

# SL Modular Connector System

# molex

With its large number of options and configurations, SL Modular Connectors and Assemblies deliver ideal wire-to-wire solutions and its varying PCB termination methods, including reflow process capable versions, support a range of wire-to-board applications

## Features and Advantages

### Two independent points of contact

Offers redundant, secondary current paths for long-term electrical performance and reliability

### Low-profile, stackable housing, vertical and right-angle headers

Provides design flexibility with or without panel mounting

### Positive lock

Provides secure retention between headers and receptacles

### Terminal position assurance (TPA) lock for male and female housings

Reduces the risk of terminal back-out in high-vibration environments

### Connector position assurance (CPA) lock

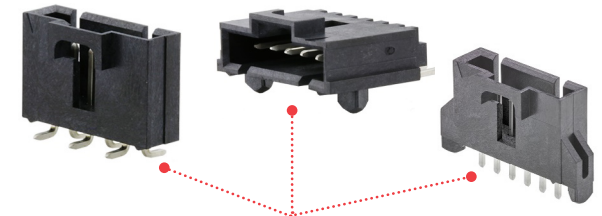
Ensures wire-to-wire and wire-to-board mating interface will not disengage in high-vibration environments

### High-temperature LCP headers available

Reflow process capable. Enables automated termination to PCBs. Reduces labor costs.

### 2.54mm pitch

Enables intermatability with C-Grid and KK 2.54mm-pitch product families for the largest number of configurations in the industry



### High-temperature headers available, made with liquid crystal polymer (LCP)

Reflow process capable. Enables automated termination to PCBs. Reduces labor costs.

## Applications

### Consumer

- Computer Peripherals
- Copiers
- HVAC Equipment
- Modems
- Printers
- Scanners

### Automotive

- Airbag Sensors
- Interior Lighting
- Sound Systems
- Steering Controls

### Medical

- Panel Displays on Portable Medical
- Dental Equipment
- Breathing Machines



Automotive Interior Lighting and Sound System



Copiers and Printers



Portable Diagnostics

## Specifications

### REFERENCE INFORMATION

Packaging: Tape-and-reel, tube  
 UL File No.: E29179  
 CSA File No.: LR19980  
 Designed In: Millimeters  
 RoHS: Yes  
 Halogen Free: No  
 Glow Wire Compliant: No

### ELECTRICAL

Voltage (max.): 250V  
 Current (max.): 3.0A  
 Contact Resistance (max.): 15 milliohms  
 Dielectric Withstanding Voltage (min.): 600V AC  
 Insulation Resistance (min.): 10000 Megohms

### MECHANICAL

Mating Force (min.): 45N  
 Unmating Force (min.): 15N  
 Durability (min.): 25 (Tin) 50 (Gold)

### PHYSICAL

Housing: Glass-filled polyester  
 High-Temp Housings: Liquid Crystal Polymer (LCP)  
 Contact: Brass  
 Plating:  
 Contact Area — Matte tin or select gold  
 Solder Tail Area — Matte tin  
 Underplating — Nickel  
 Operating Temperature: -40 to +105°C

## Ordering Information

### Tape-and-Reel Packaging Versions

Order No.	Component	Circuits	Plating	Poles
<a href="#">74099-06XX</a>	Wire-to-Board Headers, Vertical SMT	3 through 12	Tin	5-Pole Power
<a href="#">74099-06YY</a>			15µ" Gold	
<a href="#">74099-06ZZ</a>			30µ" Gold	
<a href="#">15-91-6XX9</a>	Wire-to-Board Headers, Right Angle SMT	2 through 25	Tin	
<a href="#">15-91-7XX0</a>			15µ" Gold	
<a href="#">15-91-7XX1</a>		2 through 12	30µ" Gold	

XX: Replace XX with desired circuit size

YY: Replace YY with desired circuit size +20 (e.g.: 3 circuit = 74099-0623)

ZZ: Replace ZZ with desired circuit size +40 (e.g.: 3 circuit = 74099-0643)

### Tube Packaging Versions

Series No.	Component	Circuit Sizes
<a href="#">70066</a> , <a href="#">70107</a>	Crimp Housings	2 to 25
<a href="#">70021</a> , <a href="#">70058</a> , <a href="#">71851</a>	Crimp Terminals	22 to 32 AWG
<a href="#">70541</a> , <a href="#">70543</a> , <a href="#">70545</a> , <a href="#">70551</a> , <a href="#">70553</a> , <a href="#">70555</a> , <a href="#">70634</a> , <a href="#">74095</a> , <a href="#">74099</a> , <a href="#">87898</a>	PCB Headers	2 to 25
<a href="#">73838</a>	Female TPA Locks	2 to 8
<a href="#">70400</a> , <a href="#">70475</a>	IDT Assemblies	2 to 25
<a href="#">70013</a> , <a href="#">70022</a>	Clips and Modular Branches	2 to 50

Series No.	Component	Wire Gauge
<a href="#">70021</a> , <a href="#">70058</a> , <a href="#">71851</a>	Crimp Terminals	22 to 32 AWG

### High-Temperature Headers That Are Reflow Process Capable

Series No.	Type	Orientation	Circuit Sizes
<a href="#">171971</a>	Through Hole	Vertical	2 to 25
<a href="#">171972</a>	Through Hole with Pegs		
<a href="#">171974</a>	Through Hole	Right-Angle	
<a href="#">171975</a>	Through Hole with Pegs		
<a href="#">171973</a>	SMT	Vertical	
<a href="#">171976</a>		Right-Angle	
<a href="#">171977</a>	SMT with Pegs	Right-Angle	

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