**Flexi-Latch™ 2.00mm Pitch Right Angle FPC-to-Board Connector System**

Flexi-Latch™ connectors provide secure mating assurance along with space and cost savings versus wire-to-board systems for rugged applications such as automotive lighting or industrial controls.

### Features and Benefits

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable retention force of 20N</td>
<td>Provides secure mating retention force that meets automotive shock and vibration requirements</td>
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<tr>
<td>Positive inertia lock</td>
<td>Prevents partial cable insertion for secure mating</td>
</tr>
<tr>
<td>Audible click when mated</td>
<td>Offers additional mating assurance</td>
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<tr>
<td>Multiple polarizing keys</td>
<td>Prevent against incorrect cable insertion</td>
</tr>
<tr>
<td>-40 to 125 degrees operating temperature range</td>
<td>Meets automotive requirements</td>
</tr>
<tr>
<td>FPC retention tabs</td>
<td>Position cable for proper mating and prevent cable drop-out during assembly</td>
</tr>
</tbody>
</table>

### Markets and Applications

**Home Appliances**
- LCD TVs

**Industrial**
- Gaming/Pachinko Machines
- Medical equipment
- Lighting

**Automotive & Transportation**
- Lighting
- Comfort and Infotainment
- Factory Automation equipment

### Specification

**REFERENCE INFORMATION**
- Packaging:
  - Terminals: Reel; Housings: Bags; SMT PCB
  - Receptacles: Embossed Tape
- Designed In: Millimeters
- RoHS: Compliant
- Halogen Free: Yes
- Glow Wire Compatible: No

**ELECTRICAL**
- Voltage (max.): 50V AC/DC
- Current (max.): 1.5A max.
- Contact Resistance: 40 milliohms max.
- Dielectric Withstanding Voltage: 250V AC for 1 minute
- Insulation Resistance: 50 Megohm min.

**MECHANICAL**
- Durability (min.): 25 cycles
- FPC Retention Force: 20N min.

**PHYSICAL**
- Material:
  - Connector Housing: LCP, UL 94V-0, Black
  - Plug Jacket Housing: PBT, UL 94V-0 Black
- Terminal: Copper Alloy
- Plating:
  - Contact Area — Gold
  - Solder Tail Area — Tin
  - Underplating — Nickel
- Operating Temperature: -40 to +125°C
Additional Product Features

Space and Cost Savings Versus Wire-to-Board

In applications such as automotive head-lights, the Flexi-Latch™ system provides space savings and reduced component costs versus wire-to-board connector systems.

Clear Click Feeling for Secure Mating
(20N of Cable Retention Force That Meets Automotive Shock and Vibration Requirements)

Before Mating
- The height of the latch is lower than the guard, which contributes to the click feeling.

During Mating
- There is a clear click feeling when fully mated
- The operator’s finger does not push down on the latch—like in many outer-lock designs—which allows for a better click feeling.

Ordering Information

<table>
<thead>
<tr>
<th>Series No.</th>
<th>Circuit Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>505147-0290</td>
<td>2</td>
<td>Right-Angle Connector</td>
</tr>
<tr>
<td>505147-0390</td>
<td>3</td>
<td>Right-Angle Connector</td>
</tr>
<tr>
<td>505147-0490</td>
<td>4</td>
<td>Right-Angle Connector</td>
</tr>
<tr>
<td>505148-0208</td>
<td>2</td>
<td>Cable Plug Jacket</td>
</tr>
<tr>
<td>505148-0308</td>
<td>3</td>
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www.molex.com/link/flexilatch.html