



# 1.27mm (.050") Pitch Slimline Serial ATA Interconnect Solution

## FEATURES AND SPECIFICATIONS

Molex expands its Slimline SATA offerings with a crimp terminal and housing for power connection and receptacles with various Z-height options to meet the needs for Optical Disc Drive applications

The migration of parallel to serial bus architecture with smaller overall product footprint design was launched due to the demand for higher bandwidth electronic data transfer in compact storage applications.

Molex's Slimline SATA connector for the Optical Disk Drive (ODD) offers the standard blind mating with generous lead-in design for easier mating. This feature is in compliance to the SATA-IO revision 2.6 specs. The plug-to-ODD retention comes in numerous versions for the manufacturers to ensure strong connector retention to their specific design.

In this revision, Molex has included the power cable solution and 5 new series of receptacles.

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.

For more information about the Slimline Serial ATA Interconnect Solution family, please visit: <http://www.molex.com/product/slimline.html>

**47300-1xxx**  
**Plug**

**47634**  
**Crimp Terminal and Housing for  
Power Cable Receptacle**

**47300-2xxx, 47650, 48330,  
48321, 48325, 48336**  
**Receptacles**



Slimline SATA plug



Slimline SATA receptacle



Crimp Housing  
for power receptacle



Crimp Terminal  
for power receptacle

Features	Benefits
• High-temperature housing	• Withstand lead-free processing
• Conform with SATA association's spec.	• Ensures cross-function ability among SATA applications
• Blind mate guide ears	• Provides easy connection and prevents mis-mating
• First-mate/last-break contacts	• Prevents electrical shorts in application
• Solderable metal pin	• Provides positive retention to the PCB

## SPECIFICATIONS : PLUG

### Reference Information

Packaging: Embossed Tape on Reel

UL File No.: Pending

CSA File No.: Pending

Mates With: Series 47300

Slimline Serial ATA Plug

Designed In: Millimeters

### Electrical

Voltage: 15V Max

Current: 1A

Contact Resistance: 30 milliohms max.

Dielectric Withstanding Voltage: 500V AC

Insulation Resistance: 1000 Megohms min.

### Mechanical

Mating Force: 20N (4.50 lb) max.

Unmating Force: 2.5N (0.56 lb) min.

Durability: 50 cycles for internal cable application

500 cycles for backplane/blind mate application

### Physical

Housing: Liquid Crystal Polymer, Glass Fiber Filled, UL94V-0, Color : Black

Contact: Copper (Cu) Alloy

### Plating:

Contact Area — Gold (Au)

Solder Tail Area — Matt Tin (Sn)

Underplating — Nickel (Ni)

PCB Thickness: 0.18mm (.007") / 1.20mm (.047")

Operating Temperature: -40°C to +85°C

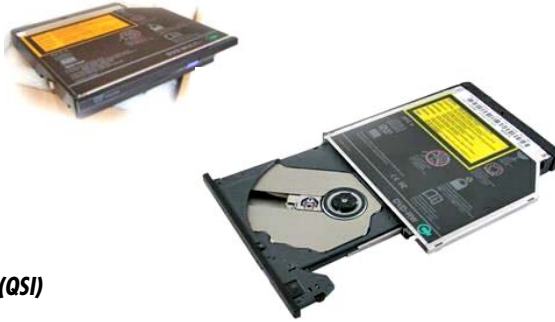
## MARKETS AND APPLICATIONS



## 1.27mm (.050") Pitch Slimline Serial ATA Interconnect Solution

### Regional Markets, Applications and Typical Customers

- **Mobile Computing**
  - Optical Disc Drive
- **ODD Manufacturers**
  - Sony NEC Optiarc
  - HLDS
  - TSST
  - TEAC
  - Panasonic
  - Quanta Storage Inc (QSI)



**47300-1xxx**  
**Plug**

**47634**  
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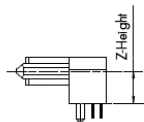
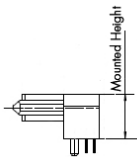
**47300-2xxx, 47650, 48330,  
48321, 48325, 48336**  
**Receptacles**

## ORDERING INFORMATION

Description	Order No.	Type	Plant No. for Samples
1.27mm (.050") Pitch Slimline SATA ODD Connector	Plug	47300-10yy	Standard 1702
	Crimp Power Terminal	47634-1002	AWG: 18, 20, 22, 24. 2601
	Crimp Power Housing	47634-2000	Uses 2 sets of terminal per housing 2601

Description	Order No.	Z-Height	Mounted Height	Type	Plant No. for Samples
1.27mm (.050") Pitch Slimline SATA ODD Connector	Receptacle, Vertical	47650-00xx	N.A.	N.A.	SMT 2601
	Receptacle, Right Angle	47300-20yy	4.25mm (.165")	5.40mm (.213")	Standard, Screw 1702
		48321-10xx	1.25mm (.049")	3.50mm (.150")	Standard DIP with nut 2603
		48321-20xx	2.00mm (.078")	4.25mm (.167")	
		48325-40xx	4.05mm (.160")	5.80mm (.228")	DIP Reverse
		48325-50xx	9.05mm (.357")	10.80mm (.425")	
		48325-60xx	5.55mm (.219")	7.30mm (.287")	
		48325-11xx	5.00mm (.197")	6.75mm (.266")	
	48330-0001	5.10mm (.200")	6.85mm (.270")	Reverse SMT	
	48336-10xx	5.35mm (.211")	7.10mm (.280")	Reverse SMT	
48336-20xx	5.85mm (.230")	7.60mm (.299")			

yy denotes various plating and hold down options  
xx denotes various plating options only



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