

## FEATURES AND SPECIFICATIONS



# 1.27mm (.050") Pitch Serial ATA Host Receptacle

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 advantage of SATA over Parallel ATA (PATA) is the 3 Gb/sec, 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.

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

67492

47018

47279-3xxx

47305-2xxx

SMT, Bottom Mount

SMT, Top Mount

Through Hole,

Right Angle

Top Mount

Through Hole,

Right Angle,

Top Mount



| Features  | Benefits   |
|---|--|
| <ul style="list-style-type: none"> <li>Staggered contact length (First-Mate-Last-Break)</li> </ul>    | <ul style="list-style-type: none"> <li>Allows sequential mating of pins for hot-plugging of hard disk drive</li> </ul> |
| <ul style="list-style-type: none"> <li>Guide pocket for plug and guide post for receptacle</li> </ul> | <ul style="list-style-type: none"> <li>Allows blind-mating</li> </ul>  |
| <ul style="list-style-type: none"> <li>Plastic locating peg</li> </ul>                                | <ul style="list-style-type: none"> <li>Assures proper seating on the PCB</li> </ul>                                    |
| <ul style="list-style-type: none"> <li>Nut at housing (available for 47279 &amp; 47305)</li> </ul>    | <ul style="list-style-type: none"> <li>Retains PCB during and after soldering</li> </ul>                               |
| <ul style="list-style-type: none"> <li>Small size</li> </ul>  | <ul style="list-style-type: none"> <li>Improves airflow and thermal dynamics</li> </ul>                                |
| <ul style="list-style-type: none"> <li>High temperature thermoplastic housing</li> </ul>              | <ul style="list-style-type: none"> <li>Withstands lead-free soldering process</li> </ul>                               |
| <ul style="list-style-type: none"> <li>Friction lock</li> </ul>                                       | <ul style="list-style-type: none"> <li>Insure secure locking with selected cable receptacle</li> </ul>                 |
| <ul style="list-style-type: none"> <li>Beveled metal pins (Forklocks)</li> </ul>                      | <ul style="list-style-type: none"> <li>Secure connectors to PCB against shock and vibration</li> </ul>                 |
| <ul style="list-style-type: none"> <li>Cap</li> </ul>   | <ul style="list-style-type: none"> <li>Stabilize connector with forklocks feature during soldering</li> </ul>          |

## SPECIFICATIONS

### Reference Information

Packaging: See order table

UL File No.:

CSA File No.:

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**

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



**molex® 1.27mm (.050") Pitch  
Serial ATA  
Host Receptacle**

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

**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<br>87672 |
|   | 67492-1121          | 0.76µm (30µ") Gold (Au) |           |                          |                |
|   | 67492-1122          | 0.38µm (15µ") Gold (Au) |           |                          |                |
|   | 67492-1123          | 1.00µm (40µ") 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) |           |                          |                |
|   | 67492-1323          | 1.00µm (40µ") 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) |           |                          |                |
|   | 67492-1423          | 1.00µm (40µ") 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) |           |                          |                |
|   | 67492-9223          | 1.00µm (40µ") Gold (Au) |           |                          |                |

| 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<br>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       | 255 +/- 5 | 87703<br>87672 |
|  | 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          | 47018-4001   | Gold (Au) Flash         |                       |                          |                |  |            |           |                |
|  | 47018-4002   | 0.76µm (30µ") Gold (Au) |                       |                          |                |  |            |           |                |
|  | 47018-4003   | 0.38µm (15µ") Gold (Au) |                       |                          |                |  |            |           |                |
| Serial ATA Host Receptacle, Through Hole, Right Angle, with Cap, Mating Height 4.60mm (.181"), Top Mount Type, 22 Circuits | 47279-3000   | Gold (Au) Flash         | Embossed Tape on Reel |                          |                |  |            |           |                |
| Serial ATA Host Receptacle, Through Hole, Right Angle, Mating Height 3.50mm (.138"), Top Mount Type, 22 Circuits           | 47305-2000   | Gold (Au) Flash         | Embossed Tape on Reel |                          |                |  |            |           |                |



Bringing People & Technology Together, Worldwide<sup>SM</sup>

**Americas Headquarters**  
2222 Wellington Ct.  
Lisle, Illinois 60532 USA  
1-800-78MOLEX  
amerinfo@molex.com

**Far East North Headquarters**  
Yamato, Kanagawa, Japan  
81-462-65-2324  
feninfo@molex.com

**Far East South Headquarters**  
Jurong, Singapore  
65-6-268-6868  
fesinfo@molex.com

**European Headquarters**  
Munich, Germany  
49-89-413092-0  
eurinfo@molex.com

**Corporate Headquarters**  
2222 Wellington Ct.  
Lisle, Illinois 60532 USA  
630-969-4550

Visit our Web site at <http://www.molex.com>