Pin-type Lithium-ion Battery

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Panasonic Energy Co., Ltd.

This data in this document is for descriptive purposes only and is not intended to make or imply any guarantee or warranty.
Pin-type Lithium-ion Battery, suitable for small devices

- Wireless Earphones
- Smart Glasses
- Stylus Pen
- Hearing Aids
- Wristband Devices
Features

1) Super small and slim battery realizes not only stylish designs but also high output.

2) A high-strength stainless exterior case provides excellent safety and reliability.

3) Rapid charging makes your portable devices more user-friendly.
1) Super small and slim, but high output

✓ Provides stylish designs for your products, as well as Bluetooth low energy, vibration and other functions which needs big discharging current.

<table>
<thead>
<tr>
<th>CG-320B General Li-ion 18650 size</th>
<th>CG-320B</th>
<th>150mA 1 pulse/hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter : 3.65mm</td>
<td>Height : 20mm</td>
<td>Weight : 0.5g</td>
</tr>
</tbody>
</table>

※Image chart

\[
\text{Voltage when discharging with base current} \quad \text{Voltage when discharging with pulse current}
\]

Test Conditions:
- C: 11.2mA(0.75C)/4.35V - 0.3A(0.02C) cut(CC/CV)
- D: Pulse current 150mA(10C) for 0.5s in every hour, Base current 0.1mA - 3.0V cut
- Temperature: 20°C
2) High-strength stainless case, high safety and high reliability

- No swelling, no explosion, no fire.
- Certified by IEC62133/UL1642.

**Test example**

- **Swelling check after 1,000 times cycle test**
- **Nail penetration test**
- **Impact test**
3) Rapid charging, more user-friendly

✓ 3C charging realizes 80% charging in 20 minutes. (CG-420A/425A only)

- 20 min. charging
  - CG-425A
  - CG-420A

- 60 min. charging
  - CG-425A
  - CG-420A

80% charged

100% charged
Manufacturing technology

- Highly skilled battery design technology
- Highly precise manufacturing technology
- Highly quality control
### Specification

<table>
<thead>
<tr>
<th>Part Number</th>
<th>CG-320B</th>
<th>CG-420A</th>
<th>CG-425A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diameter(Max.)</td>
<td>3.65mm</td>
<td>4.7mm</td>
<td>4.7mm</td>
</tr>
<tr>
<td>Height(Max.)</td>
<td>20mm</td>
<td>20mm</td>
<td>25mm</td>
</tr>
<tr>
<td><strong>Weight</strong> (Approx.)</td>
<td>0.5g</td>
<td>0.8g</td>
<td>1.0g</td>
</tr>
<tr>
<td><strong>Typical Capacity</strong></td>
<td>16mAh</td>
<td>23mAh</td>
<td>32mAh</td>
</tr>
<tr>
<td><strong>Rated Capacity</strong></td>
<td>15mAh</td>
<td>22mAh</td>
<td>30mAh</td>
</tr>
<tr>
<td><strong>Nominal Voltage</strong></td>
<td>3.8V</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Charging Voltage</strong></td>
<td></td>
<td>4.35V</td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Continuous Discharging Current</strong></td>
<td>30.0mA(2C)</td>
<td>44.0mA(2C)</td>
<td>60.0mA(2C)</td>
</tr>
<tr>
<td><strong>Maximum Charging Current</strong></td>
<td>11.2mA(0.75C)</td>
<td>66.0mA(3C)</td>
<td>90.0mA(3C)</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>Charge</td>
<td>0°C ~ 60°C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discharge</td>
<td>-20°C ~ 60°C</td>
<td></td>
</tr>
<tr>
<td><strong>Certifications</strong></td>
<td>IEC62133, UL1642</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Without tabs
Pin-type Li-ion battery will make your product more attractive.

Key Benefits

- Small & Slim
- Stylish design
- High safety & reliability
- Rapid charging
- Available for Bluetooth low energy, vibration and other functions
- Long product life time

2. The battery will be shipped with tabs.
   Please ask a Panasonic Energy sales person when tab customization is needed.

3. In order to prevent accidental ingestion of the battery, it must be inaccessible to the individual user / customer.

Standard Terminal Types

<table>
<thead>
<tr>
<th>Through-hole type</th>
<th>Surface mount type</th>
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</thead>
</table>

All models have stainless steel tab with tin (Sn) plating.
Please feel free to contact us

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