

# L1NK Connector System Product Family



The L1NK Connector System is a wire-to-board system that delivers up to 11.0A of current through 3 pitch sizes (2.50, 3.00 and 3.96mm) and offers superior design options for flexibility and efficient assembly

## Features and Advantages



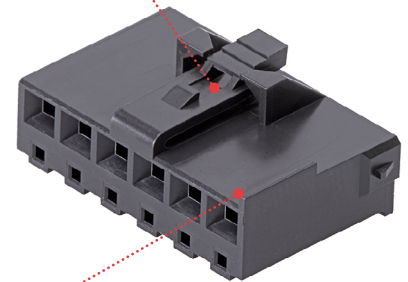
### Reflow-capable header

Can withstand a 260°C reflow process



L1NK 396 Connector

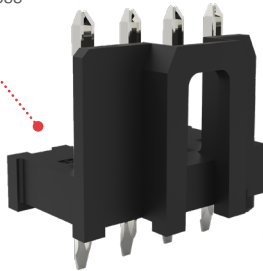
**Positive-locking latch**  
Offers a clear audible click for connection assurance



**Unique keying design**  
Prevents mis-mating

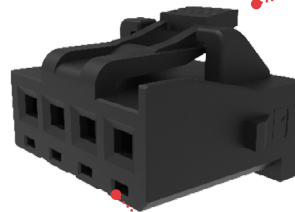


**Reflow options available**  
Reduces labor costs, saving time and resources



L1NK 250 Connector

**Positive-locking latch**  
Offers a clear audible click for connection assurance



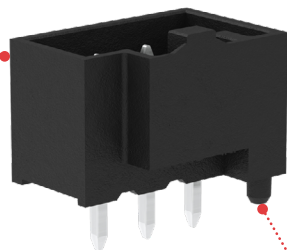
**V-0/Glow Wire combination resin**  
Reduces the cost of materials and labor and allows customers to meet the European standard for electrical requirements



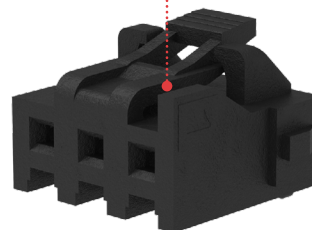
**TPA**  
Prevents terminal back-out



**Partially Shrouded Wall**  
Provides protection of the pins within



**Unique keying design**  
Prevents mis-mating



**Crush Peg**  
Provides stability of the connector onto the PCB and allows assembly operators to align the connector onto the PCB

L1NK 300 Connector

L1NK 250 Connectors can provide a direct drop-in replacement on a PCB for JST – XA products.  
L1NK 396 Connectors can provide a direct drop-in replacement on a PCB for JST – VH products.

For new low-power, wire-to-board applications, L1NK connectors are reliable alternatives to other manufacturers' products. L1NK 250 Connectors are designed to have a PCB layout compatible with JST's XA series, and L1NK 396 Connectors are designed to have a PCB layout compatible with JST's VH series; however, L1NK receptacles will not mate with JST's or any other manufacturers' products.

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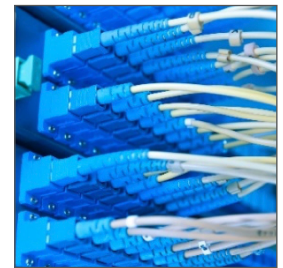


## Markets and Applications

<b>Consumer – General Market</b>	<b>Telecommunications/Networking</b>	<b>Automotive</b>
Washers and dryers	Routers and switches	Harness manufacturers
Freezers	Servers	Non-sealed applications
Gaming machines	Storage	Inside devices
Printers	<b>Medical</b>	Charging stations
Refrigerators	Diagnostic equipment	<b>Industrial</b>
Scanners	Patient monitors	Food and beverage
Security systems		Assembly line equipment
Vending machines		
White goods		



Appliances



Routers

## Specifications

### L1NK 250 (2.50MM)

#### REFERENCE INFORMATION

Packaging: Bag, Reel  
 UL File No.: E29179  
 CSA File No.: 70216533  
 Header : 207843  
 Receptacle: 207841  
 TPA : 207845  
 Crimp Terminal: 46626  
 Designed In: Millimeters  
 RoHS: Yes  
 Halogen Free:  
   Compliant(Low-Halogen): 207843  
   Not Compliant: 207841, 207845  
 Glow Wire Capable: Yes

#### ELECTRICAL

Voltage (max.): 250V AC (RMS) or DC  
 Current (max.): 6.5A  
 Contact Resistance (max.): 10 milliohms  
 Dielectric Withstanding Voltage: 1000VAC  
 Insulation Resistance (min.): 1000 Megohms

#### MECHANICAL

Pitch: 2.50mm  
 Contact Insertion Force (max.): 15N  
 Contact Retention to Housing (min.): 12N  
 Header Pin Retention Force (min.): 7.5N  
 Mating Force: 6N per circuit  
 Un-mating Force: 0.5N per circuit  
 Durability (max.): 25

#### PHYSICAL

Header Housing: LCP UL 94V-0, Black  
 Header Contact: Brass Alloy  
 Contact Plating: Tin Over Nickel Overall  
 Receptacle Housing: PA66 UL 94V-0, Black  
 TPA: PA66 UL 94V-0, Natural  
 Terminal: Copper Alloy  
 Plating: Tin  
 PCB Thickness: 1.60mm  
 Operating Temperature: -40 to +105°C

### L1NK 300 (3.00MM)

#### REFERENCE INFORMATION

Packaging: Tray, Reel  
 UL File No.: E29179  
 CSA File No.: 80033030  
 Header: 209208  
 Receptacle: 209209  
 TPA: 209325  
 Crimp Terminal: 206396  
 Designed In: Millimeters  
 RoHS: Yes  
 Halogen Free:  
   Compliant(Low-Halogen): 209208  
   Not Compliant: 209209, 209325  
 Glow Wire Capable: Yes

#### ELECTRICAL

Voltage (max.): 250V AC (RMS) or DC  
 Current (max.): 11.0A  
 Contact Resistance: 10 milliohms  
 Dielectric Withstanding Voltage: 1000VAC  
 Insulation Resistance: 1000 Megohms

#### MECHANICAL

Pitch: 3.00mm  
 Contact Insertion Force (max.): 15N  
 Contact Retention to Housing (min.): 12N  
 Header Pin Retention Force (min.): 7.5N  
 Mating Force per circuit: 6N  
 Un-mating Force per circuit: 0.5N  
 Durability (min.): 25

#### PHYSICAL

Header Housing: LCP UL 94V-0, Black  
 Header Contact: Brass Alloy  
 Contact Plating: Tin Over Nickel Overall  
 Receptacle Housing: PA66 UL 94V-0, Black  
 TPA: PA66 UL 94V-0, Black  
 Terminal: Copper Alloy  
 Plating: Tin  
 PCB Thickness: 1.57mm  
 Operating Temperature: -40 to +105°C

### L1NK 396 (3.96MM)

#### REFERENCE INFORMATION

Packaging: Bag, Tray, Reel  
 UL File No.: E29179  
 CSA File No.: 80036057  
 Header : 207478, 207479  
 Receptacle: 207458  
 TPA : 207459  
 Crimp Terminal : 45570  
 Designed In: Millimeters  
 RoHS: Yes  
 Halogen Free:  
   Compliant(Low-Halogen): 207478, 207479  
   Not Compliant: 207458, 207459  
 Glow Wire Capable: Yes

#### ELECTRICAL

Voltage (max.): 350V AC / DC  
 Current (max.): 11.0A  
 Contact Resistance (max.): 10 milliohms  
 Dielectric Withstanding Voltage: 1700VAC  
 Insulation Resistance (min.): 1000 Megohms

#### MECHANICAL

Pitch: 3.96mm  
 Contact Insertion Force (max.): 14.7N  
 Contact Retention to Housing (min.): 35.6N  
 Header Pin Retention Force (min.): 7.5N  
 Mating Force: 10.7N per circuit  
 Un-mating Force: 3.4N per circuit  
 Durability (max.): 25

#### PHYSICAL

Header Housing: LCP UL 94V-0, Black  
 Header Contact: Brass Alloy  
 Contact Plating: Tin Over Nickel Overall  
 Receptacle Housing: PA66 UL 94V-0, Black  
 TPA: PA66 UL 94V-0, Natural  
 Terminal: Copper Alloy  
 Plating: Tin  
 PCB Thickness: 1.60mm  
 Operating Temperature: -40 to +105°C

[www.molex.com/link/L1NK.html](http://www.molex.com/link/L1NK.html)

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