

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

**Part Number:** [0473001022](#)  
**Status:** **Active**  
**Overview:** slimline serial ata odd connectors  
**Description:** 1.00mm(.039"), 1.27mm (.050") Pitch Slimline Serial ATA Plug for Optical Disk Drive with DIP Standard Type Soldering Tabs, Right Angle, 0.76µm (30µ") Gold (Au) Plating, with Peg, 5.4mm (.213") Mounted Height, Lead-free

**Documents:**

[3D Model](#) [Product Specification PS-47300-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR 19980

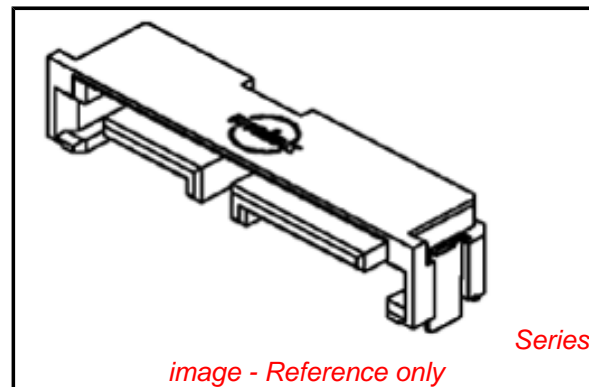
**General**

Product Family PCB Headers  
 Series [47300](#)  
 Application Board-to-Board  
 Comments Soldering Standard Type  
 Overview slimline serial ata odd connectors  
 Product Name Serial ATA, Slimline Serial ATA

**Physical**

Breakaway No  
 Circuits (Loaded) 13  
 Circuits (maximum) 13  
 Durability (mating cycles max) 500  
 First Mate / Last Break Yes  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Guide to Mating Part Yes  
 Keying to Mating Part Yes  
 Lock to Mating Part No  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 1  
 Orientation Right Angle  
 PCB Locator Yes  
 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) 30  
 Plating min: Mating (µm) 0.76  
 Plating min: Termination (µin) 39  
 Plating min: Termination (µm) 1  
 Polarized to Mating Part Yes  
 Polarized to PCB Yes  
 Stackable No  
 Temperature Range - Operating -35°C to +85°C  
 Termination Interface: Style Surface Mount

**Electrical**



*image - Reference only*

**EU RoHS**

**ELV and RoHS  
Compliant**  
**REACH SVHC  
Contains SVHC: No**  
**Halogen-Free  
Status**

**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**

[47300Series](#)

**Mates With**

[47628](#) , [47639](#), [47645](#), [47650](#), [78380](#),  
[48321](#), [48325](#), [48330](#), [48336](#), [47657](#)  
 Slimline Serial ATA Receptacles

Current - Maximum per Contact	1.5A
Voltage - Maximum	15V DC

### **Solder Process Data**

Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

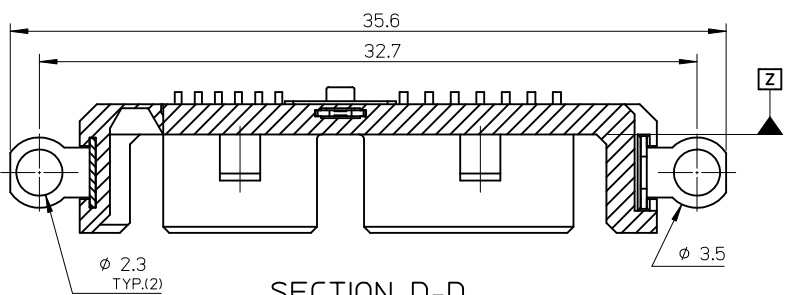
### **Material Info**

### **Reference - Drawing Numbers**

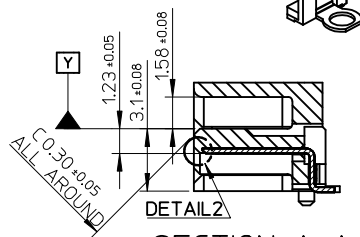
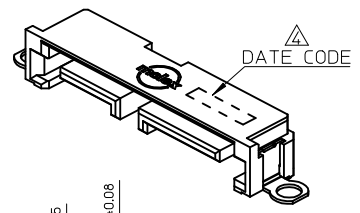
Packaging Specification	PK-47300-001, PK-47300-003
Product Specification	PS-47300-001
Sales Drawing	SD-47300-100

This document was generated on 05/26/2010

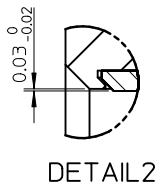
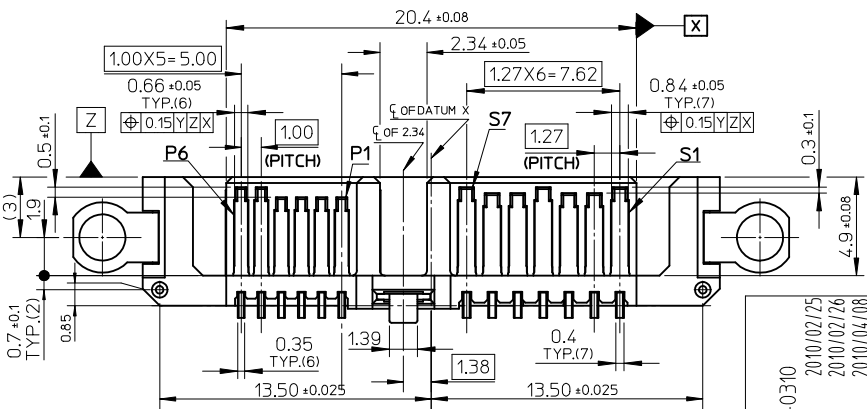
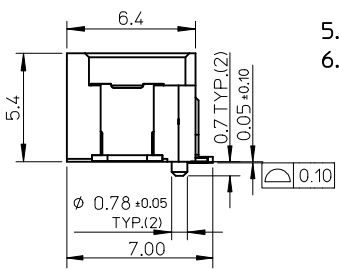
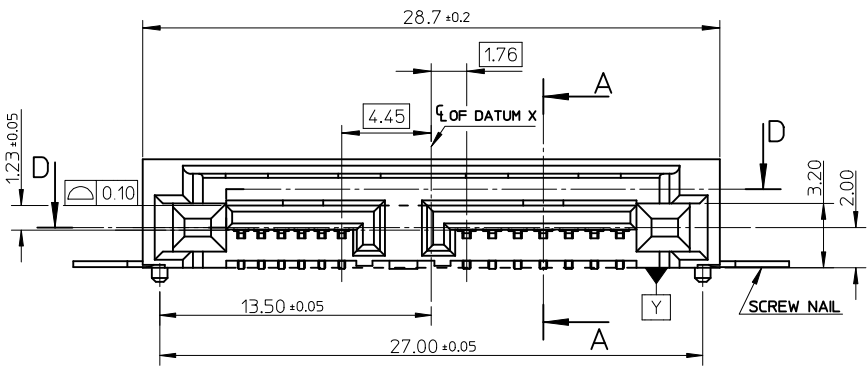
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SECTION D-D



SECTION A-A

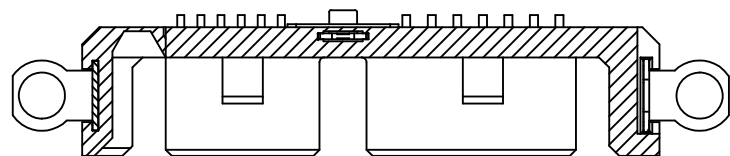


NOTES :

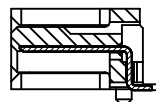
- 1.MATERIAL :
  - HOUSING : HIGH TEMPERATURE THERMOPLASTIC, 30% G.F., UL94V-0, BLACK
  - TERMINAL : COPPER ALLOY, THICKNESS=0.25 MM
  - SCREW NAIL : STAINLESS, THICKNESS=0.30 MM
  - SOLDERING NAIL : COPPER ALLOY, THICKNESS=0.30 MM
- 2.PLATING :
  - TERMINAL :
    - CONTACT AREA : GOLD PLATING 0.1 MICRONS MIN.
    - SOLDERING AREA : MATTE TIN PLATING 1.0 MICRONS MIN.
    - UNDERPLATING : NICKEL PLATING 2.5 MICRONS MIN.
    - SOLDERING NAIL : MATTE TIN PLATING 1.0 MICRONS MIN. OVER NICKEL PLATING 1.0 MICRONS MIN.
- 3.PRODUCT SPECIFICATION: PS-47300-001.
- DATE CODE FORMAT: YY/MM/DD/XX/S, 'XX' IS USED TO MARK TERMINAL GOLD PLATING SPEC, '05' IS FOR FL5H, '15' IS FOR 15u", '30' IS FOR 30u". 'S' IS A SPECIAL LETTER FOR FACTORY TO TRACK.
- 5.PRODUCT PACKAGE SPEC: PK-47300-001.
- 6.THE PRODUCT COMPLIANT TO RoSH DIRECTIVE 2002/95/EC AND ELV DIRECTIVE 2000/53/EC.

P/N	CONTACT PLATING	NAIL
47300-1000	GOLD FLASH	
47300-1002	GOLD 0.38 MICRONS MIN	STAINLESS STEEL, NO PLATING
47300-1004	GOLD 0.76 MICRONS MIN	
47300-1001	GOLD FLASH	
47300-1003	GOLD 0.38 MICRONS MIN	PHOSPHOR BRONZE, MATTE TIN PLATING
47300-1005	GOLD 0.76 MICRONS MIN	

REVISED	EC NO:	DRAWN:GLLI	CHKD:RZHANG	APPR:RZHANG	DESCRIPTION	QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION	
						mm	INCH	MM ONLY	SCALE	MM	METRIC	PROJECTION					
REVISED	SH2010-0310	2010/02/25	2010/02/26	2010/04/08		$\nabla_{\sqrt{A}}=0$	$\nabla_{\sqrt{C}}=0$	$\nabla_{\sqrt{P}}=0$	4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± --- ± ---	1 PLACE ± --- ± ---	4:1	METRIC	THIRD ANGLE PROJECTION		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						ANGULAR ± 3 °		DRAWN BY: GLLI		DATE: 2010/02/25		TITLE: SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER SCREW STANDARD TYPE		MOLEX INCORPORATED		SHEET NO. 1 OF 7	
						SEE TABLE		APPROVED BY: RZHANG		DATE: 2010/02/26		DOCUMENT NO. SD-47300-100					
						SIZE: A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									

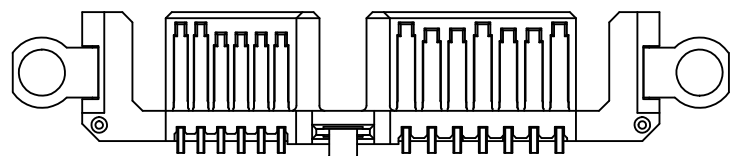
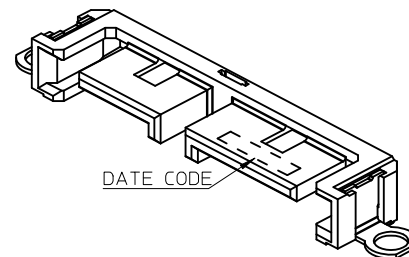
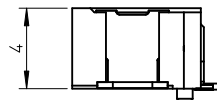
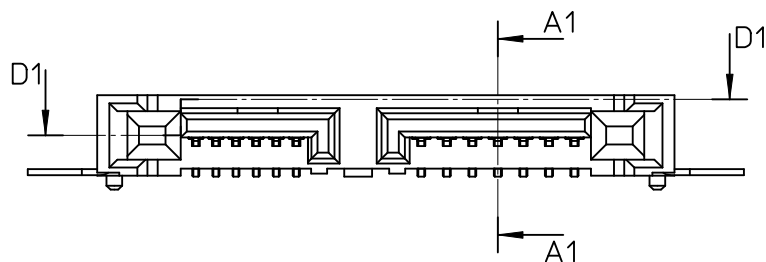


SECTION D1-D1



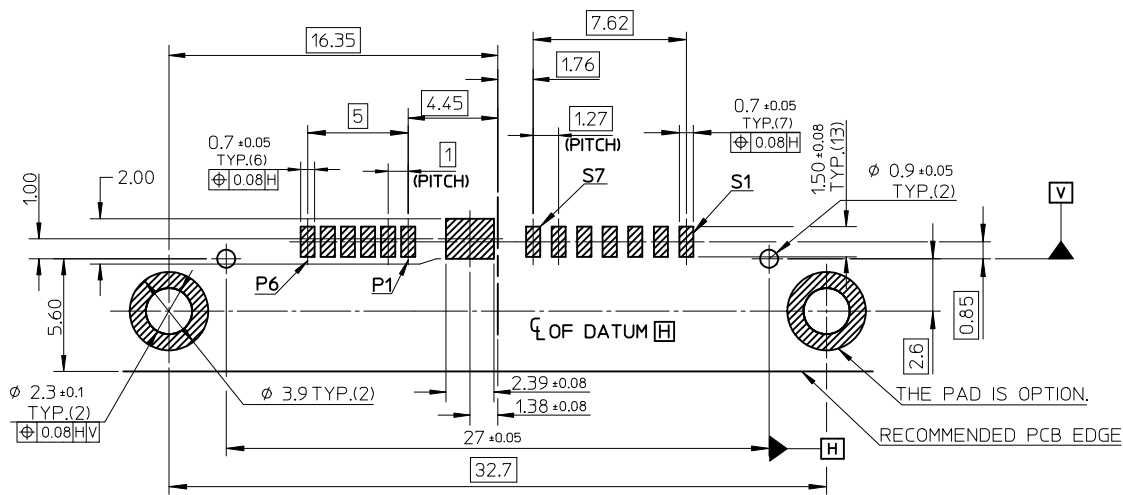
SECTION A1-A1

NOTES : OTHER DIMENSIONS AND NOTES REFER TO SHEET-1.



P/N	CONTACT PLATING	NAIL
47300-1014	GOLD FLASH	
47300-1012	GOLD 0.38 MICRONS MIN	STAINLESS STEEL, NO PLATING
47300-1010	GOLD 0.76 MICRONS MIN	
47300-1015	GOLD FLASH	
47300-1013	GOLD 0.38 MICRONS MIN	PHOSPHOR BRONZE, MATTE TIN PLATING
47300-1011	GOLD 0.76 MICRONS MIN	

REVISED EC NO: SH2010-0310 DRWNG: GLL1 CHKD: APPR: RZHANG 2010/02/25 2010/02/26 2010/04/08	QUALITY SYMBOLS $\nabla_F=0$ $\nabla_E=0$ $\nabla_D=0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>		SCALE <b>4:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY GLL1	DATE 2010/02/25	TITLE <b>SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER SCREW LOW TYPE</b>		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± ---			CHECKED BY RZHANG	DATE 2010/02/26			
			ANGULAR ± 3 °		APPROVED BY RZHANG	DATE 2010/02/26	MOLEX INCORPORATED		
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NO. <b>SEE TABLE</b>	DOCUMENT NO. SD-47300-100	SHEET NO. 2 OF 7			



**RECOMMENDED PCB LAYOUT(CONNECTOR SIDE)**

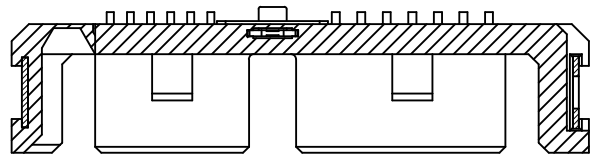
**THICKNESS=0.8MM**

REMARK:

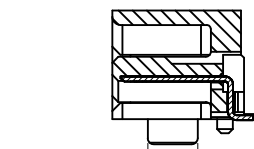
THE PCB LAYOUT IS ONLY FOR 47300-100X, 47300-101X.

<b>REVISED</b> EC NO: SH2010-0310 DRW:GLLI CHKD: APPR:RZHANG REV J	2010/02/25 2010/02/26 2010/04/08	QUALITY SYMBOLS $\nabla_F = 0$ $\nabla_F = 0$ $\nabla_F = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>		SCALE <b>4:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION															
			<table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± ---	± ---	1 PLACE	± ---	± ---	DRAWN BY GLLI	DATE 2010/02/25	TITLE <b>SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER SCREW TYPE</b>			
			mm	INCH																				
	4 PLACES		± ---	± ---																				
3 PLACES	± ---	± ---																						
2 PLACES	± ---	± ---																						
1 PLACE	± ---	± ---																						
		APPROVED BY RZHANG	DATE 2010/02/26	<b>molex</b> MOLEX INCORPORATED																				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. <b>SEE REMARK</b>		DOCUMENT NO. <b>SD-47300-100</b>		SHEET NO. <b>3 OF 7</b>																

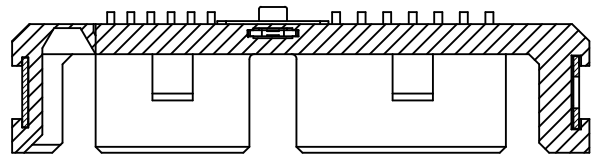
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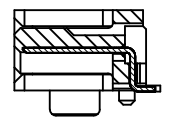
SECTION D-D



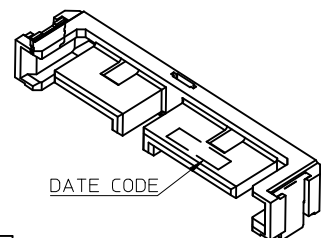
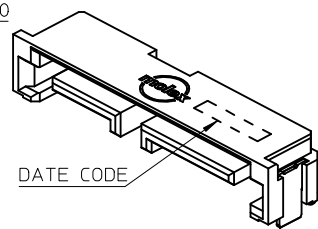
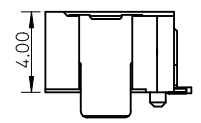
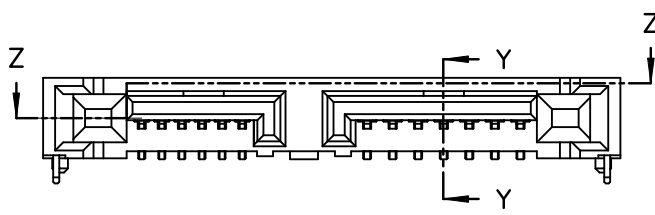
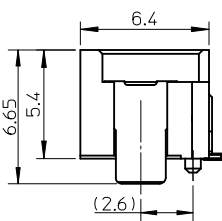
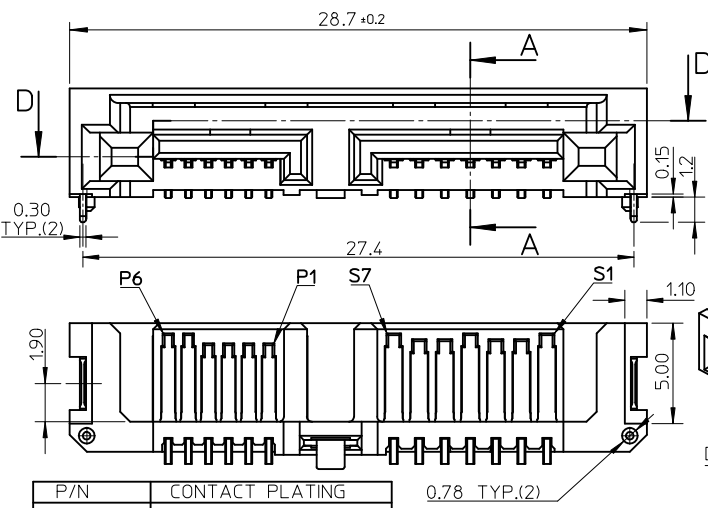
SECTION A-A



SECTION Z-Z

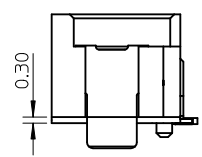
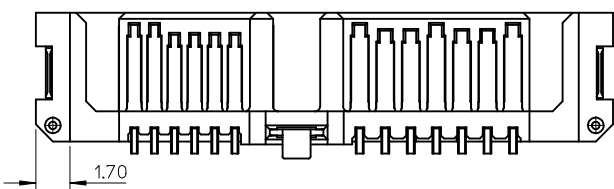


SECTION Y-Y



P/N	CONTACT PLATING
47300-1022	GOLD 0.76 MICRONS MIN
47300-1021	GOLD 0.38 MICRONS MIN
47300-1023	GOLD FLASH

P/N	CONTACT PLATING
47300-1032	GOLD 0.76 MICRONS MIN
47300-1031	GOLD 0.38 MICRONS MIN
47300-1030	GOLD FLASH



NOTES: ONLY FOR 47300-1020, OTHER DIMENSION AND NOTES REFER TO 47300-1023.

NOTES : OTHER DIMENSIONS AND NOTES REFER TO 47300-102X.

- NOTES :
- MATERIAL :  
SOLDERING PEG : COPPER ALLOY
  - PLATING :  
SOLDERING PEG :  
MATTE TIN PLATING 1.0 MICRONS MIN.  
OVER NICKEL PLATING 1.0 MICRONS MIN.
  - PRODUCT PACKAGE SPEC: PK-47300-003.
  - OTHER NOTES AND DIMENSIONS REFER TO SHEET-1.

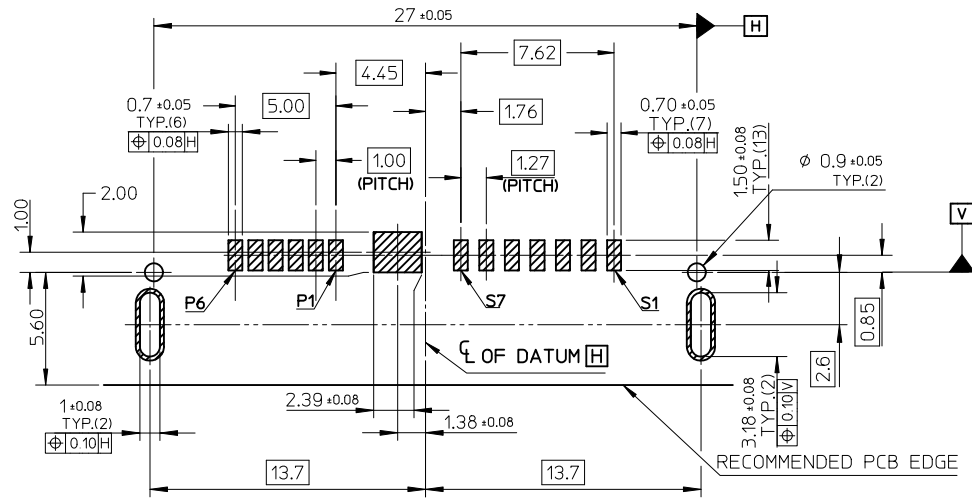
REVISED	DESCRIPTION	QUALITY SYMBOLS
J	REV	▽F=0
J	REV	▽F=0
J	REV	▽F=0

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm INCH
4 PLACES	± --- ± ---
3 PLACES	± --- ± ---
2 PLACES	± --- ± ---
1 PLACE	± --- ± ---
ANGULAR ± 3 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
GLL I	2010/02/25
CHECKED BY	DATE
APPROVED BY	DATE
RZHANG	2010/02/26
MATERIAL NO.	
SEE TABLE OR NOTES	
SIZE	
A3	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
4:1	METRIC	☉
TITLE		
SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER		
SOLDERING STANDARD TYPE		
MOLEX INCORPORATED		
DOCUMENT NO.	SHEET NO.	
SD-47300-100	4 OF 7	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

9 8 7 6 5 4 3 2 1

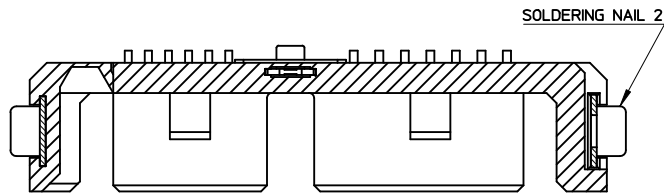


RECOMMEND PCB LAYOUT (THICKNESS=0.8)

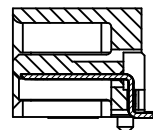
REMARK:

THE PCB LAYOUT IS ONLY FOR 47300-102X AND 47300-103X.

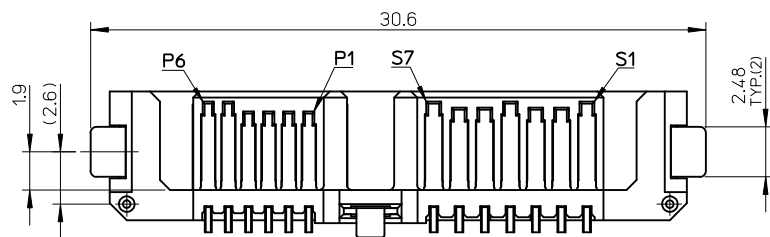
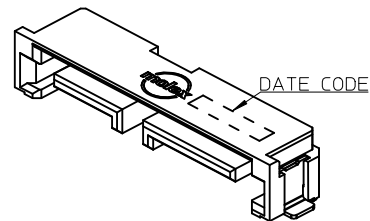
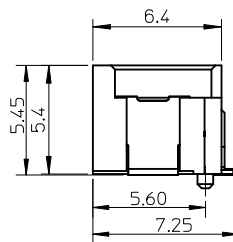
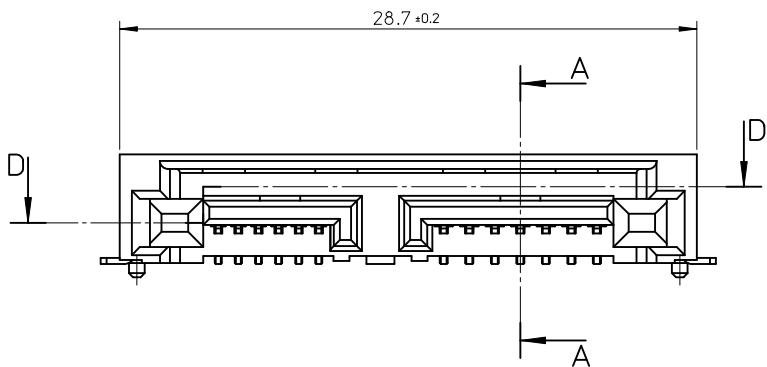
REVISED EC NO: SH2010-0310 DRWNG: GLL I CHKD: 2010/02/26 APPR: RZHANG 2010/04/08	QUALITY SYMBOLS $\nabla = 0$ $\nabla = 0$ $\nabla = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>	SCALE <b>4:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± ---	mm INCH	DRAWN BY GLL I	DATE 2010/02/25	TITLE SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER SOLDERING TYPE		
		3 PLACES ± --- ± ---		CHECKED BY DATE		MOLEX INCORPORATED		
		2 PLACES ± --- ± ---		APPROVED BY RZHANG		DATE 2010/02/26	DOCUMENT NO. SD-47300-100	
		1 PLACE ± --- ± ---		MATERIAL NO. SEE REMARK		SHEET NO. 5 OF 7		
		ANGULAR ± 3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						



SECTION D-D



SECTION A-A



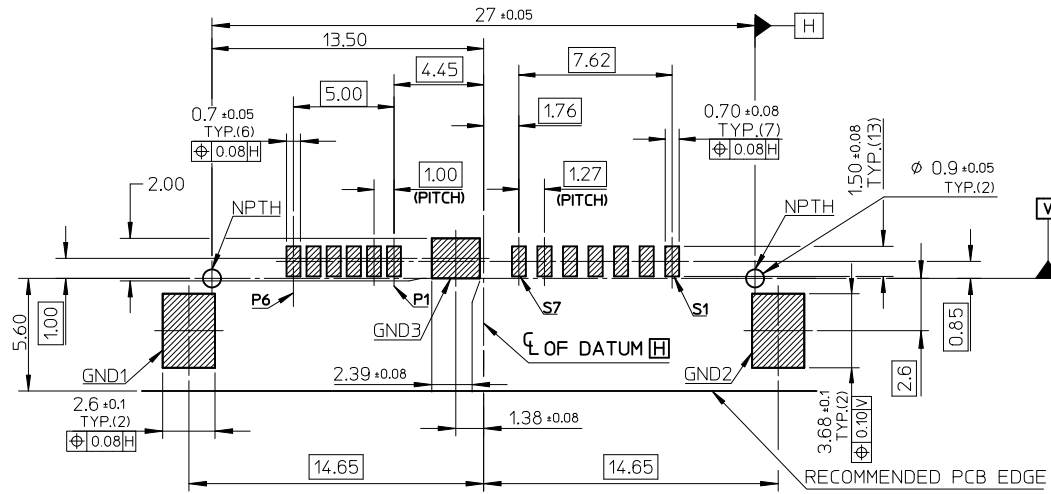
P/N	CONTACT PLATING
47300-1042	GOLD 0.76 MICRONS MIN
47300-1041	GOLD 0.38 MICRONS MIN
47300-1040	GOLD FLASH

NOTES :

- MATERIAL :  
SOLDERING NAIL 2 : COPPER ALLOY
- PLATING :  
SOLDERING NAIL 2 : MATTE TIN PLATING 1.0 MICRONS MIN.  
OVER NICKEL PLATING 1.0 MICRONS MIN.
- OTHER NOTES AND DIMENSIONS REFER TO SHEET-1.

REVISED EC NO: SH2010-0310 DRWN:GLL 2010/02/25 CHKD: 2010/07/26 APPR:RZHANG 2010/04/08	DESCRIPTION QUALITY SYMBOLS $\nabla_A = 0$ $\nabla_G = 0$ $\nabla_P = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± ---	mm INCH	DRAWN BY GLL I	DATE 2010/02/25	TITLE SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER FITTING STANDARD TYPE			
		ANGULAR ± 3 °		CHECKED BY	DATE	APPROVED BY RZHANG			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE	DATE 2010/02/26	MOLEX INCORPORATED		DOCUMENT NO. SD-47300-100	SHEET NO. 6 OF 7
J	REV	SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					





**RECOMMEND PCB LAYOUT**

REMARK:  
THE PCB LAYOUT IS ONLY FOR 47300-104X

REVISED IEC NO: SH2010-0310 DRWG:GLL1 CHYKD: APPR:RZHANG	2010/02/25 2010/02/26 2010/04/08	QUALITY SYMBOLS $\nabla_F = 0$ $\nabla_F = 0$ $\nabla_F = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>	SCALE <b>4:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION	
			4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± ---	mm INCH ± --- ± --- ± --- ± --- ± --- ± ---	DRAWN BY GLL1	DATE 2010/02/25	TITLE <b>SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER FITTING TYPE</b>		
			ANGULAR ± 3 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	APPROVED BY RZHANG	DATE 2010/02/26	MOLEX INCORPORATED		
			SEE REMARK	MATERIAL NO.	DOCUMENT NO.	SHEET NO.			