Molex continues to push the envelope on micro technology with the industry's smallest overall microSD card connector. The new 503398 push-pull version has a profile height of 1.28mm (.050”) and width of just 13.10mm (.516”), making it the smallest available in the market today.

This new version features many of the same reliable features as our 503182 version, such as an inner lead terminal design that prevents terminal stubbing during card insertion while also providing secure contact reliability.

This newest version also includes several unique new features such as housing and shell modifications that help ensure smooth card extraction. Other features include: card polarization chamfers to prevent incorrect card insertion; and an integral detect and anti card-sticking feature that provides dual functionality and space savings.

**Specifications:**
- Voltage: 10V
- Current: 0.50A
- Contact Resistance: 100 milliohms max.
- Dielectric Withstanding Voltage: 500V AC
- Insulation Resistance: 1000 Megohms min.
- Durability (min.): 10,000 cycles
- Operating Temperature: -25 to +85°C

### Features

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultra-low-profile (1.28mm)</td>
<td>Space savings for mobile and other tight packaging applications</td>
</tr>
<tr>
<td>Inner lead terminal design</td>
<td>Prevents terminal stubbing, and provides secure contact reliability</td>
</tr>
<tr>
<td>Anti card fly-out ramp and alignment guides</td>
<td>Controls card ejection forces and enable smooth card insertion and extraction</td>
</tr>
<tr>
<td>Safe zone near solder tail area</td>
<td>Enables easy re-work and provides protective space for solder tail joints</td>
</tr>
<tr>
<td>Card polarization feature</td>
<td>Prevents card from being improperly inserted</td>
</tr>
</tbody>
</table>

### Design Features

- Inner lead terminal design prevents terminal stubbing
- Side wall design provides smooth card extraction and prevents card scratching

### Markets and Applications

- Mobile phones
- Portable audio players
- Digital still cameras
- Digital video cameras
- Portable games
- Car navigation
- Personal navigators (PND)
**microSD Card Connector**
Push-Push, Top Mount
1.28mm (.050”) Height

**Series 503398**
Card Detect Switch

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Pitch</th>
<th>Description</th>
<th>Mounting Type</th>
<th>Packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>503398-0891</td>
<td>1.10mm (.043&quot;)</td>
<td>Ultra-low-profile height 1.28mm (.050&quot;)</td>
<td>Top (Normal)</td>
<td>Embossed Tape</td>
</tr>
</tbody>
</table>

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