Molex’s 0.30mm pitch narrow-depth FPC connector provides an optimal combination of space savings, contact retention assurance and ease-of-use for tight-packaging applications.

The 503566 FPC connector offers the narrowest depth (2.85mm) of any Molex 0.30mm pitch version. The connector was designed for tight-packaging mobile applications such as smart phones or digital still cameras to allow manufacturers to reduce size while adding increased functionality. The 503566 series connector incorporates some of the proven features of other Molex FPC connectors such as a robust Easy-On™ actuator for stable mating functionality and reliable contact retention. The new series also includes other new or improved design features such as: housing design that highlights the FPC tabs more to help assure proper cable seating; wider gap for easier cable insertion; and a longer area to hold onto the actuator to make assembly easier and quicker for operators.

Movable contacts provide more secure contact retention force. This is achieved by terminals moving with the cable in case it is pulled up or down to assure electrical contact is still maintained. While certain competitive versions may have a narrower depth or lower profile, the Molex 503566 version offers one of the best combinations of compact size, contact retention assurance and ease of use.

For additional information visit: www.molex.com/product/smt_ffc-fpc.html

**Features and Benefits**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.85mm depth</td>
<td>Space savings to allow for other components or tracing</td>
</tr>
<tr>
<td>Movable contacts</td>
<td>Provide higher contact retention force</td>
</tr>
<tr>
<td>FPC tabs</td>
<td>Facilitate cable insertion for proper alignment and assured electrical reliability</td>
</tr>
<tr>
<td>Longer area to access actuator</td>
<td>Easier locking for faster assembly</td>
</tr>
<tr>
<td>Housing design and color that highlights cable ear tabs</td>
<td>Better visibility to ensure proper cable alignment</td>
</tr>
<tr>
<td>9-45 circuits</td>
<td>Lowest circuit size options amongst competitors, and wide range for design flexibility</td>
</tr>
</tbody>
</table>

**Applications**

- Smart Phone/Mobile Phone
- Tablet PC
- Portable Audio
- Digital Still Camera/Video Camera
- Portable Navigation Equipment
- Portable game
- Notebook PC
Specifications

**REFERENCE INFORMATION**
Packaging: Embossed Tape
Use With: 0.20mm thick FPC
Designed In: mm
RoHS Compliant: Yes
Halogen Status: Low-Halogen

**ELECTRICAL**
Voltage (max.): 50V
Current (max.): 0.2A
Contact Resistance:
  80 milliohms max. (Odd terminal)
  50 milliohms max. (Even terminal)
Dielectric Withstanding Voltage:
  250V (rms) AC
Insulation Resistance:
  50 Megohms min.

**PHYSICAL**
Housing:
  Glass-filled LCP,
  Natural, UL 94V-0
Actuator:
  Glass-filled Polyamide,
  Black, UL 94-HB
Contact: Phosphor bronze
Plating:
  Contact Area — Gold
  Fitting Nail — Gold
  Underplating — Nickel
Temperature: -40 to +85°C

Additional Product Features

**Space Savings**
Movable Contacts for Higher Retention Force

- Narrowest depth (2.85mm) of any Molex 0.30mm pitch FPC connector
- Movable contacts provide higher contact retention force as terminals move and maintain electrical contact with cable pads even if cable is pulled up or down.

Ordering Information

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Circuits</th>
</tr>
</thead>
<tbody>
<tr>
<td>503566-0900</td>
<td>09</td>
</tr>
<tr>
<td>503566-1100</td>
<td>11</td>
</tr>
<tr>
<td>503566-1300</td>
<td>13</td>
</tr>
<tr>
<td>503566-1500</td>
<td>15</td>
</tr>
<tr>
<td>503566-1700</td>
<td>17</td>
</tr>
<tr>
<td>503566-1900</td>
<td>19</td>
</tr>
<tr>
<td>503566-2100</td>
<td>21</td>
</tr>
<tr>
<td>503566-2300</td>
<td>23</td>
</tr>
<tr>
<td>503566-2500</td>
<td>25</td>
</tr>
</tbody>
</table>

Order No. 987650-8273, Rev 1
Printed in Singapore/pdf/R5/MMC/2013.03
©2013 Molex