

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

**Part Number:** **0473001040**

**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 Fitting Type Soldering Nail, Right Angle, Gold (Au) Flash Plating, with Pegs, Lead-free

**Documents:**

[3D Model](#)

[Drawing \(PDF\)](#)

[Product Specification PS-47300-001 \(PDF\)](#)

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

**Agency Certification**

CSA LR 19980

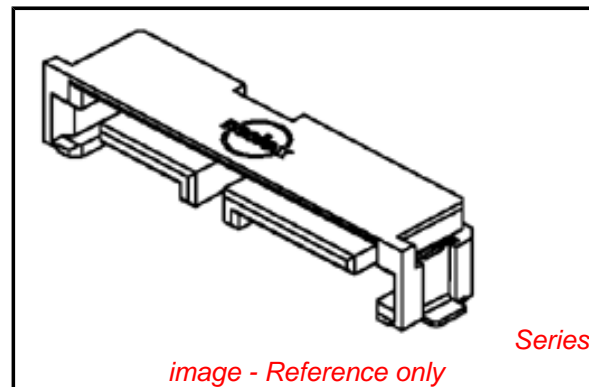
**General**

Product Family	PCB Headers
Series	<a href="#">47300</a>
Application	Board-to-Board
Comments	Fitting Standard Type
Overview	<a href="#">slimline serial ata odd connectors</a>
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)	2
Plating min: Mating (µm)	0.05
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**



**EU RoHS**

**ELV and RoHS Compliant**

**REACH SVHC**

Not Reviewed

**Halogen-Free**

**Status**

**Halogen-Free**

**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

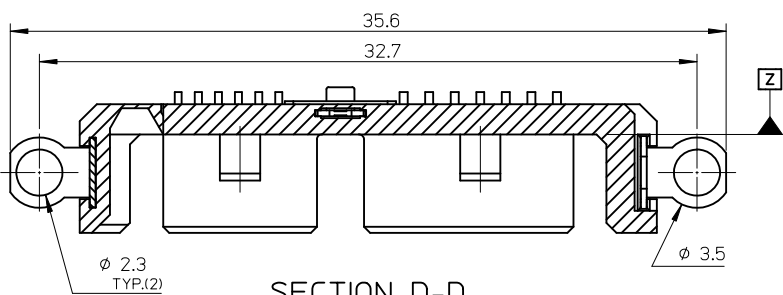
### **Material Info**

### **Reference - Drawing Numbers**

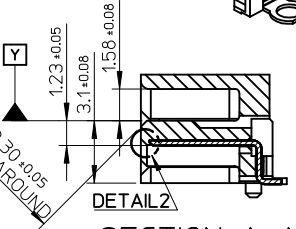
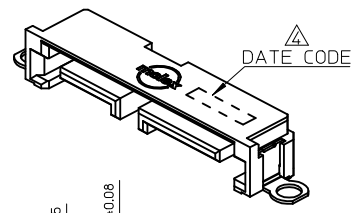
Packaging Specification	PK-47300-001
Product Specification	PS-47300-001
Sales Drawing	SD-47300-100

This document was generated on 05/26/2010

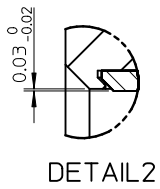
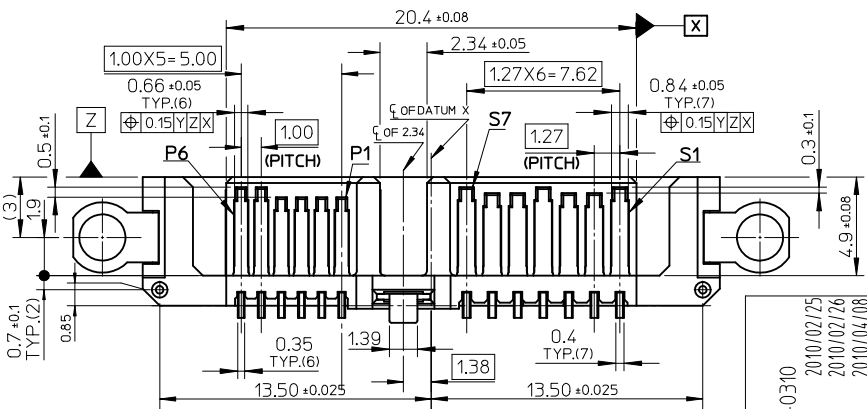
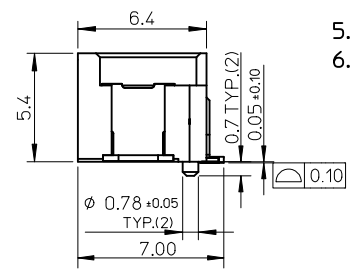
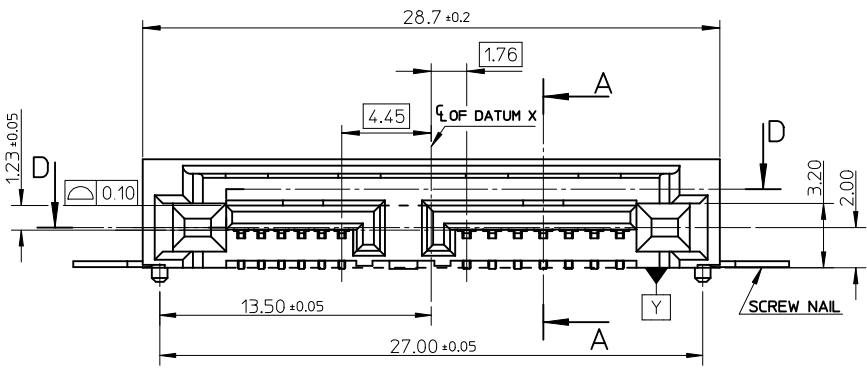
**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**



SECTION D-D



SECTION A-A



DETAIL2

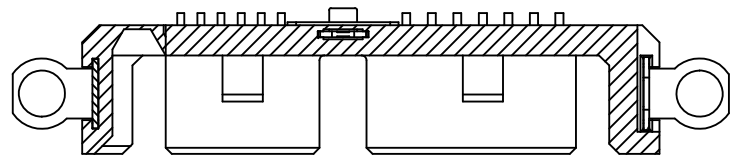
NOTES :

- 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 FLSH, '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.

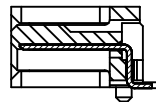
P/N	CONTACT PLATING	NAIL
47300-1000	GOLD FLASH	
47300-1002	GOLD 0.38 MICRONS MIN	STAINLESS STEEL, NO PLATING
47300-1004	GOLD 0.76 MICRONS MIN	
47300-1001	GOLD FLASH	
47300-1003	GOLD 0.38 MICRONS MIN	PHOSPHOR BRONZE, MATTE TIN PLATING
47300-1005	GOLD 0.76 MICRONS MIN	

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

10 9 8 7 6 5 4 3 2 1

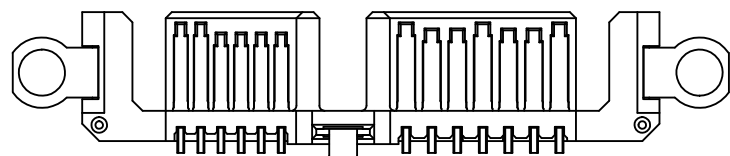
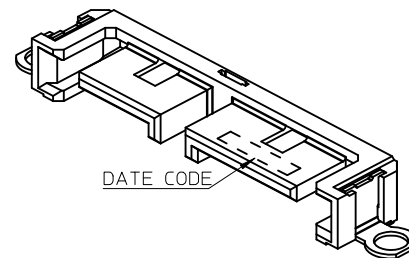
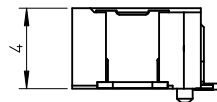
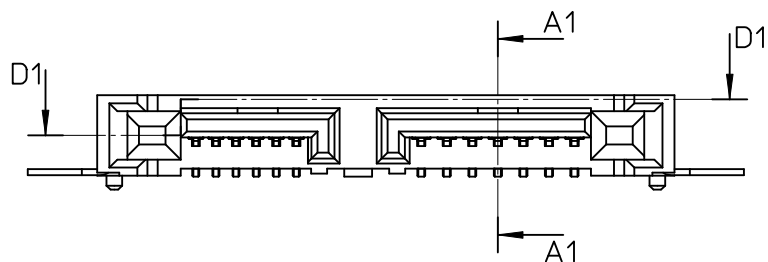


SECTION D1-D1



SECTION A1-A1

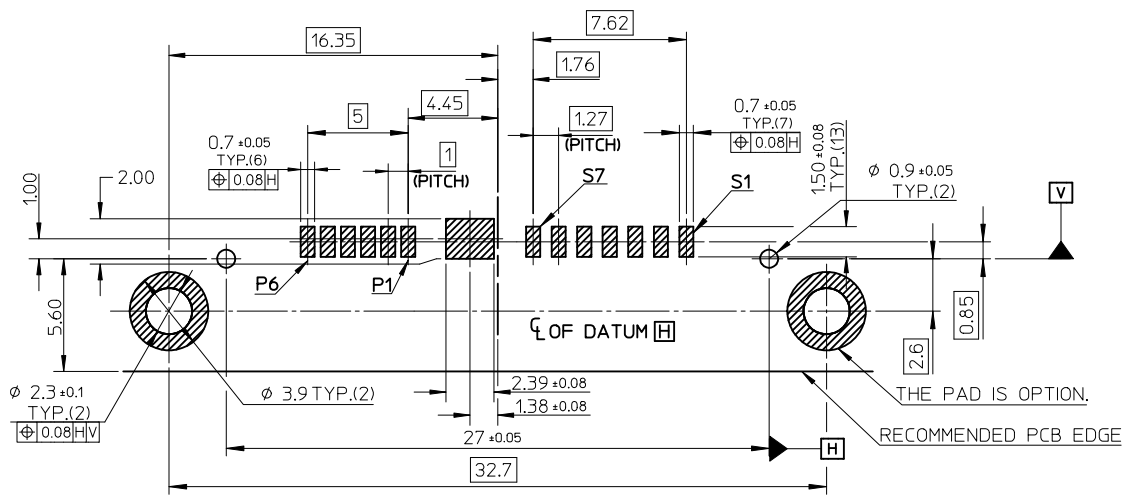
NOTES : OTHER DIMENSIONS AND NOTES REFER TO SHEET-1.



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	

<b>REVISED</b> EC NO: SH2010-0310 DRWNG: GLL1 CHKD: APPR: RZHANG	2010/02/25 2010/02/26 2010/04/08	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
			$\nabla_F=0$ $\nabla_E=0$ $\nabla_D=0$	mm    INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	MM ONLY	4:1	METRIC	DRAWN BY: GLL1    DATE: 2010/02/25 CHECKED BY:    DATE:	TITLE SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER SCREW LOW TYPE
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	APPROVED BY: RZHANG    DATE: 2010/02/26 MATERIAL NO.    DOCUMENT NO.	MOLEX INCORPORATED SD-47300-100			
					SIZE: A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	SHEET NO. 2 OF 7			

9 8 7 6 5 4 3 2 1



**RECOMMENDED PCB LAYOUT(CONNECTOR SIDE)**

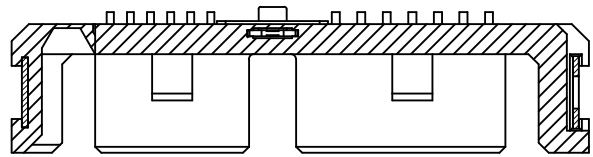
**THICKNESS=0.8MM**

REMARK:

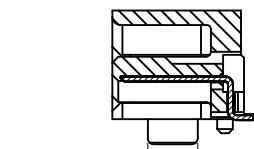
THE PCB LAYOUT IS ONLY FOR 47300-100X, 47300-101X.

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

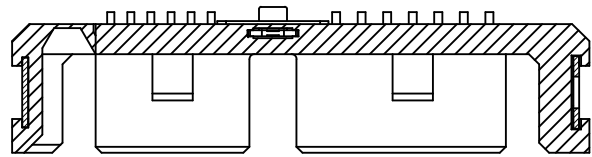
10 9 8 7 6 5 4 3 2 1



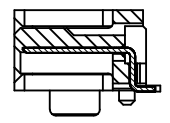
SECTION D-D



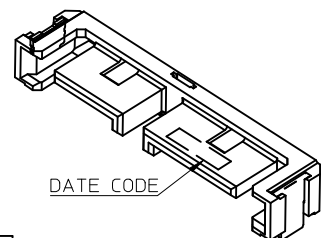
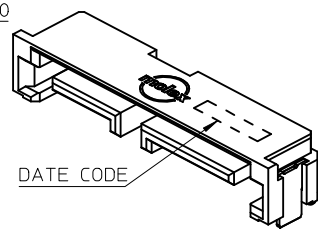
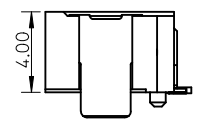
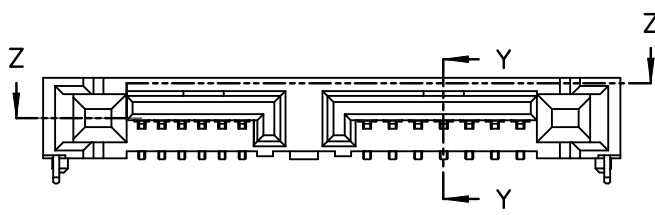
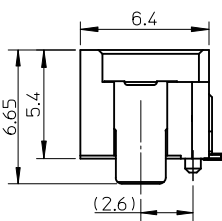
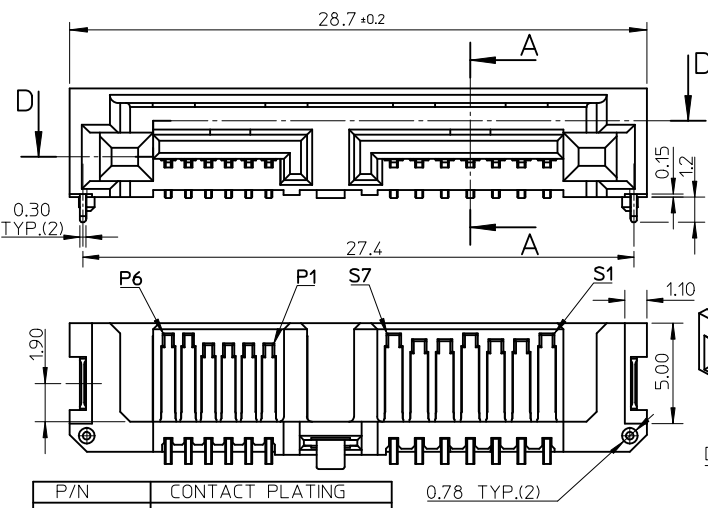
SECTION A-A



SECTION Z-Z

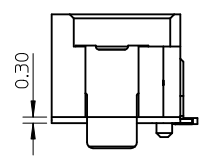
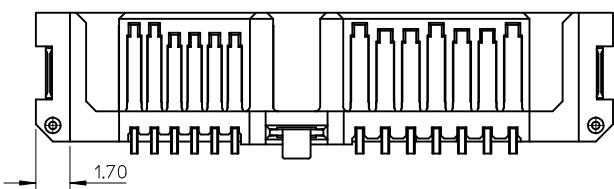


SECTION Y-Y



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.

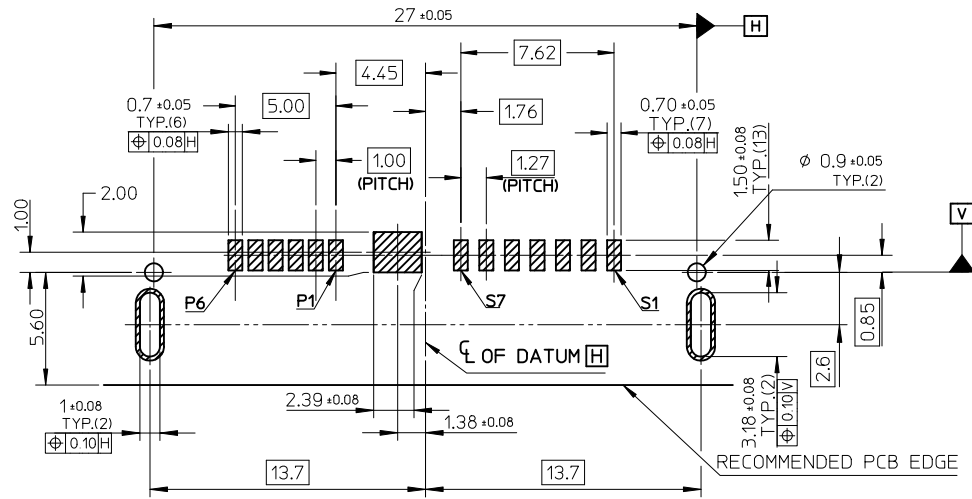
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J	REV	▽F=0
J	REV	▽F=0
J	REV	▽F=0

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

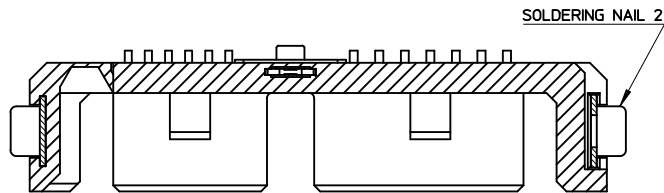


RECOMMEND PCB LAYOUT (THICKNESS=0.8)

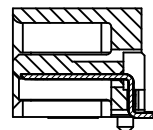
REMARK:

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

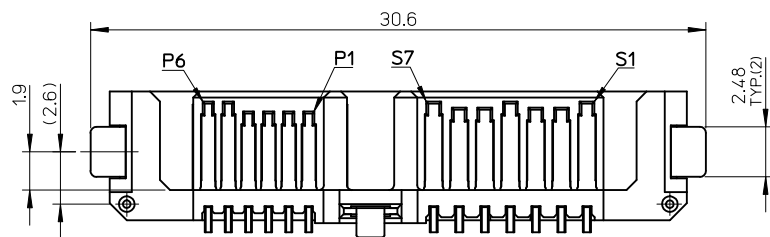
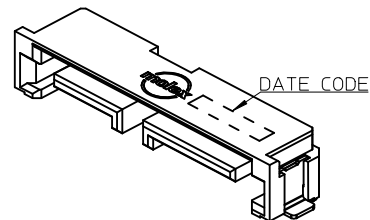
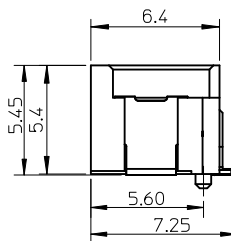
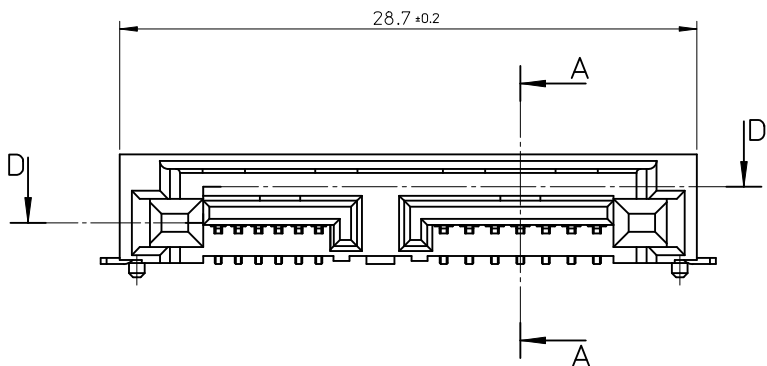
REVISED EC NO: SH2010-0310 DRWNG: GLL I CHKD: 2010/02/26 APPR: RZHANG 2010/04/08	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	$\nabla = 0$	mm	INCH	MM ONLY	4:1	METRIC	
	$\nabla = 0$	4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE
	$\nabla = 0$	3 PLACES	± ---	± ---	GLL I	2010/02/25	SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER SOLDERING TYPE
		2 PLACES	± ---	± ---	CHECKED BY	DATE	
		1 PLACE	± ---	± ---	APPROVED BY	DATE	
		ANGULAR ± 3°		RZHANG	2010/02/26	MOLEX INCORPORATED	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
				SEE REMARK	SD-47300-100	5 OF 7	
				SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		



SECTION D-D



SECTION A-A



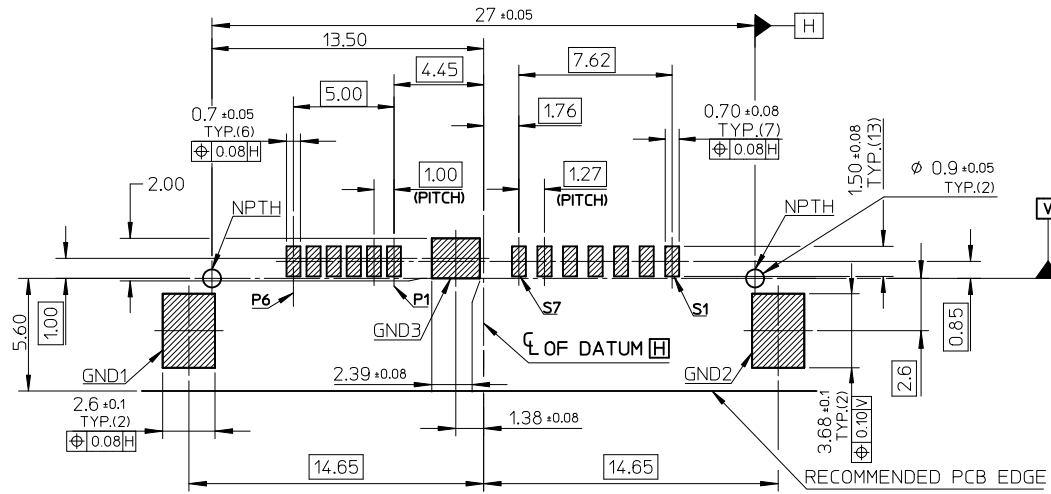
P/N	CONTACT PLATING
47300-1042	GOLD 0.76 MICRONS MIN
47300-1041	GOLD 0.38 MICRONS MIN
47300-1040	GOLD FLASH

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 °		APPROVED BY RZHANG	DATE 2010/02/26	MOLEX INCORPORATED			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-47300-100	SHEET NO. 6 OF 7		





**RECOMMEND PCB LAYOUT**

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

REVISED IEC NO: SH2010-0310 DRWG:GLL1 CH/KD: APPR:RZHANG	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 °		APPROVED BY RZHANG	DATE 2010/02/26	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>7 OF 7</b>			