Molex’s newest 0.30mm pitch dual-contact FPC connector offers the most compact dimensions of any equivalent competitive version, while eliminating the need to source a top and bottom-style connector when routing FPC to parallel boards.

Molex developed its 502598 dual-contact FPC connector for consumer applications such as digital still cameras that required overall compact features. Designers for these applications were also looking for a dual-contact version that would enable them to source a single connector and utilize the same PCB pattern on adjoining parallel PCBs. Molex’s new 502598 solution met these needs and more.

Molex offers another 0.30mm-pitch dual-contact version with a lower profile, series 502250, which is ideal for ultra-thin applications such as certain cell phone designs. However, the new 502598 FPC connector offers a shorter depth than the 502250 version and other similar competitive versions and is suitable for applications needing an overall compact size.

This new version also includes a unique terminal design that includes movable contacts. This helps maintain secure connection between FPC contact pads and terminals even when the FPC cable is pulled up.

### FEATURES AND BENEFITS

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual-contact design</td>
<td>Eliminates the need for different top and bottom-mount connectors</td>
</tr>
<tr>
<td>Compact depth, height and width</td>
<td>Space savings for mobile device and tight packaging applications</td>
</tr>
<tr>
<td>Movable contacts</td>
<td>Maintain secure and stable connections even when cable is pulled upward</td>
</tr>
<tr>
<td>BackFlip™ actuator with short latch</td>
<td>Easy cable insertion, actuation and additional space savings</td>
</tr>
<tr>
<td>Front wide solder tabs</td>
<td>Secure PCB retention and protection for solder joints</td>
</tr>
</tbody>
</table>

### ADDITIONAL PRODUCT FEATURES

- **0.3×(N-1)+2.4**
- **3.80 (ACT OPEN)**
- **3.55 (ACT OPEN)**
- **1.15**
- **3.80 (ACT CLOSE)**

### MARKETS AND APPLICATIONS

- Digital still cameras
- Digital video cameras
- Mobile Devices
  - Cell phones
  - Tablet PCs
- Portable audio equipment
- Portable GPS equipment
- Other compact, handheld devices

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0.30mm (.012”) Pitch Easy-On™ BackFlip™ FPC Connector, Right Angle, SMT, 1.15mm (.045”) Height

502598 Dual-Contact Style
SPECIFICATIONS

Reference Information
• Packaging: Embossed
• Use With: 0.20mm thick FPC cable
• Designed In: mm
• RoHS Compliant: Yes

Electrical
• Voltage (max.): 50V AC (RMS)/DC
• Current (max.): 0.2A
• Contact Resistance: 60 milliohms max.
• Dielectric Withstanding Voltage: 250V AC
• Insulation Resistance: 50 Megohms max.

Mechanical
• Durability (min.): 10 cycles

Physical
• Housing: LCP White
• Contact: Copper alloy
• Plating:
  Contact Area — Gold
  Solder Tail Area — Gold
  Underplating — Nickel
• Operating Temperature: -40 to +85 °C

ORDERING INFORMATION

Connector

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Circuits</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>502598-2393</td>
<td>23</td>
<td>3.80mm(.150&quot;)</td>
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<tr>
<td>502598-2593</td>
<td>25</td>
<td></td>
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<tr>
<td>502598-2793</td>
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<tr>
<td>502598-2993</td>
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<td>502598-3393</td>
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<td>502598-4593</td>
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<tr>
<td>502598-5193</td>
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</table>

Part Number -xx93 replaces -xx91 due to a terminal material change. Contact Molex for further details.