

FEATURES AND SPECIFICATIONS



1.27mm (.050") Pitch Serial ATA Host Receptacles

Molex offers the Serial ATA host receptacles for notebooks and server applications.

The demand for faster data transfer has presented Serial ATA (SATA) technology as the preferred choice in the storage interconnect bus architecture. One of the main advantages of SATA over Parallel ATA (PATA) is the 3 Gb/sec data rate, as compared to Parallel ATA's 133Mb/sec. Other advantages of SATA over PATA are ease of cabling; reduced risk of electro-magnetic interference from other components; lower cost and support for hot plugging.

Molex's Serial ATA connectors are compliant to SATA-IO standards with respect to the mating interface. These standards define features such as 7 signal pins, 15 power pins, staggered contact lengths for hot-plugging, guide posts and pockets for blind-mating. Recent addition includes a cable side connector which comes in both straight and right angle versions.

Molex is an active member of the Serial ATA International Organization (SATA-IO), which is the working group that is responsible for developing and specifying Serial ATA interconnect standards.

67492	SMT, Bottom Mount
47018	SMT, Top Mount
47279-3xxx	Through Hole, Right Angle Top Mount
47305-2xxx	Through Hole, Right Angle, Top Mount
47362	Cable end receptacle



Features	Benefits
• Staggered contact length (First-Mate-Last-Break)	• Allows sequential mating of pins for hot-plugging of hard disk drive
• Guide pocket for plug and guide post for receptacle	• Allows blind-mating
• Plastic locating peg	• Assures proper seating on the PCB
• Nut at housing (available for 47279 & 47305)	• Retains PCB during and after soldering
• Small size	• Improves airflow and thermal dynamics
• High temperature thermoplastic housing	• Withstands lead-free soldering process
• Friction lock	• Insure secure locking with selected cable receptacle
• Beveled metal pins (Forklocks)	• Secure connectors to PCB against shock and vibration
• Cap	• Stabilize connector with beveled metal pins feature during soldering

SPECIFICATIONS

Reference Information

Packaging: See order table

UL File No.: Pending

CSA File No.: Pending

Mates With: See order table

Designed In: mm

Electrical

Voltage: 15V DC

Current: 1.5A

Contact Resistance: 30 milliohms max.

Dielectric Withstanding Voltage: 500V AC

Insulation Resistance: 1000 Megohms min.

Mechanical

Contact Insertion Force:

Contact Retention to Housing:

Insertion Force to PCB:

Mating Force: 20.00N (4.50lb)

Unmating Force: 4.00N (0.90lb)

Durability: 500 cycles min.

Physical

Housing: High temperature thermoplastic, UL 94V-0

Contact: Copper (Cu) Alloy

Plating:

Contact Area — See order table

Solder Tail Area — Tin(Sn), Lead-free

Underplating — Nickel (Ni)

PCB Thickness: 1.2mm (.045") for 47305/47279 series only

Operating Temperature: -35°C to +85°C

MARKETS AND APPLICATIONS



**1.27mm (.050") Pitch
Serial ATA
Host Receptacles**

- Game Machine
- DVD Recorder
- STB
- Computers
 - Notebooks
 - Servers



- 67492** SMT, Bottom Mount
- 47018** SMT, Top Mount
- 47279-3xxx** Through Hole, Right Angle
Top Mount
- 47305-2xxx** Through Hole, Right Angle,
Top Mount
- 47362** Cable end receptacle

ORDERING INFORMATION

Descriptions	Lead-Free Order No.	Plating	Packaging	Process Temperature (°C)	Mates with
Serial ATA Host Receptacle, Mating Height 3.55mm (.140"), Surface Mount, Right Angle, 22 Circuits	67492-1120	Gold (Au) Flash	Tray	255 +/- 5	87703 87672
	67492-1121	0.76µm (30µ") Gold (Au)			
	67492-1122	0.38µm (15µ") Gold (Au)			
Serial ATA Host Receptacle, Mating Height 5.25mm (.207"), Surface Mount, Right Angle, 22 Circuits	67492-1320	Gold (Au) Flash			
	67492-1321	0.76µm (30µ") Gold (Au)			
	67492-1322	0.38µm (15µ") Gold (Au)			
Serial ATA Host Receptacle, Mating Height 5.90mm (.232"), Surface Mount, Right Angle, 22 Circuits	67492-1420	Gold (Au) Flash			
	67492-1421	0.76µm (30µ") Gold (Au)			
	67492-1422	0.38µm (15µ") Gold (Au)			
Serial ATA Host Receptacle, Mating Height 6.74mm (.265"), Surface Mount, Right Angle, 22 Circuits	67492-9220	Gold (Au) Flash			
	67492-9221	0.76µm (30µ") Gold (Au)			
	67492-9222	0.38µm (15µ") Gold (Au)			



1.27mm (.050") Pitch Serial ATA Host Receptacles

- 67492** SMT, Bottom Mount
- 47018** SMT, Top Mount
- 47279-3xxx** Through Hole, Right Angle
Top Mount
- 47305-2xxx** Through Hole, Right Angle,
Top Mount
- 47362** Cable end receptacle

Descriptions	Lead-Free Order No.	Plating	Packaging	Process Temperature (°C)	Mates with
Serial ATA Host Receptacle, Mating Height 3.55mm (.140"), Surface Mount, Right Angle, without cap 22 Circuits	67492-1921	0.76µm (30µ") Gold (Au)	Embossed Tape on Reel	255 +/- 5	87703 87672
Serial ATA Host Receptacle, Mating Height 3.70mm (.146"), Surface Mount, Right Angle, with cap 22 Circuits	67492-1731				
Serial ATA Host Receptacle, Mating Height 4.45mm (.175"), Surface Mount, Right Angle, with cap 22 Circuits	67492-1631				
Serial ATA Host Receptacle, Mating Height 5.60mm (.220"), Surface Mount, Right Angle, with cap 22 Circuits	67492-1831				
Serial ATA Host Receptacle, Mating Height 4.30mm (.169"), Surface Mount, Right Angle, Top Mount Type, 22 Circuits	47018-2000	Gold (Au) Flash	Tray		
	47018-2001	0.76µm (30µ") Gold (Au)			
	47018-2002	0.38µm (15µ") Gold (Au)			
Serial ATA Host Receptacle, Mating Height 4.70mm (.185"), Surface Mount, Right Angle, Top Mount Type, 22 Circuits	47018-3000	Gold (Au) Flash			
	47018-3001	0.76µm (30µ") Gold (Au)			
	47018-3002	0.38µm (15µ") Gold (Au)			
Serial ATA Host Receptacle, Mating Height 5.15mm (.203"), Surface Mount, Right Angle, Top Mount Type, 22 Circuits	47018-4000	Gold (Au) Flash			
	47018-4001	0.76µm (30µ") Gold (Au)			
	47018-4002	0.38µm (15µ") Gold (Au)			
Serial ATA Host Receptacle, Mating Height 4.60mm (.181"), Through Hole, Right Angle, with Cap, Top Mount Type, 22 Circuits	47279-3000	Gold (Au) Flash	Embossed Tape on Reel		
Serial ATA Host Receptacle, Mating Height 3.50mm (.138"), Through Hole, Right Angle, Top Mount Type, 22 Circuits	47305-2000				
Serial ATA Cable end Receptacle, with Arris on both surface Straight type	47362-1000	Gold (Au) Flash	Tray	200 +/- 5	
	47362-1001	0.76µm (30µ") Gold (Au)			
	47362-1002	0.38µm (15µ") Gold (Au)			



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