Ideal for thin LED lighting-module applications, Molex’s Lite-Trap™ SMT wire-to-board connectors offer a low profile, easy wire removal, and low wire insertion and high wire retention forces.

The termination method of Molex’s Lite-Trap connector is similar to Molex’s Wire Trap connectors. A stripped wire is inserted into the connector and pushes open a gate-style terminal that “traps” the wire. To unmate, a button-style lever on the housing top is pushed down to allow the wire to be disengaged.

With a profile height of just 4.20mm, Molex’s Lite-Trap connectors offer the lowest profile available of similar wire-removable types. Other lower-profile versions are available in the market, but these are permanent one-time connection types that do not allow wire removal.

Molex’s wire-removable Lite-Trap connector offers lower wire insertion force than similar types. It also offers a user-friendly latch that is easy for operators to engage and disengage, even without the use of a tool. These features combine to offer easy field assembly and removal if needed for trained or untrained operators.

Other features of the Lite-Trap connector include a housing design that accepts more insulation-length range than competitive designs. This provides more stable wire seating for electrical contact assurance. The dual-contact wire-trap clamp design provides further mating assurance.

**Features and Benefits**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low profile (4.20mm)</td>
<td>Meets needs of thin LED modules and other compact applications</td>
</tr>
<tr>
<td>User-friendly push-button latch</td>
<td>Ensures easy wire extraction</td>
</tr>
<tr>
<td>Dual-contact gate-style terminal design</td>
<td>Enables secure electrical contact and high wire-retention force</td>
</tr>
<tr>
<td>Long wire insulation design</td>
<td>Provides stable wire placement for additional contact assurance</td>
</tr>
<tr>
<td>Compact industry-standard PCB pattern layout</td>
<td>Saves space and is drop-in compatible with certain competitive products</td>
</tr>
<tr>
<td>Wire stopper feature</td>
<td>Facilitates correct wire insertion depth placement</td>
</tr>
</tbody>
</table>

**Markets and Applications**

- **Lighting**
  - Down Light
  - Strip Light
- **Factory Automation Equipment**
- **Consumer Electronics**
- Any application requiring an easy-to-use wire insertion/extraction method

- **LED Down Lighting**
- **LED Strip Lighting**
Specifications

REFERENCE INFORMATION
Packaging: Embossed tape
Designed in: mm
AWG: 18-24 (Solid wire)
RoHS Compliant: Yes
Halogen Free: Yes

ELECTRICAL
Current: 9.0A max.
Voltage: 300V max.
Contact Resistance: 10 milliohms max.
Insulation Resistance: 1,000 Megohms min.
Dielectric Withstanding Voltage: 1,600 VAC for 1 minute

MECHANICAL
Wire Insertion Force: 15.0N (initial) max.
Wire Extraction Force: AWG 24: 28.0N min.
AWG 18-22: 50.0N min.

PHYSICAL
Connector: LCP, UL 94V-0, White
Terminal: Phosphor Bronze
Plating: Tin

REFERENCE INFORMATION
Packaging: Embossed tape
Designed in: mm
AWG: 18-24 (Solid wire)
RoHS Compliant: Yes
Halogen Free: Yes

Molex’s Lite-Trap™ connectors offer an overall compact size, with the lowest profile available in the industry for wire-removable styles.

Additional Product Features

How the Lite-Trap™ Connector Works

Wire Insertion

Wire is directly inserted and pushes open low-insertion force gate-style terminal, which “traps” wire in place

Wire Extraction

Button-style lever is pushed down, gate-style terminal opens, and wire can be freely pulled out.

www.molex.com/product/litetraps.html