</td>
<td>Discharge at 1 A to 2.5 V at 20 °C</td>
</tr>
<tr>
<td>Charge / Discharge Cycles</td>
<td>240</td>
<td>@ RT 100% DOD (C/4)</td>
</tr>
<tr>
<td></td>
<td>332</td>
<td>@ RT 85% DOD (C/4)</td>
</tr>
<tr>
<td>Capacity Retention after the last cycle</td>
<td>80 %</td>
<td>Discharge at 250 mA at 20 °C</td>
</tr>
<tr>
<td>(reversible)</td>
<td>91 %</td>
<td>Discharge at 250 mA at 20 °C</td>
</tr>
<tr>
<td>Impedance (RT)</td>
<td>&lt; 100 mΩ</td>
<td>Impedance at 1 KHz</td>
</tr>
</tbody>
</table>

Physical Cell / Battery Protection (to be applied by the user)

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over charge protection</td>
<td>Cell voltage should not be higher than 4.2 V</td>
</tr>
<tr>
<td>Over discharge protection</td>
<td>Cell voltage should not be lower than 2.4 V</td>
</tr>
</tbody>
</table>

**Battery pack assembly and usage considerations**

- For 2 cells or more in series, voltage shall be monitored on each cell.
- For more than 2 cells in parallel, maximum charge current shall be limited to 250 mA for the whole pack.

**Safety Considerations**

The cells successfully passed the following tests:

- Shock & Vibration: UN
- Short Circuit at RT, +55 °C: UN
- Heating at 130 °C: UN
- Over Charge: UN
- Forced Discharge: UN
- Crush & Impact: UN

**Key Features**

- Hermetically sealed (glass-to-metal)
- Wide operating temperature range
- Low self discharge
- High output current
- High reliability
- Safe design
- Lightweight

**Main Applications**

- Energy Harvesting
- Wireless Sensors
- BUB in Metering
- Asset, Container & Cargo Tracking
- Parking Meters
- Electrical Grid Monitoring
- Emergency & Medical Devices
- Automotive
- Industrial and Agricultural IOT

**Ordering P/N:**

- TLI-1550S/S: 61-1559-22000
- TLI-1550S/T: 61-1559-22150

---

**WARNING:**
Fire, Explosion, And Severe Burn Hazard. Do Not Crush, Disassemble, Heat Above 100 °C, Incinerate Or Short Circuit.

www.tadiranbatteries.com

---

**UN Manual of Tests & Criteria**

---

THE INFORMATION PROVIDED HERE IS NECESSARILY OF A GENERAL NATURE. SINCE SPECIFIC PERFORMANCE DEPENDS ON ACTUAL OPERATING AND STORAGE CONDITIONS, OUR ENGINEERS WILL PROVIDE PARTICULAR APPLICATION INSTRUCTIONS UPON REQUEST. ANY REPRESENTATION IN THIS BROCHURE CONCERNING PERFORMANCE ARE FOR INFORMATION PURPOSES ONLY AND NOT WARRANTIES. EITHER EXPRESSED OR IMPLIED, OF FUTURE PERFORMANCE. TADIRAN’S STANDARD LIMITED WARRANTY, STATED IN ITS SALES CONTRACT OR ORDER CONFIRMATION FORM IS THE ONLY WARRANTY OFFERED BY TADIRAN.
The information provided here is necessarily of a general nature. Since specific performance depends on actual operating and storage conditions, our engineers will provide particular application instructions upon request. Data subject to revision without notice. Any representation in this brochure concerning performance are for information purposes only and not warranties, either expressed or implied, of future performance. Tadiran’s standard limited warranty, stated in its sales contract or order confirmation form is the only warranty offered by Tadiran.