

## FEATURES AND SPECIFICATIONS



## EdgeLine™ 12.5 Gbps Edge Card Connector

**76421** 108 Circuits, PCB  
Mating Thickness  
2.36mm (.093")

**76691** Multiple Circuit Sizes  
PCB Mating Thickness  
1.57mm (.062")

**76693** Multiple Circuit Sizes  
PCB Mating Thickness  
2.36mm (.093")

*EdgeLine™ 12.5 Gbps Edge Card Connector delivers a low-cost, flexible and scalable solution for a wide variety of low-to mid-range telecom, computing, and storage applications*

The new one-piece EdgeLine™ 12.5 Gbps Edge Card Connector is designed to meet the demands of high-speed signal transmissions and density requirements. The connector system accommodates two board thicknesses to support multiple PCB layers on complex product designs.

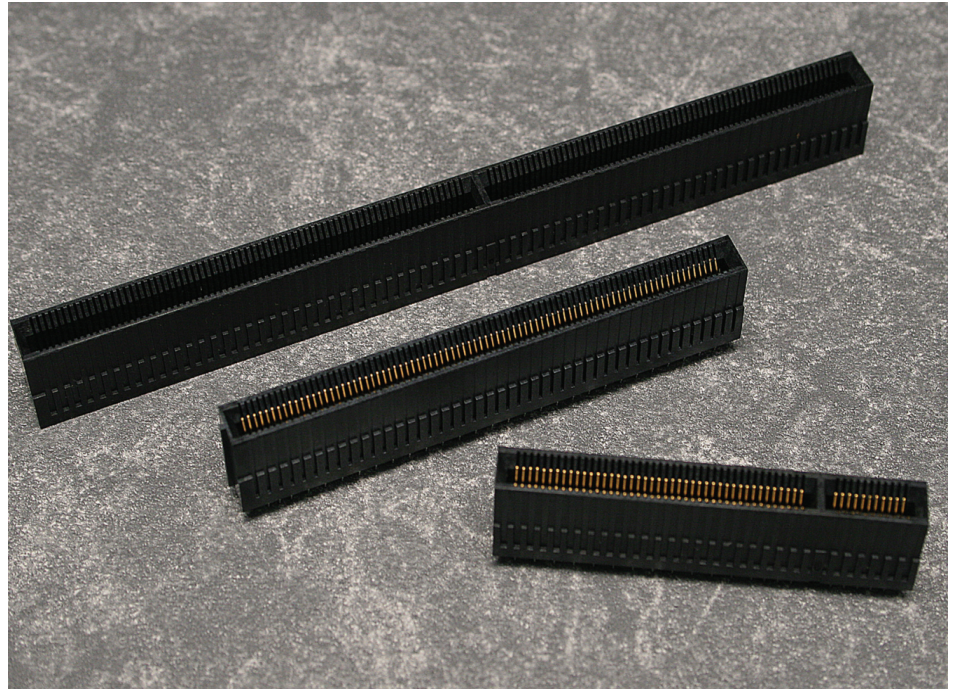
The press-fit connector offers high-speed differential performance up to 12.5 Gbps. In addition, the EdgeLine™ connector has the capability to optimally manage slower speed single-ended and power circuits. The stitched-terminal design offers both excellent electrical performance and product flexibility. Various

circuit sizes are available, with or without a center key.

The EdgeLine™ 12.5 Gbps Edge Card Connector is available in two PCB thicknesses, 1.57 and 2.36mm (.093 and .062"), with future capability to mate to a 2.00mm (.079") thick PCB. Configured to meet Telecordia requirements, the EdgeLine™ 12.5 Gbps Edge Card Connector can fill many interconnect requirements. For more information on EdgeLine™ 12.5 Gbps Edge Card Connector, visit: [www.molex.com/link/edgeline.html](http://www.molex.com/link/edgeline.html).

### Features and Benefits

- High-speed differential design provides excellent signal integrity, performance up to 12.5 Gbps, depending upon the application
- Accommodates 1.57 or 2.36mm (.062 or .093") thick PCBs to allow thicker boards to support more PCB layers on complex product designs
- Cost-effective stitched terminal provides product flexibility to accommodate various signals and power
- Press-fit, flat-rock tool ensures easy board termination with robust electrical termination
- Common or singulated ground optimizes connector for power and slow-speed, single-ended signals in addition to high-speed differential circuits
- Center key available on certain circuit sizes improve PCB alignment during mating by relaxing board tolerances up to 0.80mm (.031") pitch
- "Chevron" differential pattern allows "route through" for multilayer backplane applications



## SPECIFICATIONS

### Reference Information

Packaging: Tray  
UL File No.: E29179  
CSA File No.: 1827355 (LR 19980)  
Mates With: Customer Plug-in Card  
Product Specification: PS-75594-999

### Electrical

Voltage (max.): 250V AC  
Current (max.): 1.5A  
Contact Resistance: 10 milliohms max.  
Dielectric Withstanding Voltage: 300V AC  
Insulation Resistance: 10 Megohms min.

### Mechanical

Insertion Force to PCB: 35.6N (8.00 lb) per pin  
Durability: 200 cycles min.

### Physical

Housing: Glass Filled Thermoplastic, 94-V0, Black  
Contact: Copper (Cu) Alloy  
Plating:

Contact Area — 0.76µm Gold (Au) min.  
Solder Tail Area — 0.76µm to 1.52µm Tin (Sn)  
Underplating — 1.27µm Nickel (Ni) min.

Operating Temperature: -40 to +85°C

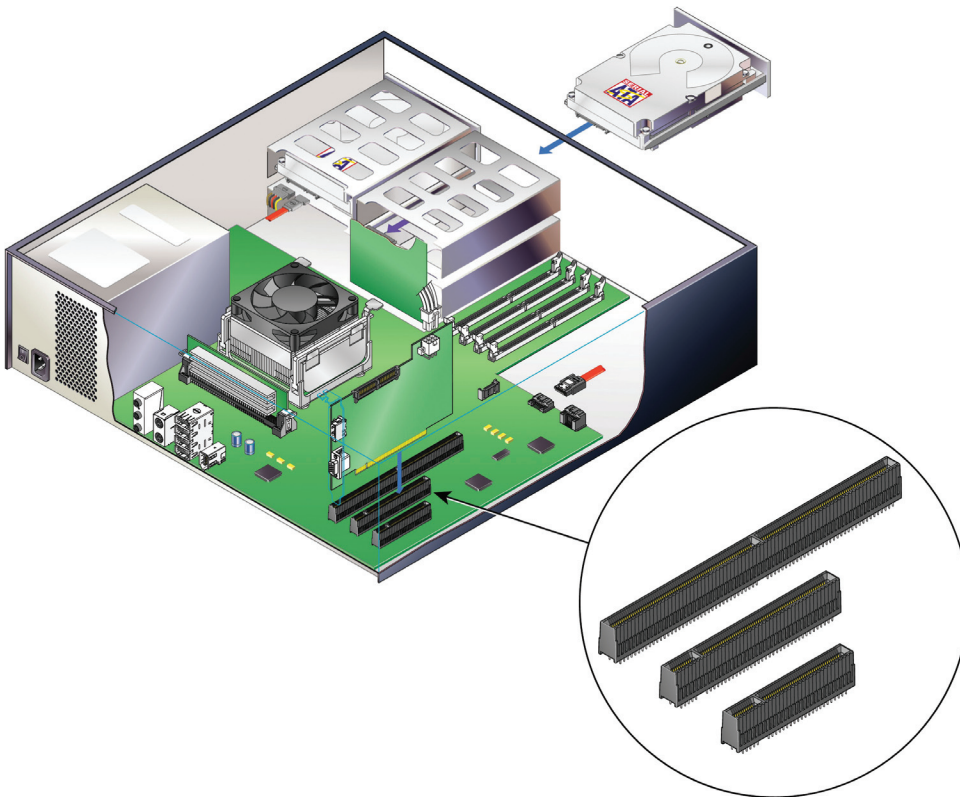


# EdgeLine™ 12.5 Gbps Edge Card Connector

**76421** 108 Circuits, PCB Mating Thickness 2.36mm (.093")

**76691** Multiple Circuit Sizes PCB Mating Thickness 1.57mm (.062")

**76693** Multiple Circuit Sizes PCB Mating Thickness 2.36mm (.093")



- Computing systems
- Storage systems
- Telecommunication hardware
- Networking equipment
- Supports many high-speed differential interfaces
  - PCIe
  - SAS
  - SATA
  - Others

## ORDERING INFORMATION

| Order No.   | Circuits | PCB Mating Thickness | Plant No. for Samples   |
|-------------|----------|----------------------|-------------------------|
| 76421-1000  | 108      | 2.36mm (.093")       | #3109                   |
| 76691-2108* | 278      | 1.57mm (.062")       | Contact Product Manager |
| 76693-2278* | 200      | 2.36mm (.093")       |                         |

Note: \*Multiple circuits are available within this product series; see sales drawing for options.

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

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