# **Lite-Trap SMT Wire-to-Board Connector System**

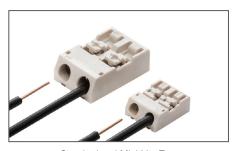
Standard, Mini, Bottom and Vertical-Entry Types



Ideal for thin LED lighting-module applications, Molex's Lite-Trap SMT wire-to-board connectors offer easy wire removability and low-profile top-andbottom entry styles for reduced shadowing

#### **Features and Benefits**

Low-profile top-and-bottom entry styles	Provide reduced shadowing effects for LED applications		
User-friendly push-button latch	Ensures easy wire extraction		
Low wire insertion and high wire retention forces	Enables easy wire insertion; provides secure contact retention		
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		
Dual-contact gate-style terminal design	Provides secure electrical contact and high wire- retention force		



Standard and Mini Lite-Trap connectors



Bottom-Entry Lite-Trap Connector



Vertical-Entry Lite-Trap Connector

# **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



Security System Controller



LED Strip Lighting

# Lite-Trap SMT Wire-to-Board Connector System



# Standard, Mini, Bottom and Vertical-Entry Types

## **Specifications**

#### REFERENCE INFORMATION

Packaging: Embossed Tape
Use With: Solid or stranded wire

Designed In: Millimeters

RoHS: Yes Halogen Free: Yes Glow Wire Compliant: No

#### **ELECTRICAL**

Voltage (max.): Standard: 300V Mini: 160V

Bottom-Entry: 320V Vertical-Entry: 431V

Current (max.): 9A (Mini, Vertical-Entry: 3.0A)
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1,600V AC;
Mini: 1,220V AC: Rottom Entry: 1,600V AC

Mini: 1,320V AC; Bottom Entry: 1,640V AC Insulation Resistance: 1,000 Megaohms min.

#### **MECHANICAL**

Wire Insertion Force: 10.0N max. (Vertical-Entry: 20.0N max.)

Wire Retention Force:

Standard:

AWG 24-28: 28N min. AWG 18-22: 50N min.

Mini:

AWG 22: 30N min. AWG 24: 20N min. AWG 26: 8N min.

Bottom-Entry:

AWG 18-22: 50N min. AWG 24: 28N min. Vertical-Entry: AWG 18: 50N min.

Durability (min.): 25 cycles

#### **PHYSICAL**

Housing: LCP, UL 94V-0 Contact: Copper Alloy

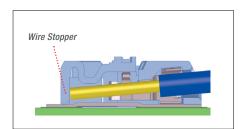
#### **PLATING**

Contact Area: Tin Solder Tail Area: Tin Operating Temperature:

Mini/Vertical-Entry: -40 to 130°C Standard/Bottom Entry: -60 to 130°C

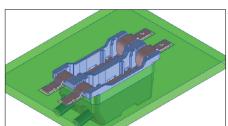
### **Additional Product Features**

#### Wire Stopper Feature For Wire Protection



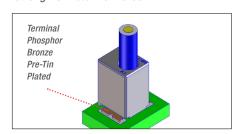
A wire stopper feature built into the mold design helps identify when the wire has been fully inserted to facilitate wire alignment and avoid wire damage

#### Less Shadowing With Bottom-Entry Type



The bottom-entry type Lite-Trap connector (above left) has less housing material exposed above the LED panel compared to top-entry types (above right), which reduces shadowing

# Grooved Solder Tail Design to secure strong PCB retention force



The vertical-entry type Lite-Trap can create the combination of high vltage and current together

## **Ordering Information**

Туре	Order No.	Circuit Size	AWG	Current
Mini	<u>104238-0110</u>	1	22 to 26 (Solid)	3.0A
	104238-0210	2		
Standard	104188-0110	1	18 to 24 (Solid) 20 to 22 (Stranded)	9.0A
	104188-0210	2		
Bottom-Entry	<u>104266-0110</u>	1	18 to 24 (Solid) 20 to 24 (Stranded)	9.0A
	<u>104266-0210</u>	2		
Vertical-Entry	<u>202394-0110</u>	1	18 (Solid)	3.0A

### www.molex.com/link/litetrap.html