



Low-profile EdgeLine® connectors support up to 25 Gbps data rates and are available in multiple orientations and PCB thicknesses for use in high-signal transmissions and high-density signal applications

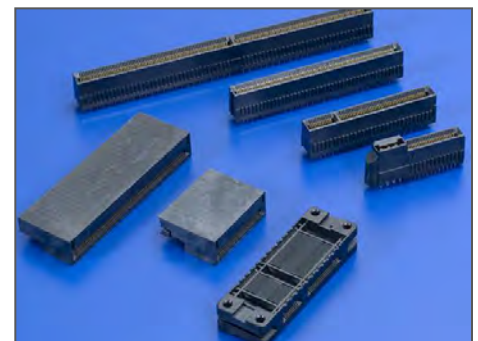
The EdgeLine® portfolio encompasses a dynamic group of product families with a compact and clean interface of plated fingers on the edge of a printed circuit board (PCB). These one-piece solutions are cost effective, flexible and scalable solution for low-to-mid range telecom, computing and storage applications.

Features and Benefits

High-speed differential contact design	Provides excellent signal integrity; performance up to 25 Gbps, depending upon the application
Multiple PCB thicknesses (1.57 to 3.18mm)	Accommodates a variety of PCB thicknesses on complex product designs
Press-fit, compliant-pin terminal design	Easy board termination using flat-rock tooling
Cost-effective stitched terminal	Accommodates various signal and power requirements
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	Improves PCB alignment during mating by relaxing board tolerances up to 0.80mm pitch
Multiple circuit sizes available	Design flexibility for signal and power assignment
Low-profile heights: CoPlanar Connector 6.40mm above PCB; CoEdge Connector 3.50mm above and below PCB	Enhanced air flow and thermal management
Keying and locking features available (0.80mm pitch CoEdge Connectors only)	Secures the connector to the PCB and improves board alignment during mating
Secondary locking options available (0.80mm pitch CoEdge Connectors only)	Prevents accidental unmating and prevents PCB from backing out of connector

EdgeLine® High-Speed Edge Card Connectors

- 171774** Edge Card Connectors, 25 Gbps, Multiple Circuit Sizes, Vertical Insertion
- 151001** Edge Card Connectors, 15 Gbps, Multiple Circuit Sizes, Vertical Insertion
- 76421** Edge Card Connectors, 12.5 Gbps, 108 Circuits, Vertical Insertion
- 76691** Edge Card Connectors, 12.5 Gbps,
- 170673** Multiple Circuit Sizes, Vertical Insertion
- 76693** Signal Power (ESP) Connectors, 12.5 Gbps, 46 Circuits, Vertical Insertion, 2 Power Blades
- 170672** CoPlanar Connectors, 12.5 Gbps, Multiple Circuit Sizes, Right-Angle Insertion
- 76861** CoEdge Connectors, 12.5 Gbps, Dual Sided, Multiple Circuit Sizes, Midplane Insertion
- 76291**
- 46720**



EdgeLine® Connectors



EdgeLine® High-Speed Edge Card Connectors

Specifications

Reference Information

Packaging: Tray
 UL File No.: ECBT2.E29179
 CSA File No.: TBD
 Mates With: Plug-in Card
 Product Specification:
 EdgeLine 25 Gpbs Connectors:
 PS-171774-0001
 EdgeLine CoEdge Connectors:
 PS-46720-001
 EdgeLine CoPlanar Connectors:
 PS-761291-001
 EdgeLine 12.5 Gbps Edge Card and
 Signal Power (ESP) Connectors:
 PS-76861-100
 EdgeLine Edge Card Connectors:
 PS-75594-999

Electrical

Voltage (max.):
 EdgeLine 25 Connectors:
 250V AC
 EdgeLine CoEdge Connectors:
 240 VAC
 EdgeLine CoPlanar Connectors:
 50 VAC (RMS)/DC
 EdgeLine (ESP) Connectors:
 250V AC(RMS)/DC
 EdgeLine Edge Card Connectors:
 250V AC
 Current (max.):
 EdgeLine 25 Connector: 1.52A
 EdgeLine CoEdge Connector: 1.0A
 EdgeLine CoPlanar Connector: 1.5A
 EdgeLine (ESP) Connector: 30A
 EdgeLine Edge Card Connectors: 1.5A
 Contact Resistance (max.):
 10 milliohms
 Dielectric Withstanding Voltage:
 300V AC
 Insulation Resistance (min.):
 10 Megohms

Mechanical

Durability (min.): 200 cycles

Physical

Housing:
 Glass Filled Thermoplastic, 94-VO,
 Black
 Contact: Copper (Cu) Alloy
 Plating:
 Contact Area —
 0.76µmGold (Au) min.
 Solder Tail Area —
 0.76µm to 1.52µmTin (Sn)
 Underplating —
 1.27µmNickel (Ni) min.
 Operating Temperature:
 EdgeLine 25 Connector:
 -40°C to +105°C
 EdgeLine CoEdge Connector:
 -55°C to +85°C
 EdgeLine CoPlanar Connector:
 -40°C TO +85C
 EdgeLine (ESP) Connector:
 -40°C to +105°C
 EdgeLine Edge Card Connectors:
 -40°C to +105°C

Applications

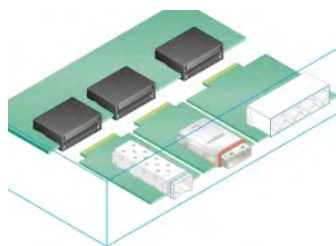
Telecommunications hardware
 Storage
 Networking equipment
 Computing systems
 PCIe
 SAS
 SATA
 Storage systems



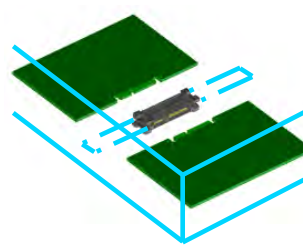
High-End Servers



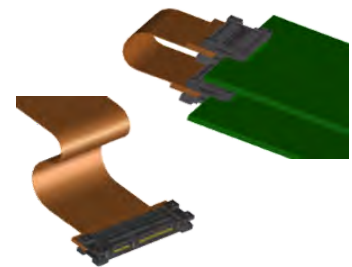
EdgeLine® Edge Card Connector Application



EdgeLine® CoEdge Mid-plane Connector Application



EdgeLine® CoPlanar Modular Connector Application



EdgeLine® CoEdge Flex Cable Connector Application



Ordering Information

EdgeLine® High-Speed Edge Card Connectors

Order Number	Component	Data Rate	Circuits	Pitch	PCB Thickness	
46720-0011	CoEdge Connector	12 Gbps	108	0.80mm	1.57mm	
46720-0016					1.57 to 2.50mm	
46720-0041					3.18mm	
76291-0038	CoPlanar Connector		12 Gbps	38	0.75mm	1.57mm
76291-0068				68		
76291-0140				140		
76291-0170				170		
76291-0226				226		
76291-0250				250		
76421-1000	Edge Card Connector	12 Gbps		108	0.80mm	1.57mm
76691-1046				46		
76691-1200				200		
76691-2080			80			
76691-2108			108			
76691-3108			108			
76693-1170			170	2.36mm		
76693-1200			200			
76693-2274			294			
76693-2278			278			
76693-2294			294			
76693-3170			170			
76861-1000			46 signal pins plus 2 power blades			
76861-1120			56 signal pins plus 2 power blades			
170672-1170			170			
170672-1200			200			
170672-2278			278			
170673-1046			46			1.57mm
170673-1200			200			
170673-2080			80			
170673-2108			108			
170673-2278			278			
151001-2118			15 Gbps	118		
171774-2118			25 Gbps			

www.molex.com/link/edgeline.html