Molex's Slim Type FFC/FPC connectors offer the lowest-profile and narrowest width of any similar version in the market for applications such as thin LED TVs.

Molex's 0.50mm pitch Slim Type FFC/FPC connectors were developed for the industry's latest and thinnest LED TVs. The recent trend for LED TVs has been toward making the screen thinner while at the same time increasing functionality for more brilliant images. Molex calls this new line of connectors "Slim Type" because they are thin in both height and width. At 1.50mm height and 4.40mm width, this new series is the smallest of its kind today in the industry.

The original application for this series is in connecting the source board to the time control board on the LED panel side of a TV application. In this area, high circuit size connectors are needed to carry large signal capacity in order to achieve more dynamic screen quality. Molex's slim FPC design fits into these thinner LED TVs while leaving more space for increased functionality.

The series includes a robust actuator design that helps prevent damage caused by extensive testing, cycling or rough handling. This new zero insertion force (ZIF) series also includes a more durable type of contact material to provide added signal reliability. The high-temperature housing meets ROHS and low halogen environmental requirements. The series is available in three different circuit sizes ranging from 68 to 96, with the 68-circuit version footprint compatible with certain competitive versions.

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>Slim height and width</td>
<td>Space savings</td>
</tr>
<tr>
<td>68 to 96 circuit size range</td>
<td>Meets various pin-count needs of latest LED flat panel TVs</td>
</tr>
<tr>
<td>Gold-plated terminals</td>
<td>Reliable and durable signal contact</td>
</tr>
<tr>
<td>Low Halogen compliant</td>
<td>Meets global environmental standards</td>
</tr>
<tr>
<td>High temperature housing and actuator</td>
<td>Withstands high-temperature environments</td>
</tr>
<tr>
<td>Robust actuator design</td>
<td>Protects actuator against damage during testing and usage</td>
</tr>
</tbody>
</table>

**Applications**

**Flat Panel Displays**
- LED/3D TV Panel Source Board
- OLED TV Panel Source Board and Time Control Boards
- PDP Display Panels

**Other Markets**
- Automotive
- Medical
Specifications

REFERENCE INFORMATION
Packaging: Embossed
Use With: 0.30mm thick FPC
Designed In: mm
RoHS: Yes
Halogen Free: Yes

ELECTRICAL
Voltage (max.): 50V
Current (max.): 0.5A
Contact Resistance: 40 milliohms max.
Dielectric Withstanding Voltage: 250V AC for 1 minute
Insulation Resistance: 50 Megohms min.

PHYSICAL
Housing: Glass-filled LCP, Natural
Actuator: Glass-filled PPS, Black
Flammability: UL 94V-0
Contact: Phosphor Bronze
Plating:
  Contact Area — Gold
  Solder Tail Area — Gold
  Underplating — Nickel
Temperature: -25 - +85°C

MECHANICAL
Durability (min.): 20

Additional Product Features

Dimensional Overview

Robust Actuator Features

Several support features built into the connector design help provide protection to the actuator. Especially in large circuit sizes, the actuator can be damaged from rough handling or repeated testing. These support features help ensure consistent performance over repeat cycling.

Ordering Information

Connector

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Circuits</th>
<th>Height</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>104075-6817</td>
<td>68</td>
<td>1.50</td>
<td>4.40</td>
</tr>
<tr>
<td>104114-8017</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>104083-9617</td>
<td>96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

www.molex.com/product/smt_ffc-fpc.html