

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0473001020

Status:

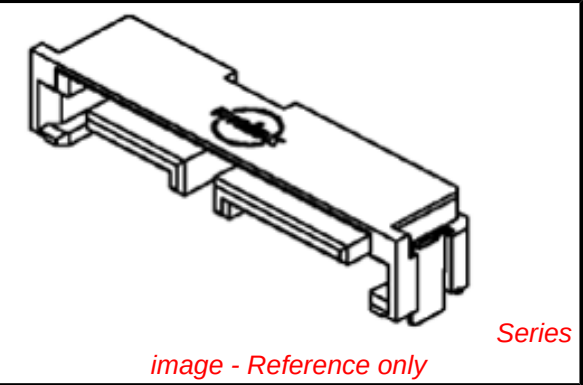
Active

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, Gold (Au) Flash Plating, with Pegs, 5.4mm (.213") Mounted Height, 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	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)	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

Contains SVHC: No

Halogen-Free

Status

Halogen-Free

China RoHS

Need more information on product environmental compliance?

Email 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

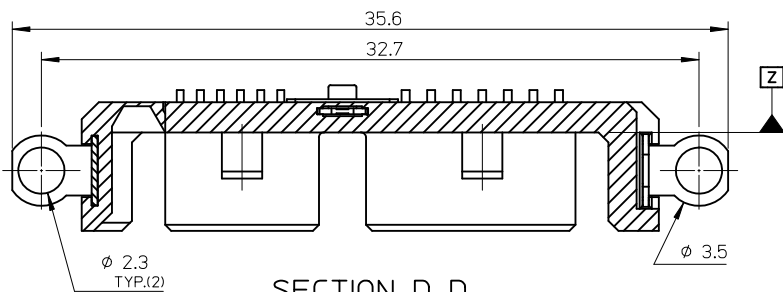
Reference - Drawing Numbers

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

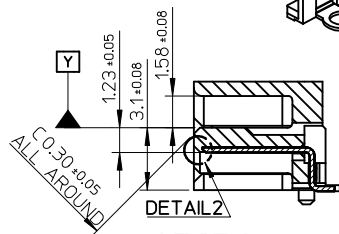
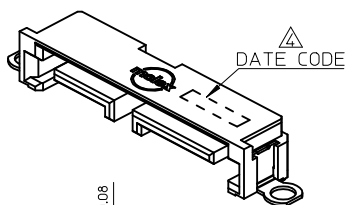
This document was generated on 05/26/2010

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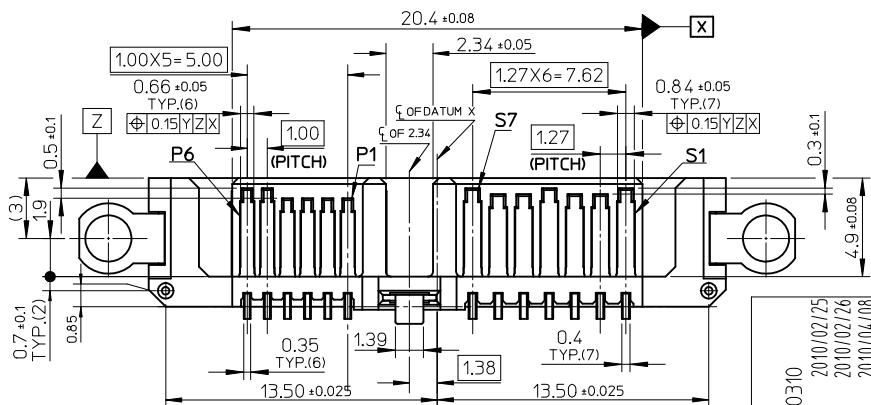
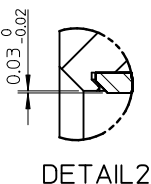
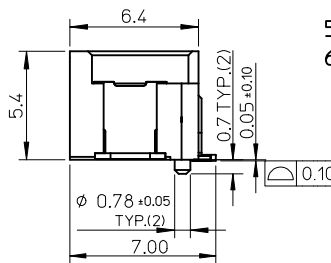
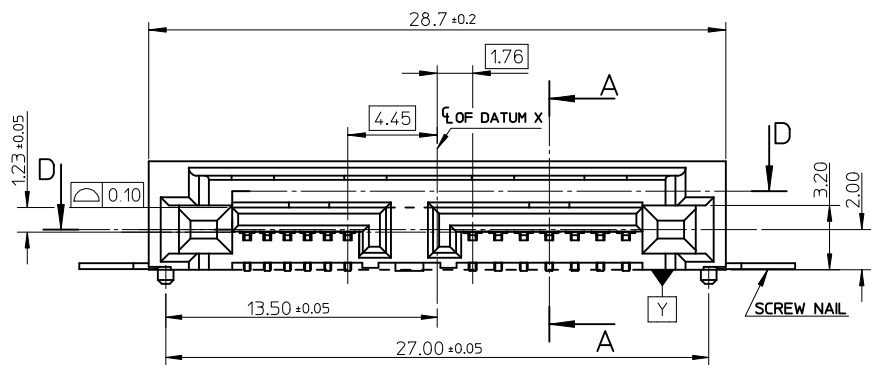
10 9 8 7 6 5 4 3 2 1



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.

4.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	STAINLESS STEEL, NO PLATING
47300-1002	GOLD 0.38 MICRONS MIN	
47300-1004	GOLD 0.76 MICRONS MIN	
47300-1001	GOLD FLASH	PHOSPHOR BRONZE, MATTE TIN PLATING
47300-1003	GOLD 0.38 MICRONS MIN	
47300-1005	GOLD 0.76 MICRONS MIN	

DESIGN UNITS	THIRD ANGLE PROJECTION
METRIC	
SCALE	4:1
DIMENSION STYLE	MM ONLY
DRAWN BY	DATE
GLLI	2010/02/25
CHECKED BY	DATE
APPROVED BY	DATE
RZHANG	2010/02/26
MATERIAL NO.	DOCUMENT NO.
SEE TABLE	SD-47300-100
SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION
A3	

QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)
F _A =0	4 PLACES ± --- ± ---
F _C =0	3 PLACES ± --- ± ---
F _P =0	2 PLACES ± --- ± ---
	1 PLACE ± --- ± ---
	ANGULAR ± 3 °
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

REV	DESCRIPTION	DATE	BY	APP
REVISED	EC NO: SH2010-0310	2010/02/25	DRW:GLLI	2010/02/26
	CH:KD	2010/02/26	APPR:RZHANG	2010/04/08

10 9 8 7 6 5 4 3 2 1

F

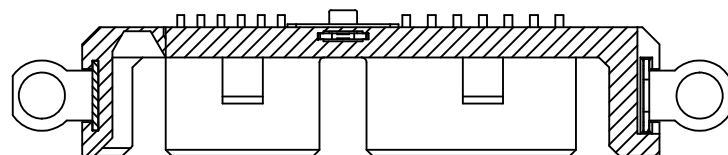
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D

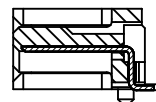
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B

A

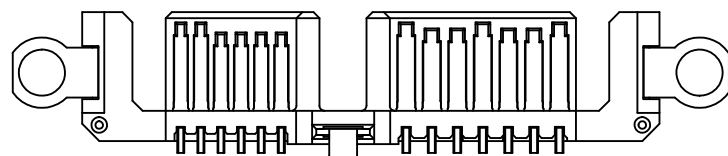
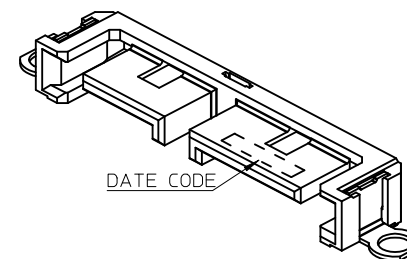
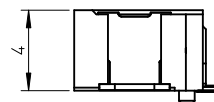
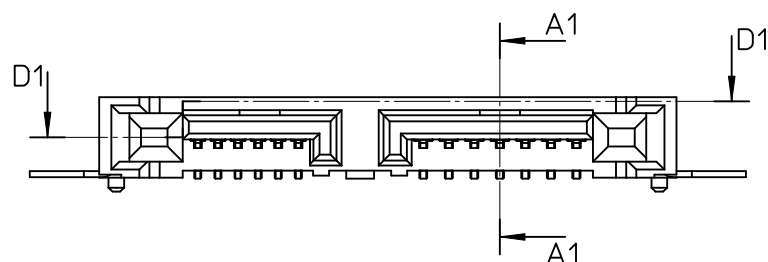


SECTION D1-D1



SECTION A1-A1

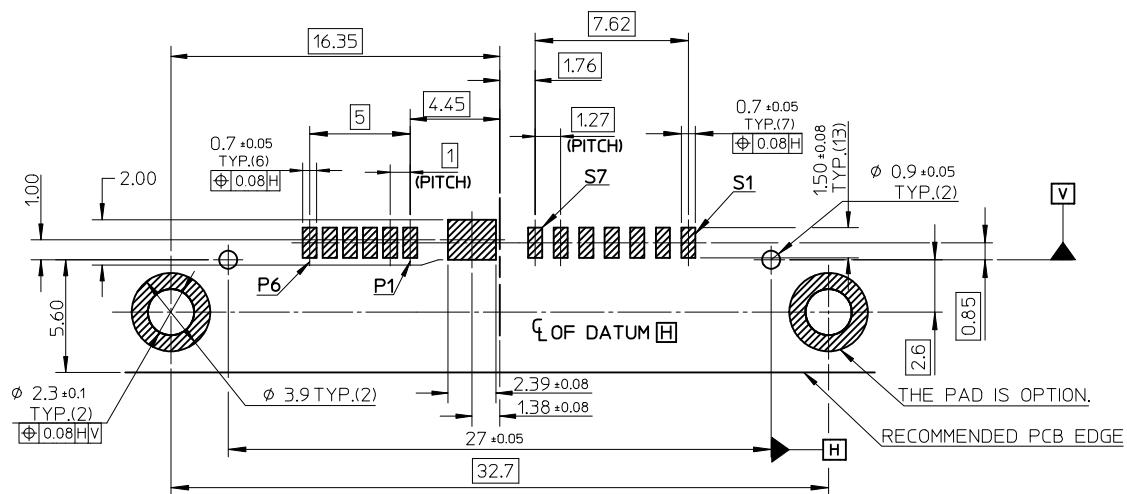
NOTES : OTHER DIMENSIONS AND NOTES
REFER TO SHEET-1.



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

REVISED EC NO: SH2010-0310 J 2010/02/25 DRW:GLL1 CHKD: APPR:RZHANG 2010/02/26 2010/04/08	DESCRIPTION REV	QUALITY SYMBOLS F_A=0 F_C=0 F_P=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
					DRAWN BY GLL1	DATE 2010/02/25	TITLE SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER SCREW LOW TYPE				
					CHECKED BY	DATE					
					APPROVED BY RZHANG	DATE 2010/02/26	MOLEX MOLEX INCORPORATED		DOCUMENT NO.		SHEET NO. 2 OF 7
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-47300-100				
					SIZE A3		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



RECOMMENDED PCB LAYOUT(CONNECTOR SIDE)

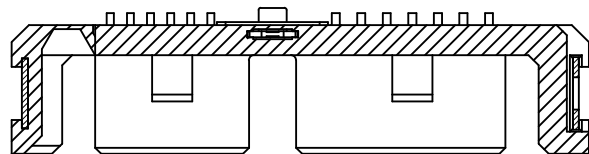
THICKNESS=0.8MM

REMARK:

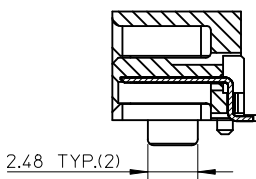
THE PCB LAYOUT IS ONLY FOR 47300-100X, 47300-101X.

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

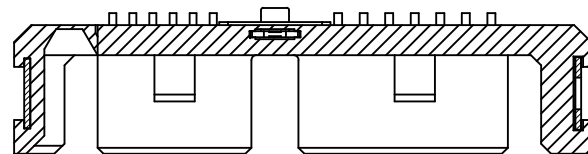
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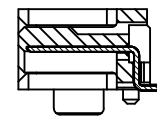
SECTION D-D



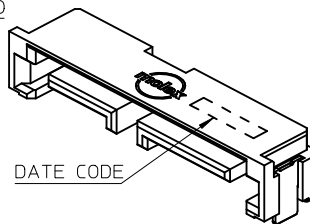
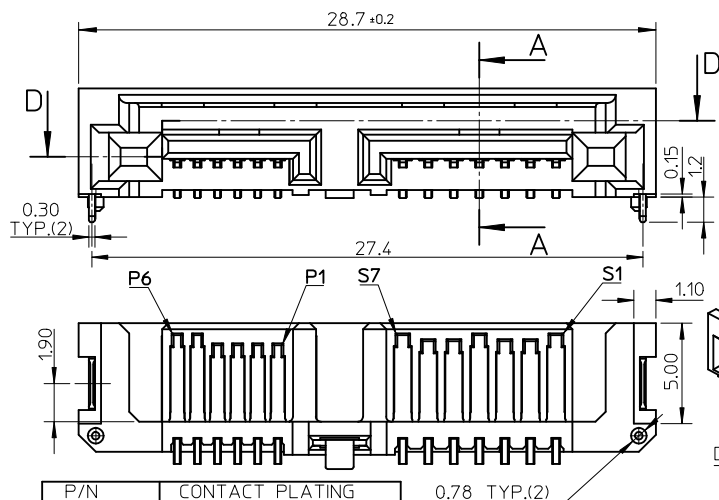
SECTION A-A



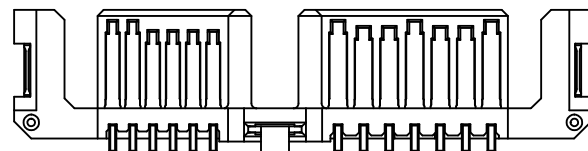
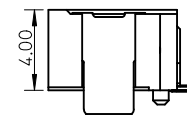
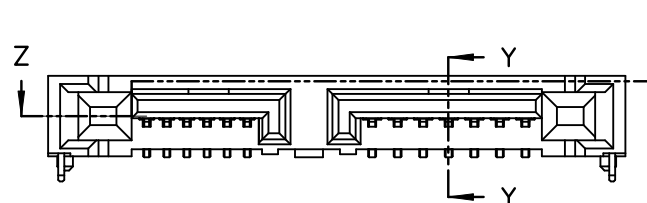
SECTION Z-Z



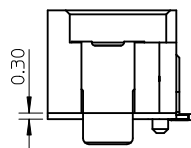
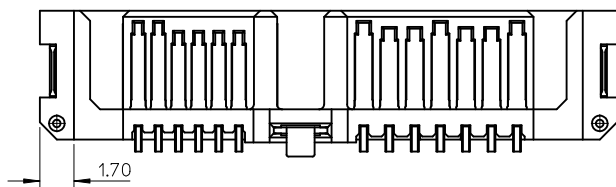
SECTION Y-Y



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 :

1.MATERIAL :

SOLDERING PEG : COPPER ALLOY

2.PLATING :

SOLDERING PEG :

MATTE TIN PLATING 1.0 MICRONS MIN.

OVER NICKEL PLATING 1.0 MICRONS MIN.

3.PRODUCT PACKAGE SPEC: PK-47300-003.

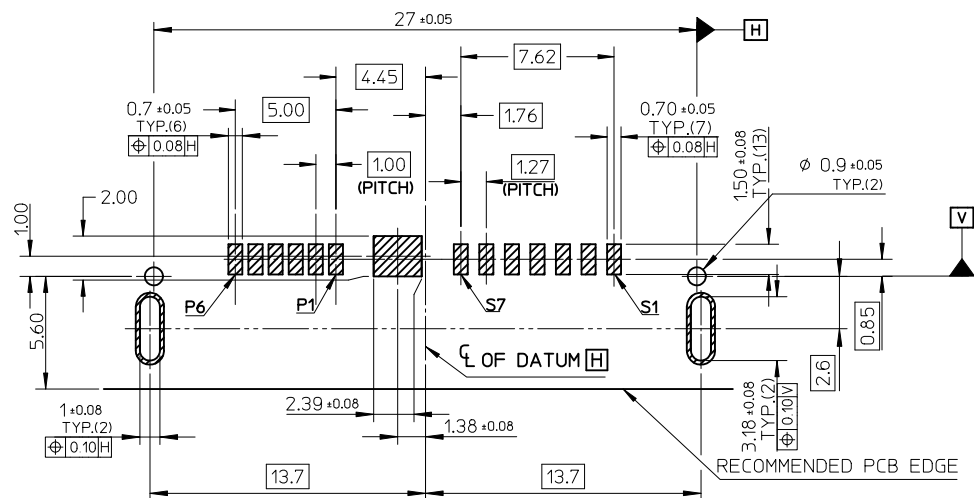
4.OTHER NOTES AND DIMENSIONS REFER TO SHEET-1.

REVISED	EC NO: SH2010-0310	2010/02/25	2010/02/26	2010/04/08	QUALITY SYMBOLS
J	DRW:GLL1	CHKD:	APPR:RZHANG	REV	$\nabla F=0$ $\nabla F=0$ $\nabla F=0$

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
GLL1	2010/02/25
CHECKED BY	DATE
APPROVED BY	DATE
RZHANG	2010/02/26
MATERIAL NO.	
SEE TABLE OR NOTES	
SIZE	
A3	

SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
TITLE		
SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER		
SOLDERING STANDARD TYPE		
MOLEX INCORPORATED		
DOCUMENT NO.		SHEET NO.
SD-47300-100		4 OF 7

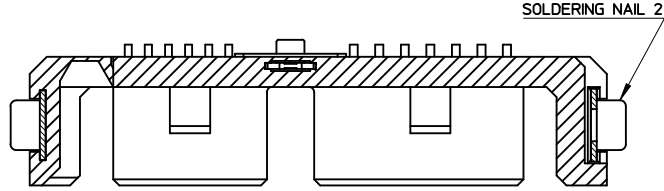


RECOMMEND PCB LAYOUT (THICKNESS=0.8)

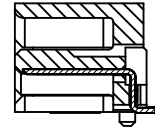
REMARK:

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

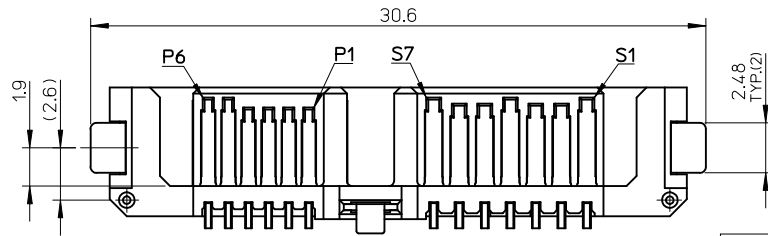
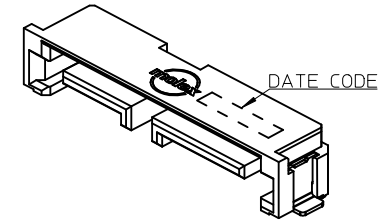
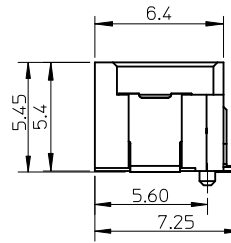
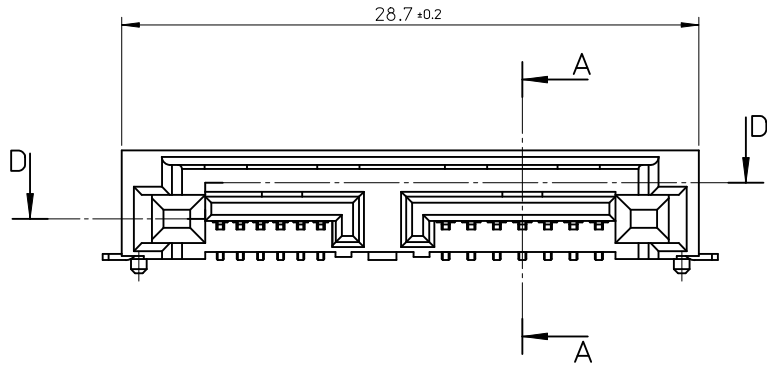
REVISED	EC NO: SH2010-0310	DRW: GLL I	CHKD: 2010/02/26	APPR: RZHANG	REV	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	TITLE	MATERIAL NO.	DOCUMENT NO.	SHEET NO.
								mm	INCH	MM ONLY	DATE							
							$\nabla = 0$	4 PLACES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



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 :

1.MATERIAL :

SOLDERING NAIL 2 : COPPER ALLOY

2.PLATING :

SOLDERING NAIL 2 : MATTE TIN PLATING 1.0 MICRONS MIN.
OVER NICKEL PLATING 1.0 MICRONS MIN.

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

REVISED	EC NO: SH2010-0310	2010/02/25	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION					
	DRWN:GLLI	2010/02/26						MM ONLY		4:1	METRIC						
	CHKD:	2010/04/08								TITLE		SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER FITTING STANDARD TYPE					
	APPR:RZHANG																
												MOLEX INCORPORATED					
J		REV			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE TABLE		SD-47300-100		SHEET NO. 6 OF 7					
														SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	

