

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: **0473001003**
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 Standard Type Screw, Right Angle, 0.38µm (15µ") Gold (Au) Plating, Phosphor Bronze Matt Tin Plated Screw Nail, with Pegs, Lead-free

Documents:

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

Agency Certification

CSA LR 19980

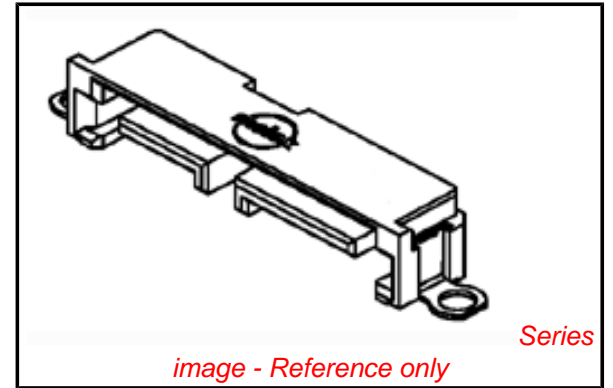
General

Product Family PCB Headers
 Series 47300
 Application Board-to-Board
 Comments Screw 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) 15
 Plating min: Mating (µm) 0.38
 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 Not Reviewed

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 |

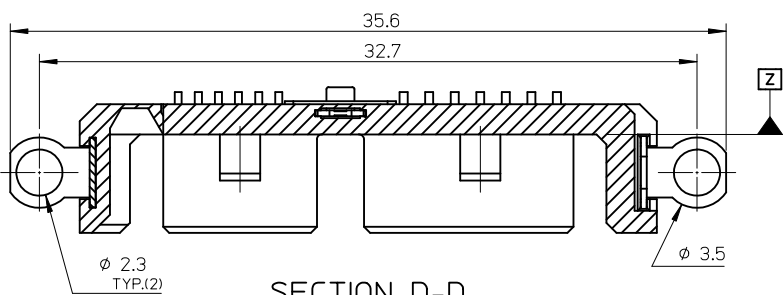
Material Info

Reference - Drawing Numbers

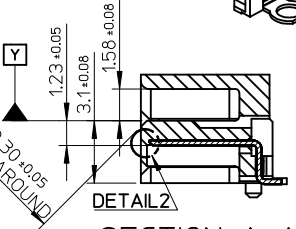
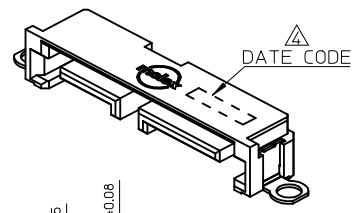
| | |
|-------------------------|--------------|
| Packaging Specification | PK-47300-001 |
| Product Specification | PS-47300-001 |
| Sales Drawing | SD-47300-100 |

This document was generated on 05/26/2010

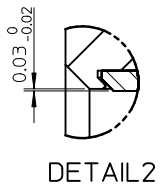
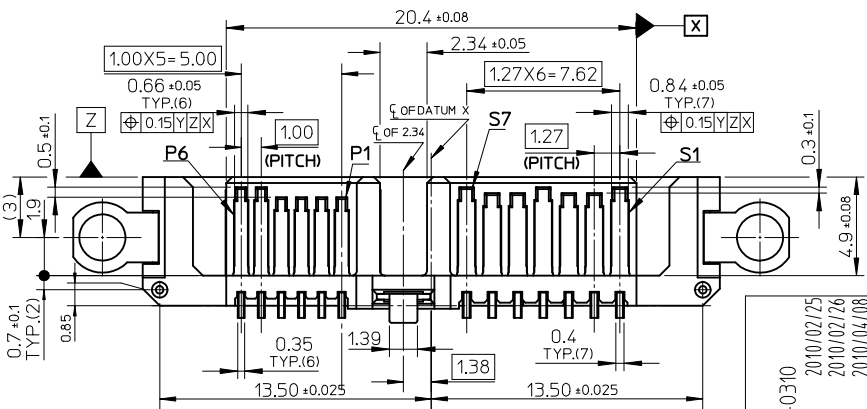
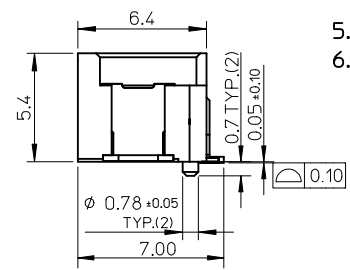
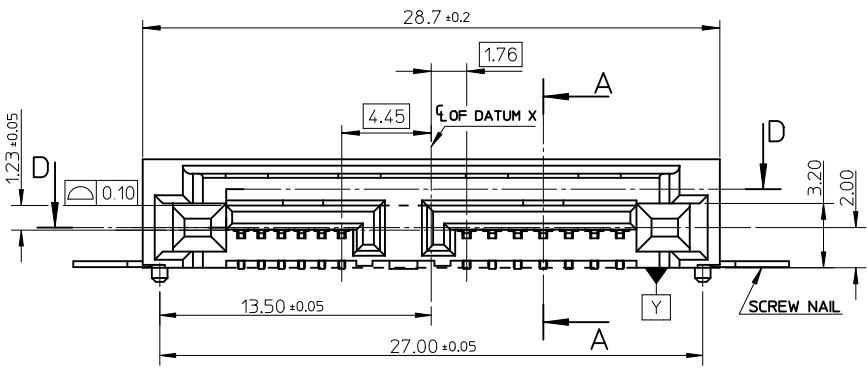
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SECTION D-D



SECTION A-A



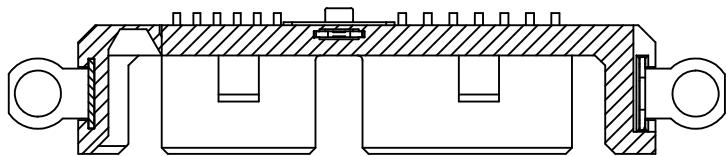
NOTES :

- 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
- 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.
- 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.
- PRODUCT PACKAGE SPEC: PK-47300-001.
- THE PRODUCT COMPLIANT TO RoSH DIRECTIVE 2002/95/EC AND ELV DIRECTIVE 2000/53/EC.

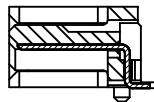
| P/N | CONTACT PLATING | NAIL |
|------------|-----------------------|------------------------------------|
| 47300-1000 | GOLD FLASH | |
| 47300-1002 | GOLD 0.38 MICRONS MIN | STAINLESS STEEL, NO PLATING |
| 47300-1004 | GOLD 0.76 MICRONS MIN | |
| 47300-1001 | GOLD FLASH | |
| 47300-1003 | GOLD 0.38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

| REVISED | EC NO: SH2010-0310 | DRWING: GLLI | CHKD: CH'KD: | 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 | ± --- | ± --- | GLLI | 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 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

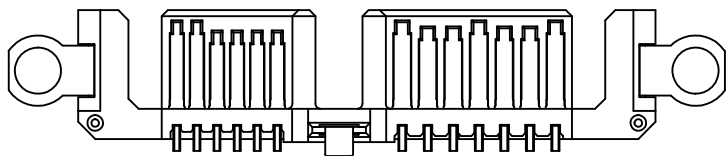
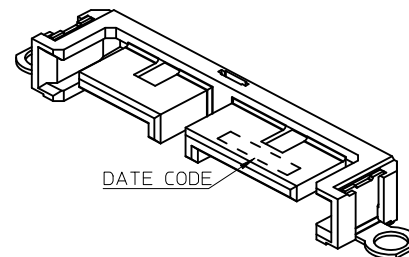
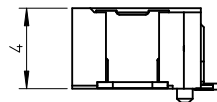
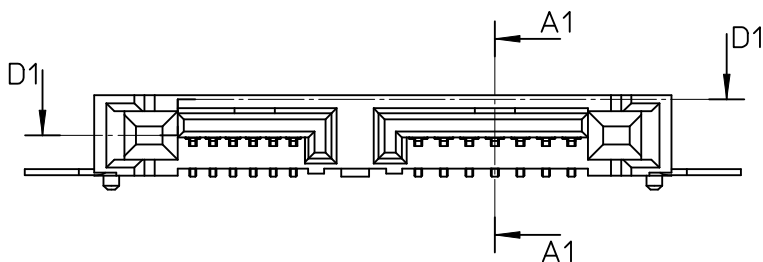


SECTION D1-D1



SECTION A1-A1

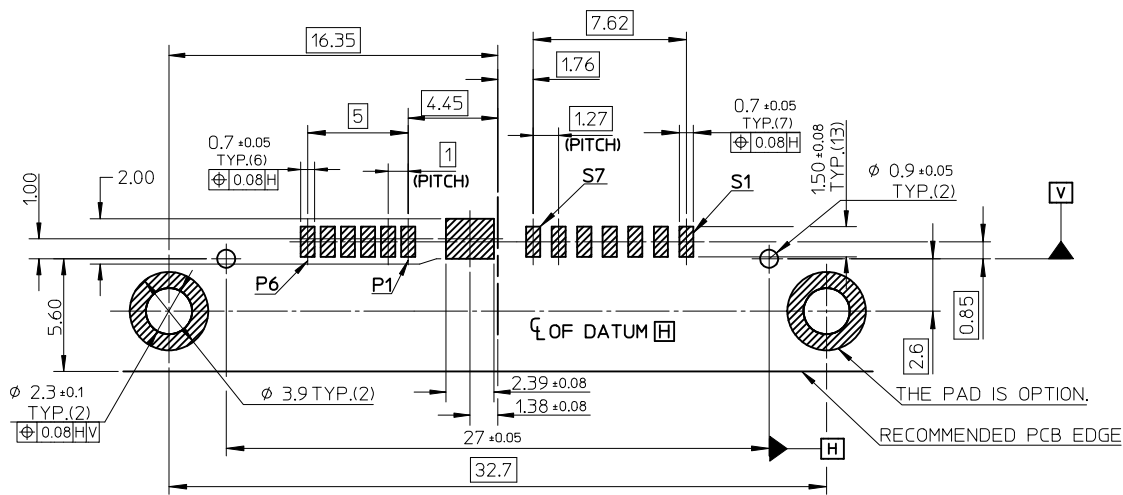
NOTES : OTHER DIMENSIONS AND NOTES REFER TO SHEET-1.



| 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 | |

| | | | | | | | | | |
|--|--|---|---------------------------------------|---|--------------------|------------|--|------------------------|--|
| REVISED EC NO: SH2010-0310 DRWNG: GLL1 CHKD: APPR: RZHANG REV: J | 2010/02/25 2010/02/26 2010/04/08 | QUALITY SYMBOLS $\nabla_F=0$ $\nabla_E=0$ $\nabla_B=0$ | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION | |
| | | | | | MM ONLY | 4:1 | METRIC | | |
| | | | | | DRAWN BY | DATE | TITLE | | |
| | | | | | GLL1 | 2010/02/25 | SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER | | |
| | | CHECKED BY | | DATE | MOLEX INCORPORATED | | | | |
| | | APPROVED BY | | DATE | SD-47300-100 | | SHEET NO. | | |
| | | RZHANG | | 2010/02/26 | SEE TABLE | | 2 OF 7 | | |
| | | MATERIAL NO. | | DOCUMENT NO. | | | | | |
| | | | | | | | | | |
| | | 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 | | | | | |

9 8 7 6 5 4 3 2 1



RECOMMENDED PCB LAYOUT(CONNECTOR SIDE)

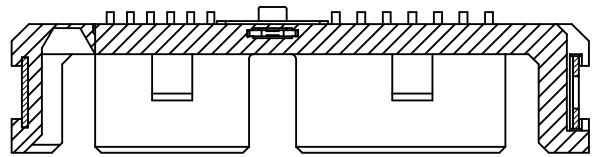
THICKNESS=0.8MM

REMARK:

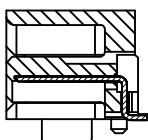
THE PCB LAYOUT IS ONLY FOR 47300-100X, 47300-101X.

| | | | | | | | | | |
|--|---|---|---------------|-----------------------------------|----------------------|-------------------------------|---|----------------------------|--|
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| | | | mm | INCH | DRAWN BY GLLI | DATE 2010/02/25 | TITLE SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER SCREW TYPE | | |
| | | 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- | ANGULAR ± 3 ° | | CHECKED BY RZHANG | DATE 2010/02/26 | MOLEX INCORPORATED | | |
| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | SEE REMARK | | MATERIAL NO. | DOCUMENT NO. SD-47300-100 | SHEET NO. 3 OF 7 | |

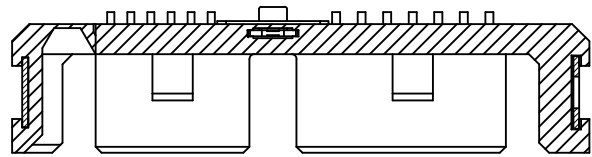
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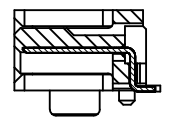
SECTION D-D



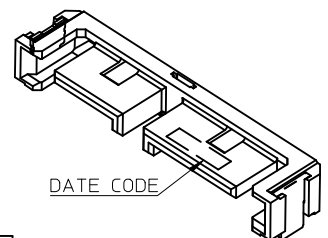
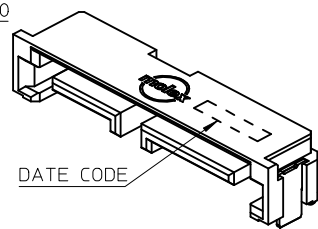
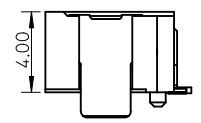
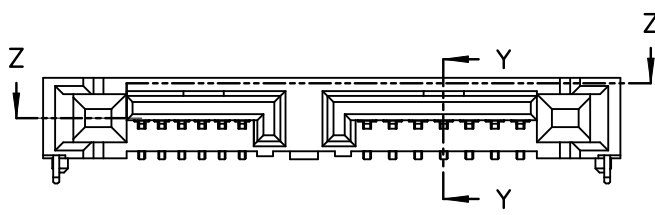
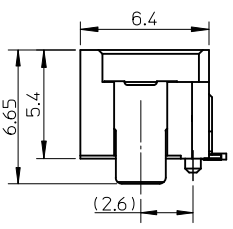
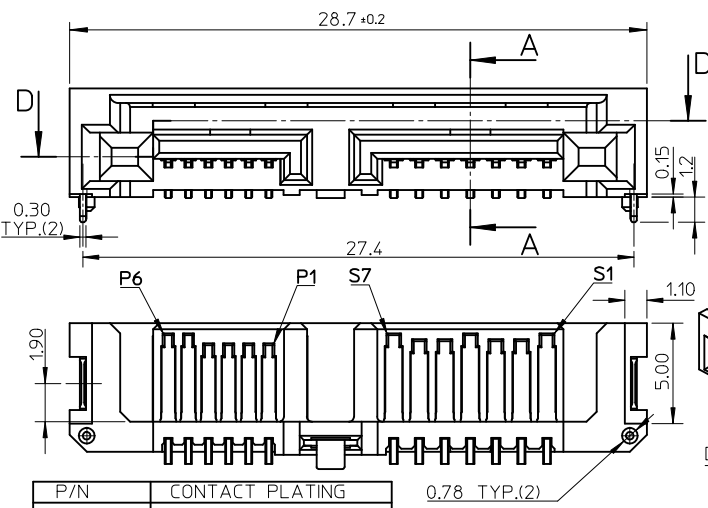
SECTION A-A
2.48 TYP.(2)



SECTION Z-Z

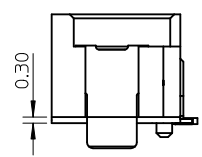
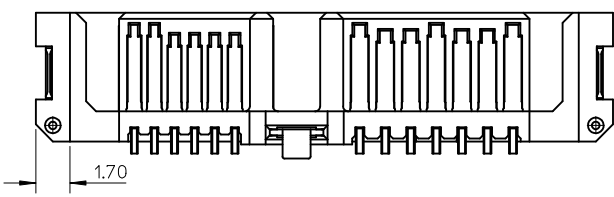


SECTION Y-Y



| 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.

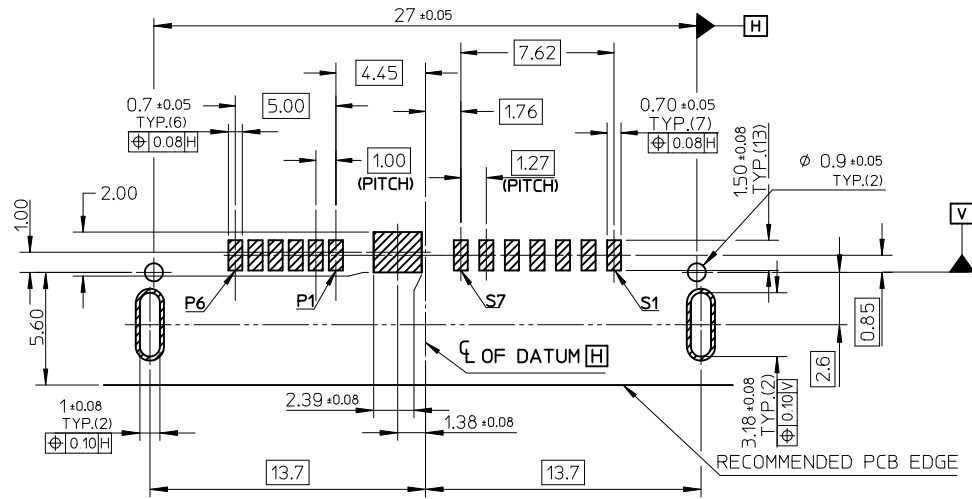
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|---------|-------------|------------|--------|
| J | DRWG:GLL1 | 2010/02/25 | GLL1 |
| | CHKD: | 2010/02/26 | |
| | APPR:RZHANG | 2010/04/08 | RZHANG |

| QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | |
|-----------------|--|------|
| | mm | INCH |
| $F_{\Delta}=0$ | 4 PLACES ± --- ± --- | |
| $F_{\Delta}=0$ | 3 PLACES ± --- ± --- | |
| $F_{\Delta}=0$ | 2 PLACES ± --- ± --- | |
| $F_{\Delta}=0$ | 1 PLACE ± --- ± --- | |
| | ANGULAR ± 3 ° | |
| | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | |

| DIMENSION STYLE | | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION |
|-----------------|--------------------|---|--------------|------------------------|
| MM ONLY | | 4:1 | METRIC | |
| DRAWN BY | DATE | TITLE | | |
| GLL1 | 2010/02/25 | SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER | | |
| CHECKED BY | DATE | SOLDERING STANDARD TYPE | | |
| APPROVED BY | DATE | MOLEX INCORPORATED | | |
| RZHANG | 2010/02/26 | DOCUMENT NO. | | |
| MATERIAL NO. | SEE TABLE OR NOTES | SD-47300-100 | | |
| SIZE | A3 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | |

| TITLE | | SHEET NO. | |
|--|--|-----------|--|
| SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER | | 4 OF 7 | |
| SOLDERING STANDARD TYPE | | | |
| MOLEX INCORPORATED | | | |
| DOCUMENT NO. | | | |
| SD-47300-100 | | | |

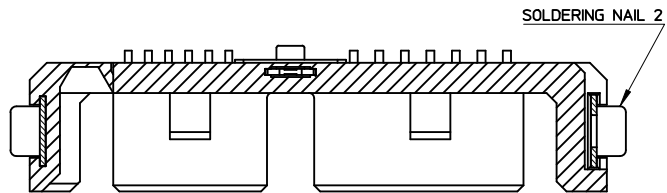
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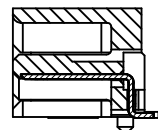
RECOMMEND PCB LAYOUT (THICKNESS=0.8)

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

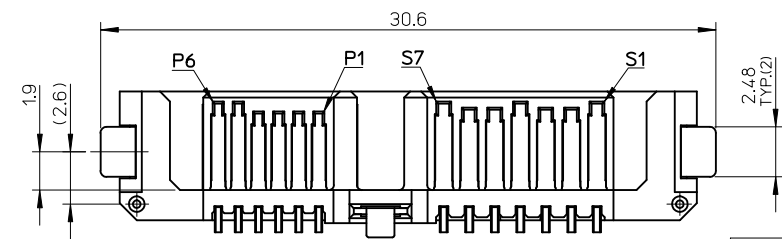
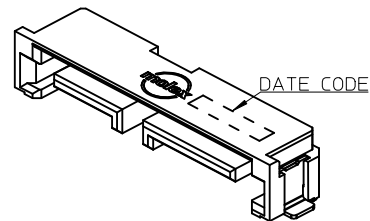
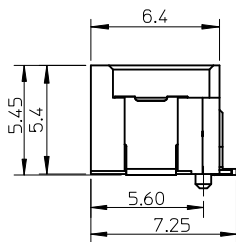
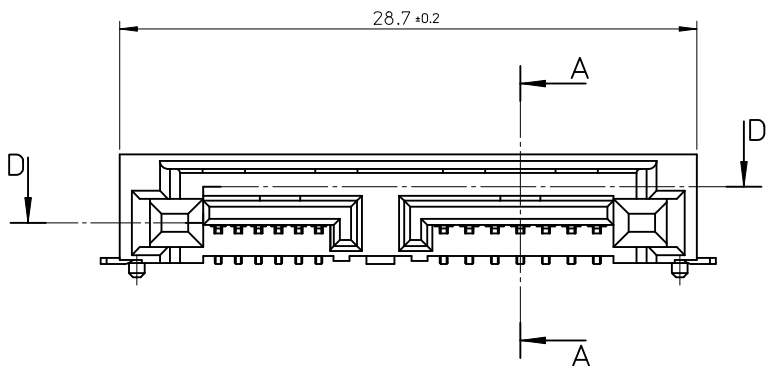
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|--|--------------------------------------|---------------------------------------|---------|---|---------------------|--|------------------------|-----------|
| REVISED EC NO: SH2010-0310 DRWNG: GLL I CHKD: RZHANG APPR: RZHANG REV | QUALITY SYMBOLS F=0 F=0 F=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | SCALE 4:1 | DESIGN UNITS METRIC | 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 | MATERIAL NO. | DOCUMENT NO. | SHEET NO. |
| | | 1 PLACE ± --- ± --- | | SEE REMARK | | SD-47300-100 | 5 OF 7 | |
| | | ANGULAR ± 3 ° | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | | | | | | |



SECTION D-D



SECTION A-A

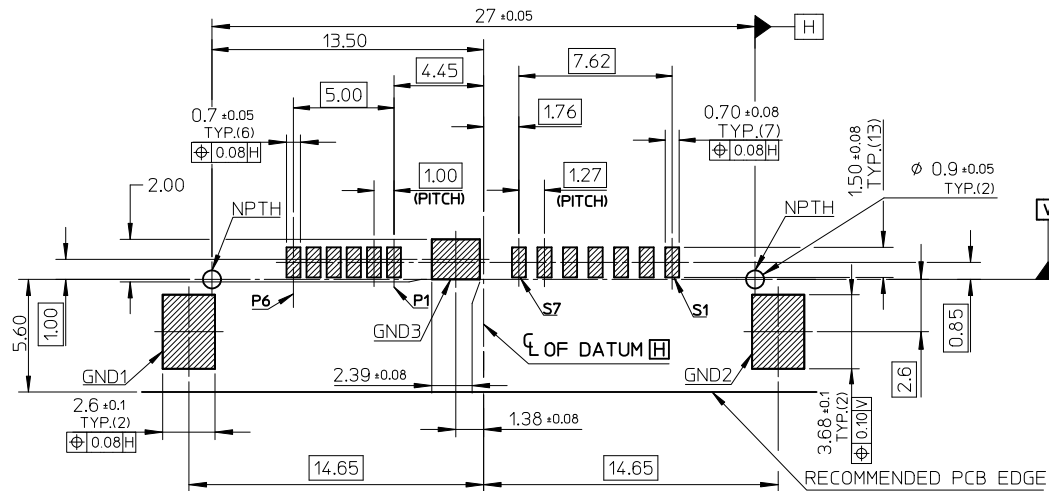


| P/N | CONTACT PLATING |
|------------|-----------------------|
| 47300-1042 | GOLD 0.76 MICRONS MIN |
| 47300-1041 | GOLD 0.38 MICRONS MIN |
| 47300-1040 | GOLD FLASH |

NOTES :

- 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 | 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 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 FITTING TYPE | | | |
| | | | | | | | CHECKED BY | DATE | APPROVED BY RZHANG | | |
| | | | | | | | | DATE 2010/02/26 | DATE 2010/02/26 | | |
| | | | | | | | MOLEX MOLEX INCORPORATED DOCUMENT NO. | | SHEET NO. 7 OF 7 | | |
| | | | | | | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS SEE REMARK | | | MATERIAL NO. SD-47300-100 | |
| | | | | | | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | |