



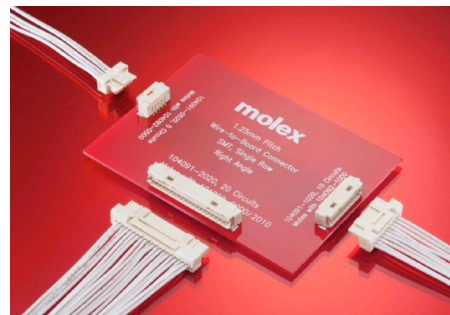
Designed to meet the low-power needs of thin-screen LED TVs, IllumiMate™ 1.25mm pitch wire-to-board connectors offer more mating styles, voltage ratings, circuit sizes and locking types than any similar connector system

Molex's IllumiMate 1.25 pitch family is the latest edition to its IllumiMate wire-to-board range. The new 1.25mm pitch IllumiMate series offers a low profile and overall compact size, and is built around a variety of mating configurations to meet various design needs.

This new system offers straight and right-angle headers, and friction and positive locks in various circuit sizes. The inner locks save space and protect wires from getting tangled and latches from breaking. Fully shrouded headers with guiding features protect pins from damage and facilitate mating. Positive locks provide secure latching when needed, while friction locks on some versions provide additional mating stability.

Other key features of the IllumiMate 1.25mm family include a dual-beam terminal design for secure electrical contact, front solder tabs for strong PCB retention, and polarizing ribs between circuits in the header that facilitate mating and protect contacts. Both vertical and right-angle headers accommodate vacuum pick-and-place equipment in RoHS-compliant and halogen-free material to meet global environmental requirements.

**IllumiMate™
1.25mm (.049")
Pitch Wire-to-Board
Connector System,
SMT, Narrow Width,
Low Profile, Positive
Lock**



IllumiMate™ 1.25mm pitch Connector System

Features and Benefits

Ultra-narrow mated width and low profile	Meets needs of thin-screen LED TVs and other compact applications
Inner positive and friction locks	Space savings and additional mating assurance
Wide variety of mating configurations	Meets various design needs
Dual-contact-terminal design	Electrical contact assurance
Fully-shrouded headers	Provides protection to terminal contact area
LCP material	Withstands high-temperature environments

Markets and Applications

- LED Monitor BLU (Back Light Unit)
- LED TV BLU
- 3D TV BLU



LED TV



3D TV



LED Monitor

Specifications

REFERENCE INFORMATION

Packaging: Headers (Tray); Housings (Bag);
Terminals (Reel)
Designed In: mm
RoHS Compliant: Yes
Halogen Status: Halogen free

ELECTRICAL

Current: **1.0A** (104539, 104130, 104131, 104521, 104121, 104122) **1.5A** (104521, 104105, 104099, 104121, 104122)
Voltage: **200V** (104521, 104099, 104105, 104091, 104092) **300V** (104539, 104130, 104131) **130V** (104521, 104121, 104122)
Contact Resistance: 20 milliohms Max.
Dielectric Withstanding Voltage: 1,000V AC (1,200V AC for 104539, 105130, 104131)
Insulation Resistance: 1,000 Megohms min.

MECHANICAL

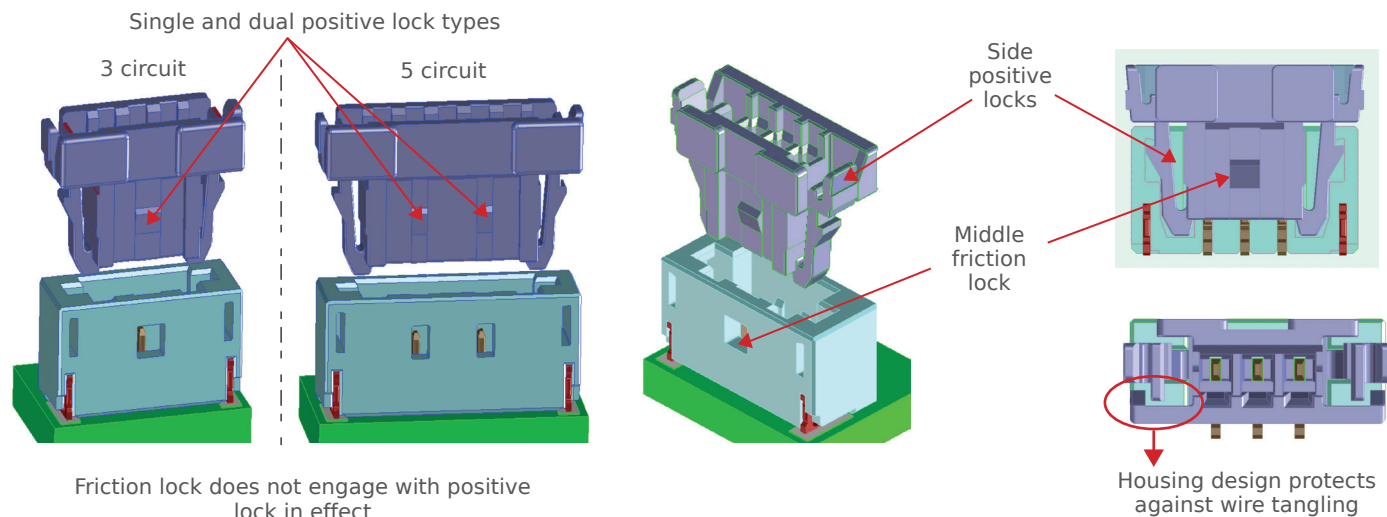
Durability: 30 cycles

PHYSICAL

Terminal: Phosphor Bronze
Housing/Header: LCP, glass-filled
Header Pin: Phosphor Bronze
Plating: Tin
Operating Temperature: -25 – 130°C

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Positive and Friction Locks



* Note: Three and five-circuit vertical version shown above (104130, 104131, 104539).

Ordering Information

Vertical, 3 and 5 Circuit Type

Terminal			
Order No.	Plating	Wire Range	
104539-8102	Tin	28, 30, 32 AWG	
Housing		Header	
Order No.	Circuit Size	Order No.	Circuit Size
104131-0300	3	104130-0310	3
104131-0500	5	104130-0510	5

Right Angle, 5 to 25 Circuits Type

Terminal			
Order No.	Plating	Wire Range	
104521-6001	Tin	26, 28 and 32 AWG	
Housing		Header	
Order No.	Circuit Size	Order No.	Circuit Size
104092-0500	5	104091-0500	5
104092-1000	10	104091-1000	10
104092-1500	15	104091-1500	15
104092-2000	20	104091-2000	20
104092-2500	25	104091-2500	25

Vertical, 10 Circuit Type

Terminal			
Order No.	Plating	Wire Range	
104521-6001	Tin	26, 28 and 32 AWG	
Housing		Header	
Order No.	Circuit Size	Order No.	Circuit Size
104105-1000	10	104099-1017	10

Vertical, 6 Circuit Type

Terminal			
Order No.	Plating	Wire Range	
104521-6001	Tin	26 and 28 AWG	
Housing		Header	
Order No.	Circuit Size	Order No.	Circuit Size
104121-0600	6	104122-0617	6

www.molex.com/link/illuminate.html