molex®

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.
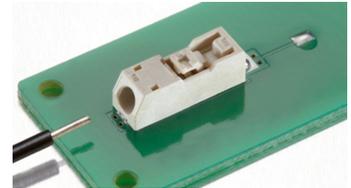
The termination method of Molex's Lite-Trap connector system is similar to Molex's Wire Trap connectors, and also to certain competitive "Poke-In" style versions. A stripped wire is inserted into the connector and pushes open a gate-style terminal that "traps" the wire. To unmate, a button-style lever on the housing top is pushed down to allow the wire to be disengaged.
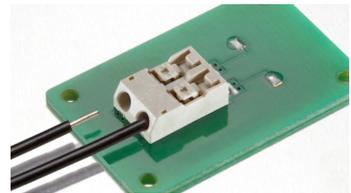
With a profile height of just 4.20mm, Molex's Lite-Trap connectors offer the lowest profile available of similar wire-removable types. Other lower-profile versions are available in the market, but these are permanent one-time connection types that do not allow wire removal.

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.

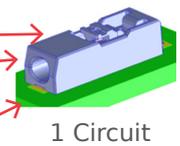One-Circuit Type

Two-Circuit Type

Features and Benefits

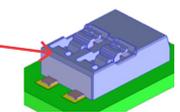|	
Low profile (4.20mm)	Meets needs of thin LED modules and other compact applications
User-friendly push-button latch	Ensures easy wire extraction
Dual-contact gate-style terminal design	Enables secure electrical contact and high wire-retention force
Long wire insulation design	Provides stable wire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

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

1 Circuit

› LED Strip Lighting

2 Circuit

molex®

Specifications

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

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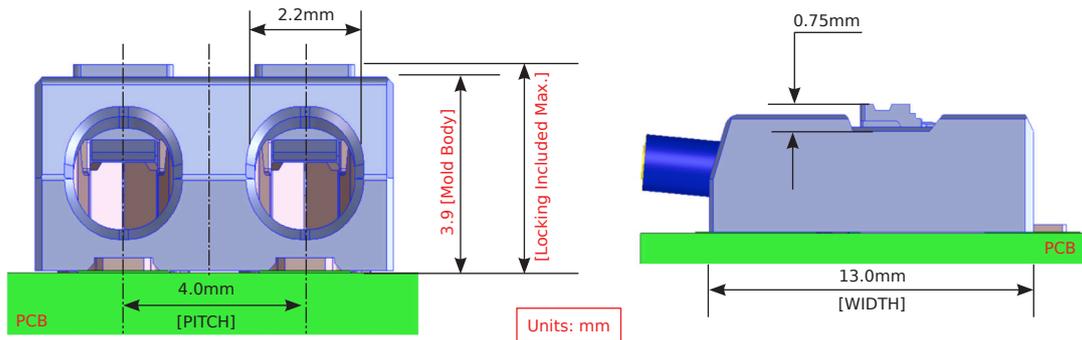Terminal: Phosphor Bronze
Plating: Tin

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.N min.

Dimensional Overview

2.2mm

3.9 [Mold Body]

[Locking Included Max.]

4.0mm

[PITCH]

PCB

Units: mm

0.75mm
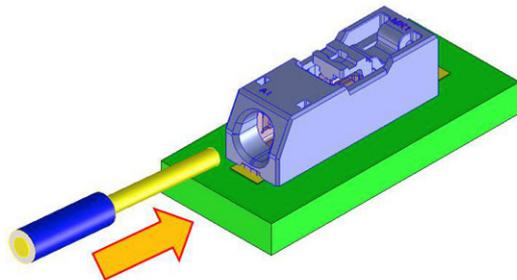
PCB

13.0mm

[WIDTH]

[Front View]

[Side View]

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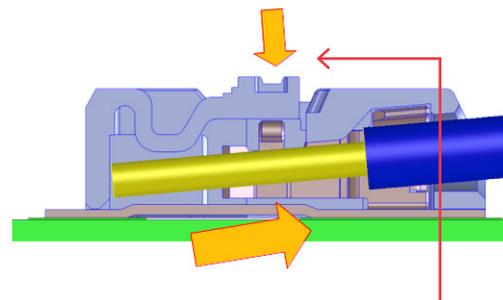
Additional Product Features

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.

Ordering Information

Connectors - Right Angle

Order No.	Circuit Size
104188-0110	1
104188-0210	2

www.molex.com/product/litetrap.html