FEATURES AND SPECIFICATIONS



Molex offers the new PCI Express* revision 2 specs connectors in a through hole configuration for high-bandwidth workstation and server applications

PCI Express is a third generation I/O architecture. PCI-SIG* recently revised the PCI Express specifications from version 1.1 to version 2.0. This revision doubles the PCI Express interconnect bit rate from 2.5 GT/s (gigatransfer per second) to 5 GT/s per lane. Unlike the previous version in which the PCI bus was implemented via multi-drop parallel architecture, the PCI Express incorporates a point-to-point signaling using differential pairs. A 16-lane link now could provide approximately 16Gbps of data-transfer. With this increase in signaling speed, the PCI Express now provides better support to high-bandwidth applications. It is also backward compatible with current PCI Express 1.1 version products.

Molex's through hole connector version of the PCI Express version 2.0 specs provides customers design flexibility for a narrower interconnect links. This would improve data-transfer at a lower cost.

All Molex PCI Express connectors are compliant with PCI-SIG* specifications. For more information on these specifications please see www.pcisig.com

*PCI Express, ExpressModule, and PCI-SIG are trademarks of PCI-SIG

1.00mm (.039") Pitch PCI Express* connector

87715 Vertical, Through Hole



Features	Benefits	
High-temperature thermoplastic housing	Withstands lead-free processing	
• Complies with PCI-SIG industry specifications	 Allows connectors to support all PCI Express module cards available in the market. 	
Keying design allows only one mating orientation	 Ensures correct mating of card module to edge card connector 	
Hot Plugging	 Allows for insertion and removal of card without system shut down, facilitates connection in cramped spaces 	

SPECIFICATIONS

Reference Information Packaging: Tray UL File No.: TBD CSA File No.: TBD

Mates With: PCI Express Card

Designed In: mm

Electrical

Voltage: 50 Volts AC (RMS)/DC

Current: 1.1A

Contact Resistance: 30 milliohms max Dielectric Withstanding Voltage: 500V AC Insulation Resistance: 1000 Megohms min Mechanical

Max Terminal Retention Force: 5 N min/Terminal Mating Force: 1.15 N max/contact pair

Unmating Force: 0.15 N min/contact pair

Durability: 50 Cycles

Physical

Housing: High Temperature Nylon, UL 94V-0

Contact: Copper Alloy

Plating:

Contact Area - 0.76 µm Gold or 0.38 µm Gold

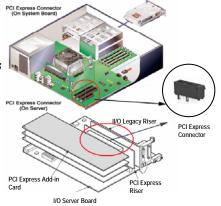
Solder Tail Area — Tin Underplating — Nickel

Operating Temperature: - 55 °C to +85 °C

Markets and Applications

- molex®
- 1.00mm (.039") Pitch PCI Express* connector

- PCI Express 87715
 - Servers
 - Desktop
 - Networking and Communications



87715 Vertical, Through Hole

Ordering Information

Descriptions	Order No. (Lead-free)	Plating	PC Tail
PCI Express connector, version 2, Vertical, Through hole Black color 8	87715-9X00	Gold Flash	2.54mm (0.100″)
	87715-9X01	0.254μm (10μ″) Gold (Au)	
	87715-9X02	0.38µm (15µ") Gold (Au)	
	87715-9X03	Gold Flash	3.00mm (0.118")
	87715-9X04	0.254μm (10μ″) Gold (Au)	
	87715-9X05	0.38µm (15µ") Gold (Au)	
	87715-9X06	0.76µm (30µ") Gold (Au)	2.54mm (0.100")
	87715-9X07	Gold Flash	2.30mm (0.091")
	87715-9X08	0.38µm (15µ") Gold (Au)	
	87715-9X09	0.76µm (30µ") Gold (Au)	3.00mm (0.118")

Circuit size

Replace X with: 0= 36

1= 64

2 = 98

3= 164



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