Battery Retainer Guide
Product Overview:

Coin cell retainers are simple metal contacts that both electrically connect coin cells and hold them in place, while taking up minimal additional space on the PCB. They feature nickel-plating and since most coin cells have nickel shells this helps to prevent galvanic corrosion, an electrochemical process that can damage dissimilar metals that are in electrical contact. Our retainers are always designed with automation in mind, and can be easily picked and placed, with both through hole and surface mount retainers available for most coin cell sizes. Combining the ease of automation with the low cost of MPD’s retainers, it is no wonder they are such a popular product.

In a typical application the pcb acts as the negative contact. Offering a lower height, reducing piece count, saving the cost of the negative terminal and its assembly are just a few of the designs advantages in favor of retainers. The negative pads shape and size are not critical but the plating is. Never use tin or solder paste for the surface material. MPD Recommends that nickel or gold are very suitable to act as the negative contact on your pcb.

Soldering:

One of the most frequent questions MPD receives about coin cell retainers is soldering them. Retainers are nickel plated over a phosphor bronze body and the lithium batteries are nickel plate over a stainless steel body.

Nickel usually requires a more active solder paste and MPD recommends working with your paste supplier in picking the one most suitable for your design.

Comments:

- If you have a battery access door, grow ribs or other features to keep the battery securely in place (hand held or portable products).
- Passes MPD’s standard shock and vibration testing requirements.
- RoHS compliant.
- Passes 24 hour salt spray test.
• For more information about lithium batteries visit: cr2032.co

• For more information about solder paste visit: kester.com

• The full selection of coin cell retainers currently available can be viewed online at Battery-Contacts.com/coin-cell-retainers.php
Battery Retainer Contacts

**Surface Mounting**

- **BK-885**: Diameter: 12 mm
- **BK-888**: Diameter: 16 mm
- **BK-883**: Diameter: 20 mm
- **BK-912-TR**: Diameter: 20 mm
- **BK-5067**: Diameter: 20 mm
  Low Profile
- **BK-884**: Diameter: 23 mm
- **BK-886**: Diameter: 24 mm

**PC Pins**

- **BK-890**: Diameter: 12 mm
- **BK-869**: Diameter: 16 mm
- **BK-888**: Diameter: 20 mm
- **BK-913**: Diameter: 20 mm
- **BK-889**: Diameter: 23 mm
- **BK-887**: Diameter: 24 mm
- **BK-5033**: Diameter: 24 mm

**Micro diameters**

- **BK-414-TR**: ML414 Retainer
- **BK-5091**: LR44 Retainer

**Customized Retainer Contacts**

*We can custom manufacture our coin cell retainer contacts to fit into confined and problematic spaces.*
## Battery Retainer Contacts

### P/N with Coin Cell Diameter

<table>
<thead>
<tr>
<th>P/N with SMD</th>
<th>Coin Cell Diameter</th>
<th>Typical Part Number for Lithium Coin Batteries and Many Standard Zinc Air, Silver Oxide, and Other Rechargeable Lithium Batteries</th>
</tr>
</thead>
<tbody>
<tr>
<td>BK-414</td>
<td>4.8 mm</td>
<td>ML414 batteries</td>
</tr>
<tr>
<td>BK-335-TR</td>
<td>5.8 mm</td>
<td>335 batteries</td>
</tr>
<tr>
<td>BK-885</td>
<td>12 mm</td>
<td>BR/CR/DL 1216, 1220, 1225, 379, 371, 381, 391, 389, RW80, LR55 batteries</td>
</tr>
<tr>
<td></td>
<td></td>
<td>V8GA, G8 or 1.6 to 2.5 mm thick by 12 mm maximum diameter batteries</td>
</tr>
<tr>
<td>BK-868</td>
<td>16 mm</td>
<td>BR/CR/DL 1616, 1620, 1632 or 1.6 to 3.2 mm thick by 16 mm diameter batteries</td>
</tr>
<tr>
<td>BK-5009</td>
<td>16 mm</td>
<td>V80H, V675H, A76, 357, I-Buttons, or 5.2 to 6 mm thick by 16 mm diameter batteries</td>
</tr>
<tr>
<td>BK-5067</td>
<td>20 mm</td>
<td>BR/CR/DL 2016 or 1.2 to 1.6 mm thick batteries</td>
</tr>
<tr>
<td>BK-883</td>
<td>20 mm</td>
<td>BR/CR/DL 2016, 2020, 2025, 2032 or 1.6 to 3.2 mm thick by 20 mm diameter batteries</td>
</tr>
<tr>
<td>BK-912TR</td>
<td>20 mm</td>
<td>BR/CR/DL 2032 or 3.2 mm thick by 20 mm diameter batteries</td>
</tr>
<tr>
<td>BK-884</td>
<td>23 mm</td>
<td>BR/CR/DL 2320, 2325, 2330 or 2.0 to 3.0 mm thick by 23 mm diameter batteries</td>
</tr>
<tr>
<td>BK-878</td>
<td>23 mm</td>
<td>BR/CR/DL 2354 or 5.4 mm by 2.3 mm diameter batteries</td>
</tr>
<tr>
<td>BK-886</td>
<td>24 mm</td>
<td>BR/CR/DL 2430 or 2.0 to 3.0 mm thick by 24 mm diameter batteries</td>
</tr>
<tr>
<td>BK-887</td>
<td>24 mm</td>
<td>BR/CR/DL 2450 or 5.0 mm thick by 24 mm diameter batteries</td>
</tr>
</tbody>
</table>

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### Individual drawings of our products are available online at [www.battery-contacts.com](http://www.battery-contacts.com)