

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [047650002](#)

**Status:** **Active**

**Overview:** [slimline serial ata odd connectors](#)

**Description:** 1.00mm (.039"), 1.27mm (.050") Pitch Slimline Serial ATA Receptacle for Optical Disk Drives, Vertical, SMT, 0.38µm (15µ") Gold (Au) Plating, with Cover, Lead free

**Documents:**

[3D Model](#)

[Product Specification PS-47650-001 \(PDF\)](#)

[Drawing \(PDF\)](#)

[RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR 19980  
UL E29179

**General**

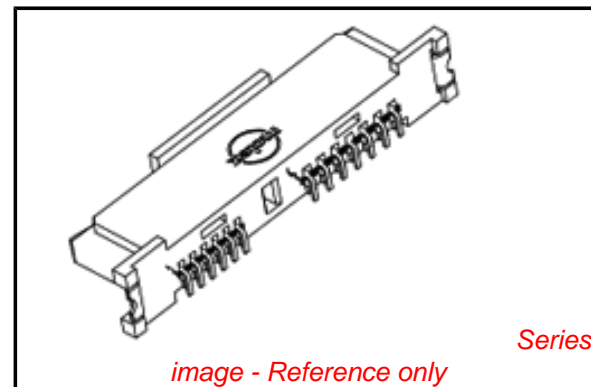
Product Family PCB Receptacles  
Series [47650](#)  
Application Board-to-Board  
Overview [slimline serial ata odd connectors](#)  
Product Name Serial ATA, Slimline Serial ATA

**Physical**

Circuits (Loaded) 13  
Circuits (maximum) 13  
Color - Resin Black  
Durability (mating cycles max) 500  
Flammability 94V-0  
Glow-Wire Compliant No  
Guide to Mating Part Yes  
Keying to Mating Part Yes  
Lock to Mating Part Yes  
Material - Metal Copper Alloy  
Material - Plating Mating Gold  
Material - Plating Termination Tin  
Material - Resin High Temperature Thermoplastic  
Number of Rows 1  
Orientation Vertical  
PCB Locator No  
PCB Retention Yes  
Packaging Type Embossed Tape on Reel  
Pitch - Mating Interface (in) 0.039 In, 0.050 In  
Pitch - Mating Interface (mm) 1.00 mm, 1.27 mm  
Pitch - Term. Interface (in) 0.039 In, 0.050 In  
Pitch - Term. Interface (mm) 1.00 mm, 1.27 mm  
Plating min: Mating (µin) 15  
Plating min: Mating (µm) 0.38  
Polarized to Mating Part Yes  
Polarized to PCB Yes  
Robotic Placement Pick and Place Cap  
Stackable No  
Surface Mount Compatible (SMC) N/A  
Temperature Range - Operating -35°C to +85°C  
Termination Interface: Style Surface Mount

**Electrical**

Current - Maximum per Contact 1.5A



**EU RoHS**

**ELV and RoHS Compliant**

**REACH SVHC**

Not Reviewed

**Halogen-Free**

**Status**

**Not Reviewed**

**China RoHS**



**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

[47650Series](#)

**Mates With**

[473001xxx Slimline Serial ATA Plugs](#)

Grounding to PCB  
Voltage - Maximum

Yes  
15V DC

**Material Info**

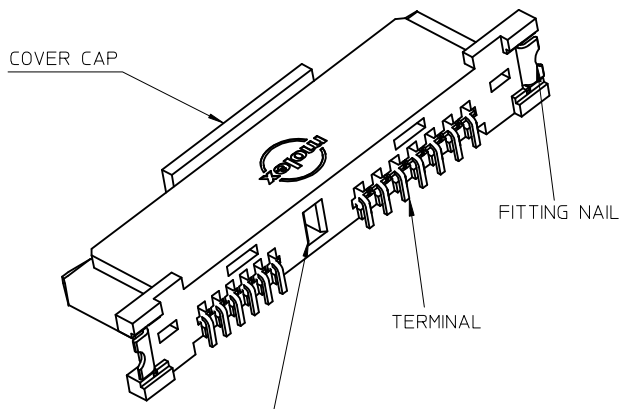
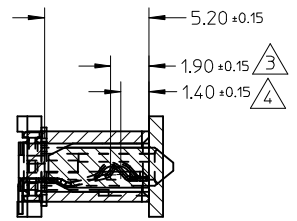
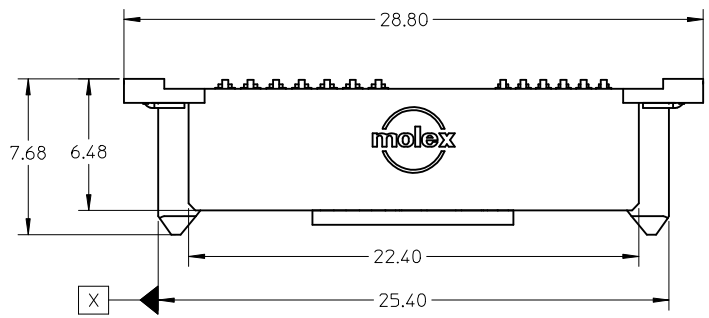
**Reference - Drawing Numbers**

Packaging Specification  
Product Specification  
Sales Drawing

PK-47650-001  
PS-47650-001  
SD-47650-001

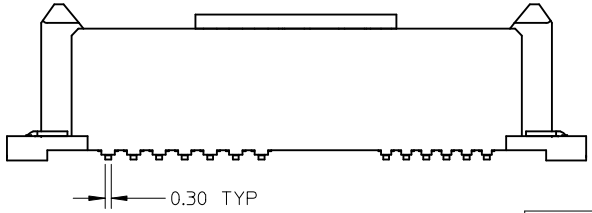
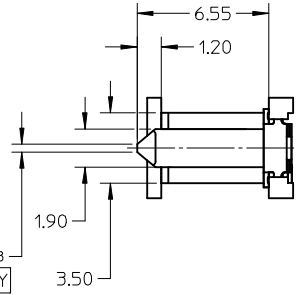
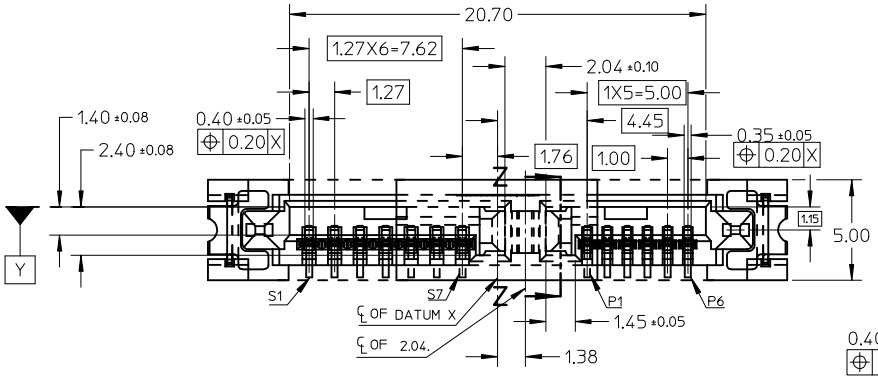
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SECTION Z-Z

- NOTES :
- MATERIAL :  
 HOUSING : HIGH TEMPERATURE THERMOPLASTIC, UL94V-0, 30% G.F., BLACK.  
 TERMINAL : COPPER ALLOY  
 FITTING NAIL : COPPER ALLOY  
 COVER CAP:HIGH TEMPERATURE THERMOPLASTIC, UL94V-0, 30% G.F., BLACK.
  - PLATING :  
 TERMINAL :  
 CONTACT AREA :SEE TABLE.  
 SOLDER AREA : TIN PLATING.  
 UNDERPLATING : NICKEL PLATING.  
 FITTING NAIL :  
 TIN PLATING 1.0 MICRONS MIN. OVER NICKEL PLATING 1.0 MICRONS MIN.
  - FOR P1 PIN ONLY.
  - FOR ALL OTHER PINS.
  - PRODUCT SPECIFICATION:PER PS-47650-001.
  - PRODUCT PACKAGE:PER PK-47650-001.
  - TERMINAL AND NAIL COPLANARITY TO BE 0.15MAX.
  - THE PRODUCT COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND 2000/53/EC.



TABLE

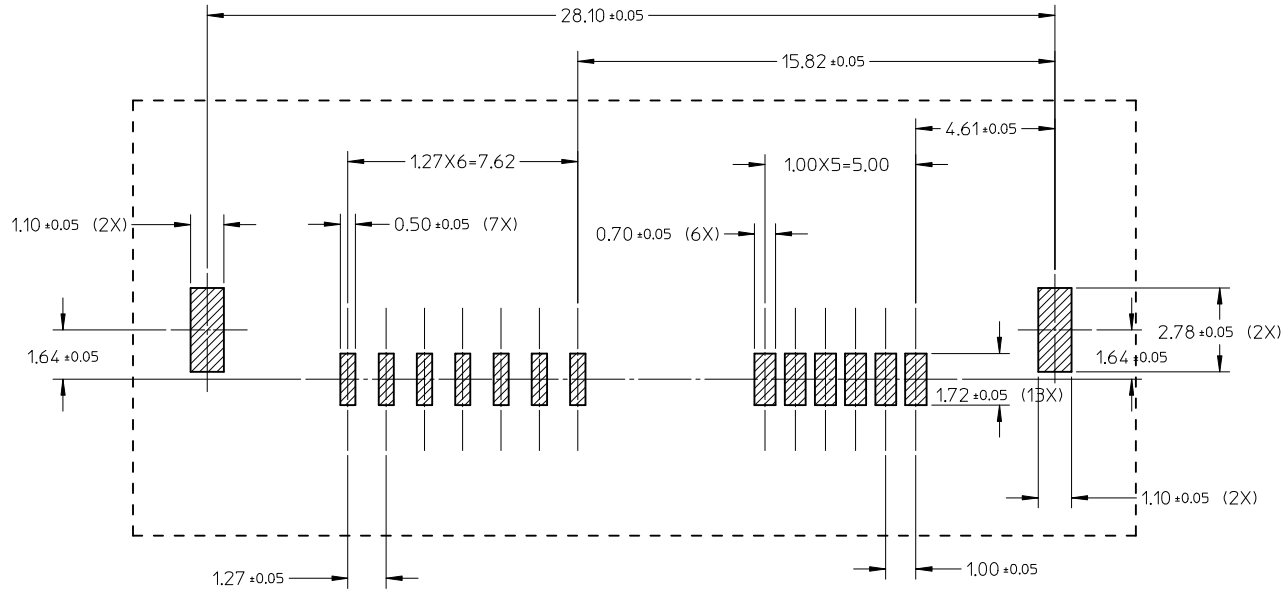
P/N	CONTACT AREA PLATING
47650-0001	0.1 MICRON MIN. GOLD
47650-0002	0.38 MICRON MIN. GOLD

UPDATE DRAWING	2009/06/01
EC NO: SH2009-0756	2009/06/02
DRWN:XJ SONG	2009/06/30
CHKD:XJ SONG	
APPR:HWANG	
REV	DESCRIPTION
B	

QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm	INCH
▽=0	4 PLACES ± ---	± ---
▽=0	3 PLACES ± ---	± ---
	2 PLACES ± 0.15	± ---
	1 PLACE ± 0.20	± ---
	ANGULAR ± 2 °	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM ONLY		4:1	METRIC	
DRAWN BY	DATE	TITLE		
LSONG	2008-2-16	SLIMLINE SATA RECEPTACLE CONNECTOR		
CHECKED BY	DATE			
JTIAN	2008-2-16			
APPROVED BY	DATE			
HWANG	2008-2-16			
MATERIAL NO.	DOCUMENT NO.			
SEE TABLE	SD-47650-001			
SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
A3				

MATERIAL NO.		DOCUMENT NO.	SHEET NO.
SEE TABLE		SD-47650-001	1 OF 2



RECOMMENDED PCB LAYOUT DIMENSION

SEE SHEET 1	EC NO: SH2009-0756	2009/06/01	<b>QUALITY SYMBOLS</b> = 0 = 0	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b>		<b>DIMENSION STYLE</b> MM ONLY		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		
	DRWN: XJSONG	2009/06/01		4 PLACES	± ---	± ---	DRAWN BY	DATE	6:1	METRIC	TITLE <b>SLIMLINE SATA RECEPTACLE CONNECTOR</b>	
	CHKD: XJSONG	2009/06/02		3 PLACES	± ---	± ---	CHECKED BY	DATE				
	APPR: HWWANG	2009/06/30		2 PLACES	± 0.15	± ---	APPROVED BY	DATE				
REV	DESCRIPTION	1 PLACE	± 0.20	± ---	HWWANG	2008-2-16						
		ANGULAR ± 2 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		DOCUMENT NO.		SHEET NO.		
						SEE SHEET 1		MOLEX INCORPORATED		SD-47650-001		
						SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				