

FEATURES AND SPECIFICATIONS



0.50mm (.020") Pitch DisplayPort*

Molex offers the next generation of digital interface for PC and CE market, the external DisplayPort* Interconnect System

The DisplayPort is designed for internal and external system solution for high bandwidth audio and video data transfer in the notebook and PC market. The standards, defined by Video Electronics Standards Association (VESA), cover provisions for high definition digital audio-video and graphics streaming via the interface through the same cable. This reduces cost and provides ease of use through the plug-and-play feature making it user-friendly for consumer. It also provides performance scalability for future developments of high quality displays, high color depths and high refresh rates display.

Molex, in accordance to requirements outlined by VESA, has developed the external DisplayPort* Interconnect System solution. It consist of 20-circuit, 0.50mm pitch SMT, external receptacles designed with a polarized D-shape mating interface and metal shield for full EMI/RFI protection. In addition, the connectors are designed with four solder pins for added mechanical stability and robustness, as well as a snap-in plastic peg for positive polarization during connector mounting. The receptacle is to be mounted on the device side and the plug, which is overmolded at both ends of the cable assemblies, on the display device. The cable assemblies come in both latching and non-latching versions with cable length of 2m and 15m. Examples of source applications are desktop PC, set-top box, DVD player or game console, and display applications are the likes of TV monitors or projection display.

47271

Plug



47272

Receptacle



Features

Benefits

- | | |
|-------------------------------|--|
| •Plastic locating peg | •Secure seating on PCB during soldering |
| •Detent locks | •Strong mating between plug and receptacle |
| •Latches | •Additional security for long cable latching |
| •Metal shielding on all sides | •Superior shielding against EMI |
| •Solder tab | •Secure PCB retention and withstand lateral forces |
| •Small footprint | •Less PCB real estate |
| •Polarized mating geometric | •Prevents mis-mating |

*DisplayPort™ is a trademark of Video Electronics Standards Association (VESA)

SPECIFICATIONS

Reference Information

Packaging: Tape and Reel

UL File No.:

CSA File No.:

Mates With: 47271, 47272

Designed In: mm

Electrical

Voltage: 40V AC

Current: 0.5A

Contact Resistance:

30 milliohm max. (mated), 50 milliohm max (shell)

Dielectric Withstanding Voltage:

500V AC(rms) (unmated)

300V AC(rms) (mated)

Insulation Resistance:

100 Megohms min. (unmated)

10 Megohms min. (mated)

Mechanical

Insertion Force: 44.1N (4.5kgf)max

Withdraw force: 9.8N (1.0kgf)min., 39.2N (4.0kgf) max. (after 2000 times)

4.9N (0.5kgf) min., 39.2N (4.0kgf) max. (after 10,000 times)

Latch strength pull force: 49.0N (5.0kgf)min

Contact pull-out force: 2.94N (0.3kgf) min.

Durability: 10,000 cycles

Physical

Housing: High Temperature Thermal Plastic, Glass-Filled, UL 94V-0

Contact: Copper Alloy

Shell: Copper Alloy

Plating:

Contact Area — 0.76µm gold

Solder Tail Area —

Underplating — 1.27µm (50µ") Nickel (Ni)

Operating Temperature: -20° C to +85° C

MARKETS AND APPLICATIONS



0.50mm (.020") Pitch DisplayPort*

Markets and Applications

- **Personal Computer (PC)**
- **External display interconnect**
 - Projector
 - TV display
- **DVD player**



47271

Plug

47272

Receptacle

ORDERING INFORMATION

Connector

Description	Order No.
DisplayPort receptacle	47272-0001

Cable

Description	Order No.
DisplayPort Cable assembly with latch, length=2m	68783-0007
DisplayPort Cable assembly without latch, length=2m	68783-0008

Components

	Description	Order No.
	Plug sub-assembly With latch	47271-0011
	Plug sub-assembly Without latch	47271-1011
	Cover Down	47271-0005
	Cover Up	47271-0004
	Inner shell Upper	47271-1008
	Inner shell Lower	47271-1009



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