

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0473001042](#)
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, 0.76µm (30µ") Gold (Au) Plating, 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

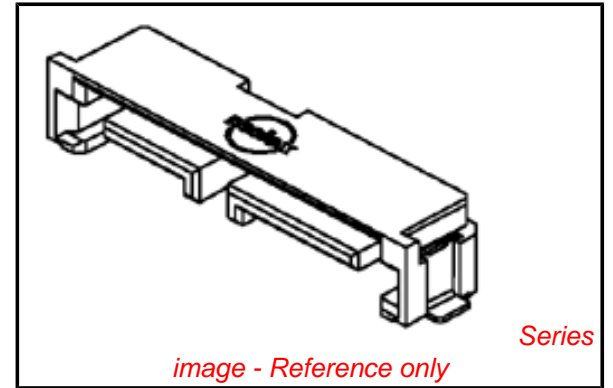
General

Product Family PCB Headers
 Series [47300](#)
 Application Board-to-Board
 Comments Fitting 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



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
 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 |

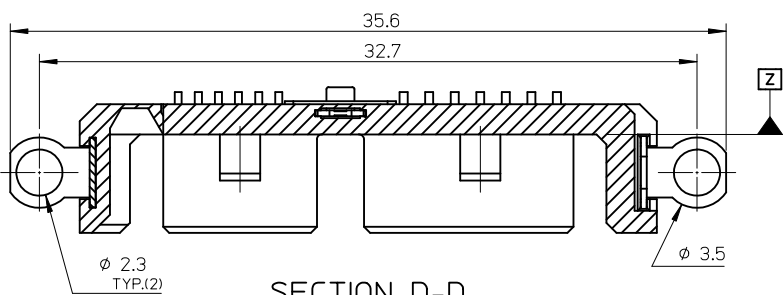
Material Info

Reference - Drawing Numbers

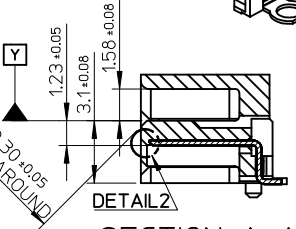
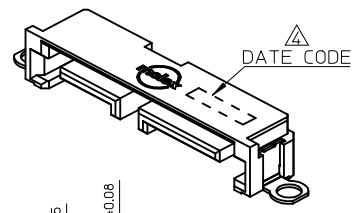
| | |
|-------------------------|--------------|
| Packaging Specification | PK-47300-001 |
| Product Specification | PS-47300-001 |
| Sales Drawing | SD-47300-100 |

This document was generated on 05/26/2010

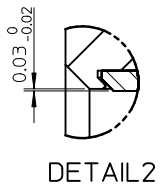
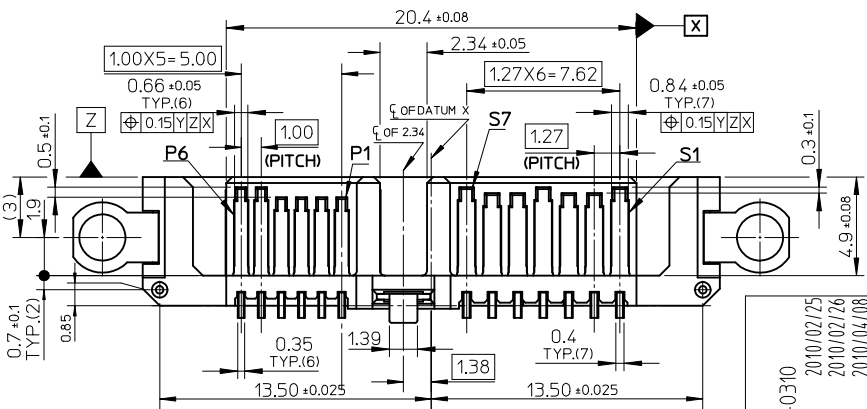
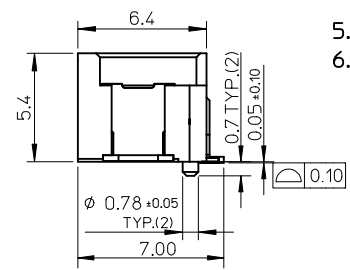
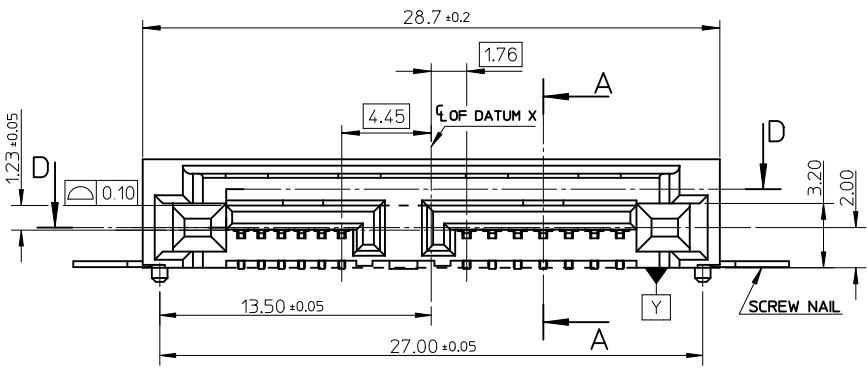
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SECTION D-D



SECTION A-A



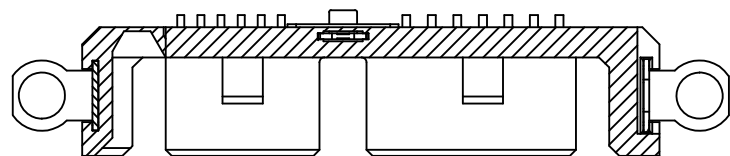
DETAIL2

NOTES :

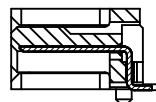
- 1.MATERIAL :
HOUSING : HIGH TEMPERATURE THERMOPLASTIC, 30% G.F., UL94V-0, BLACK
TERMINAL : COPPER ALLOY, THICKNESS=0.25 MM
SCREW NAIL : STAINLESS, THICKNESS=0.30 MM
SOLDERING NAIL : COPPER ALLOY, THICKNESS=0.30 MM
- 2.PLATING :
TERMINAL :
CONTACT AREA : GOLD PLATING 0.1 MICRONS MIN.
SOLDERING AREA : 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 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: SH2010-0310 DRWING: GLLI 2010/02/25 CHK'D: 2010/02/26 APPR: RZHANG 2010/04/08 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION |
| | $\nabla_{\text{A}}=0$ $\nabla_{\text{C}}=0$ $\nabla_{\text{P}}=0$ | mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 ° | MM ONLY | 4:1 | METRIC | |
| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | DRAWN BY: GLLI DATE: 2010/02/25 CHECKED BY: DATE: APPROVED BY: RZHANG DATE: 2010/02/26 MATERIAL NO. DOCUMENT NO. | | | TITLE: SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER SCREW STANDARD TYPE 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. 1 OF 7 |

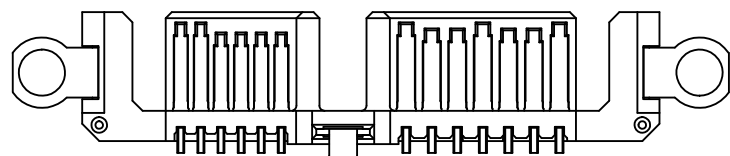
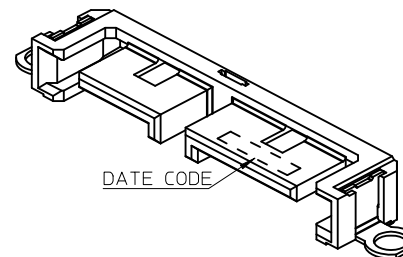
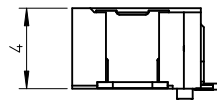
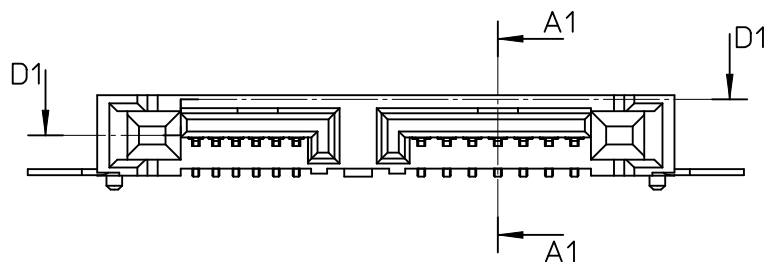


SECTION D1-D1



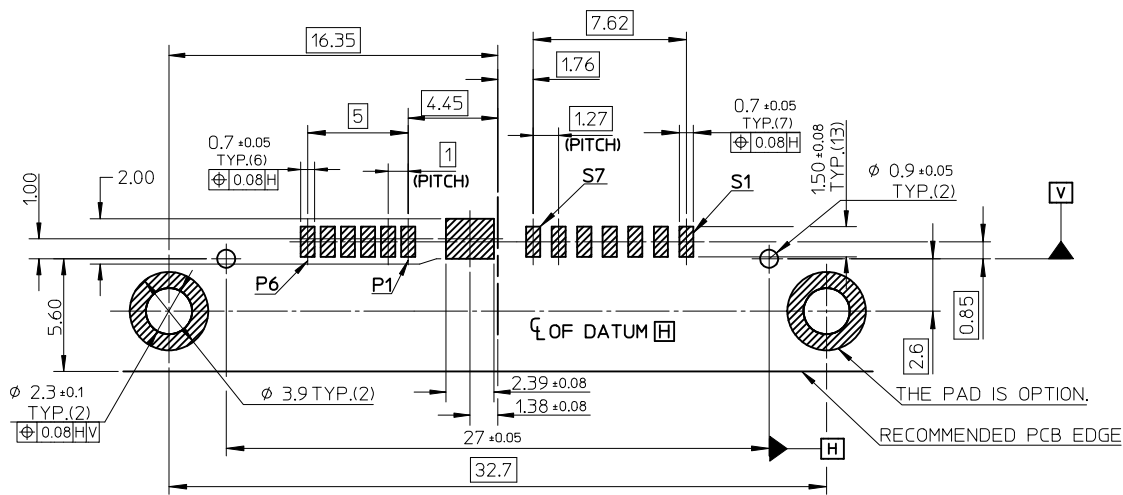
SECTION A1-A1

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 | DESCRIPTION 2010/02/25 2010/02/26 2010/04/08 | 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 MOLEX INCORPORATED |
| | | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | SEE TABLE | APPROVED BY: RZHANG DATE: 2010/02/26 MATERIAL NO. DOCUMENT NO. | MOLEX INCORPORATED SD-47300-100 | SHEET NO. 2 OF 7 | |
| | | | | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | |



RECOMMENDED PCB LAYOUT(CONNECTOR SIDE)

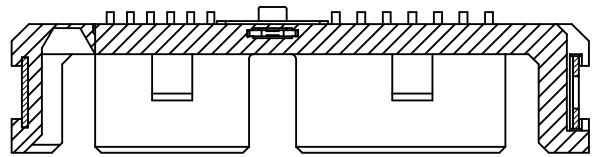
THICKNESS=0.8MM

REMARK:

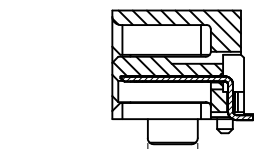
THE PCB LAYOUT IS ONLY FOR 47300-100X, 47300-101X.

| | | | | | | | | | | |
|---|--|---|---------------------------------------|--|-----------------------------------|------------------|-----------------------|---|---------------------------|--|
| REVISED EC NO: SH2010-0310 DRW: GLLI CHKD: APPR: RZHANG REV J | 2010/02/25 2010/02/26 2010/04/08 | QUALITY SYMBOLS $\nabla_F = 0$ $\nabla_F = 0$ $\nabla_F = 0$ | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE 4:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | |
| | | | | | | DRAWN BY GLLI | DATE 2010/02/25 | TITLE SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER SCREW TYPE | | |
| | | | | | | CHECKED BY | DATE | | | |
| | | | | | | | APPROVED BY RZHANG | DATE 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 | | |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | |

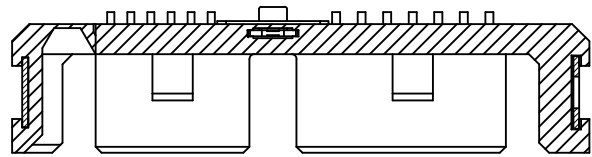
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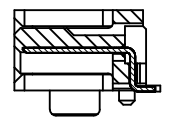
SECTION D-D



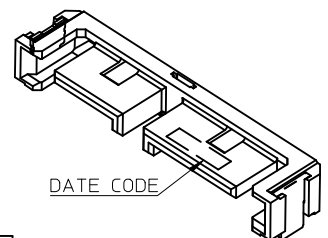
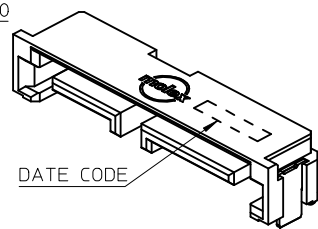
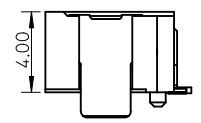
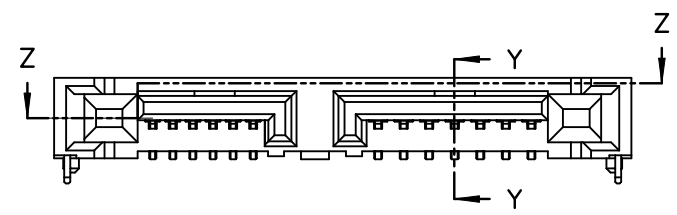
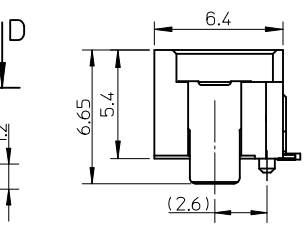
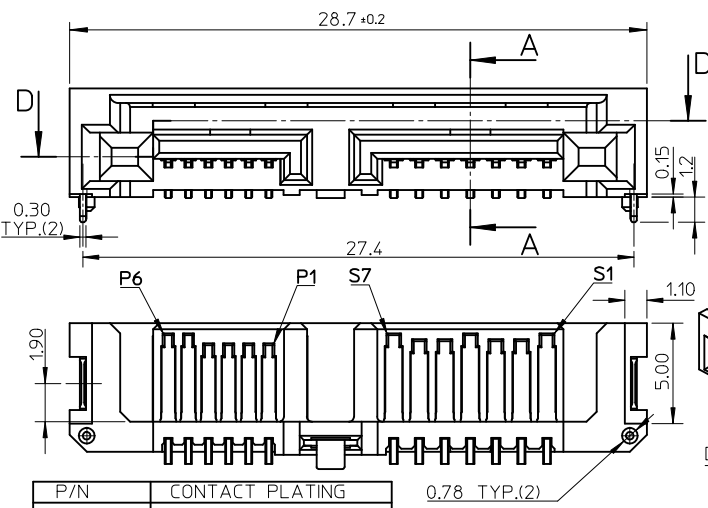
SECTION A-A



SECTION Z-Z

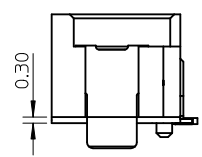
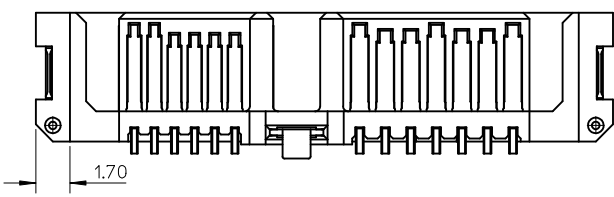


SECTION Y-Y



| 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.

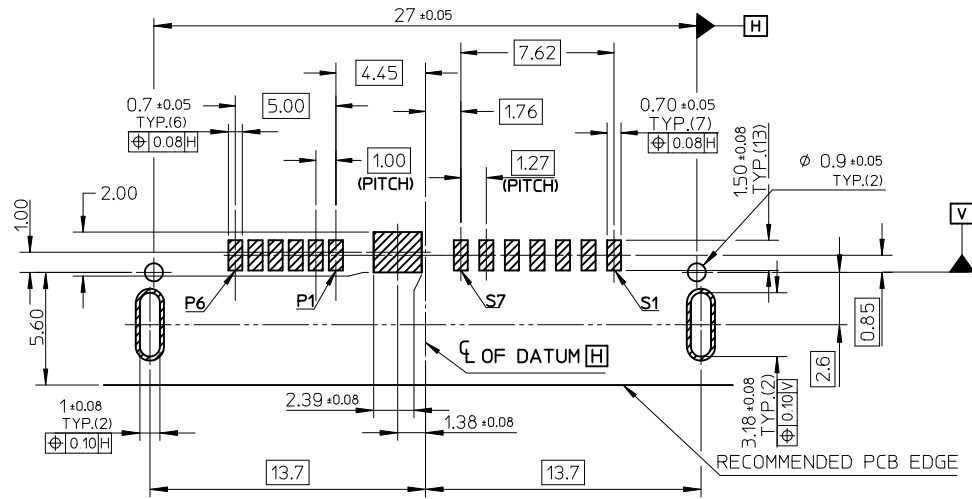
| REVISED | DESCRIPTION | QUALITY SYMBOLS |
|---------|-------------|-----------------|
| J | REV | ▽F=0 |
| J | REV | ▽F=0 |
| J | REV | ▽F=0 |

| 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 | | |

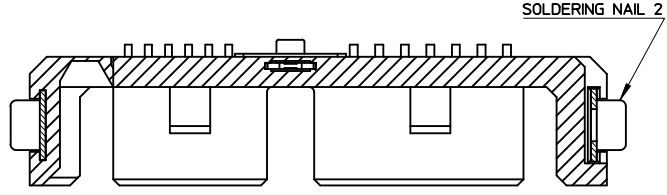
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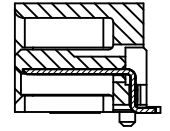
RECOMMEND PCB LAYOUT (THICKNESS=0.8)

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

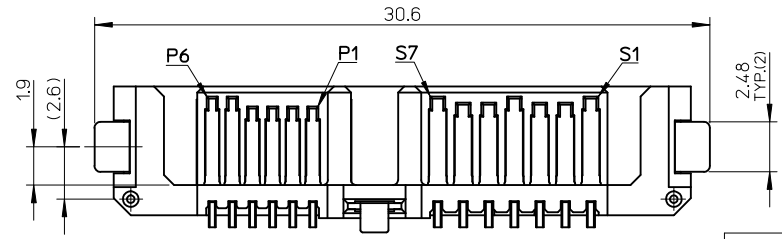
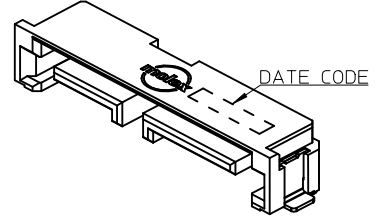
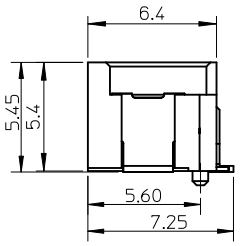
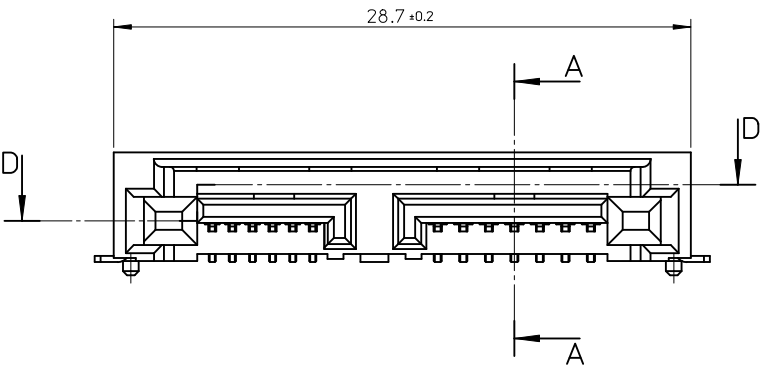
| | | | | | | | | | |
|--|---|---------------------------------------|----------------------|--|---------------------|-------------------------------|------------------------|---|--|
| REVISED EC NO: SH2010-0310 DRWNG: GLL I CHKD: RZHANG APPR: RZHANG REV | QUALITY SYMBOLS $\nabla_F = 0$ $\nabla_F = 0$ $\nabla_F = 0$ | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | SCALE 4:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | | |
| | | 4 PLACES ± --- ± --- | 3 PLACES ± --- ± --- | 2 PLACES ± --- ± --- | 1 PLACE ± --- ± --- | DRAWN BY GLL I | DATE 2010/02/25 | TITLE SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER SOLDERING TYPE | |
| | | 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. | |



SECTION D-D



SECTION A-A

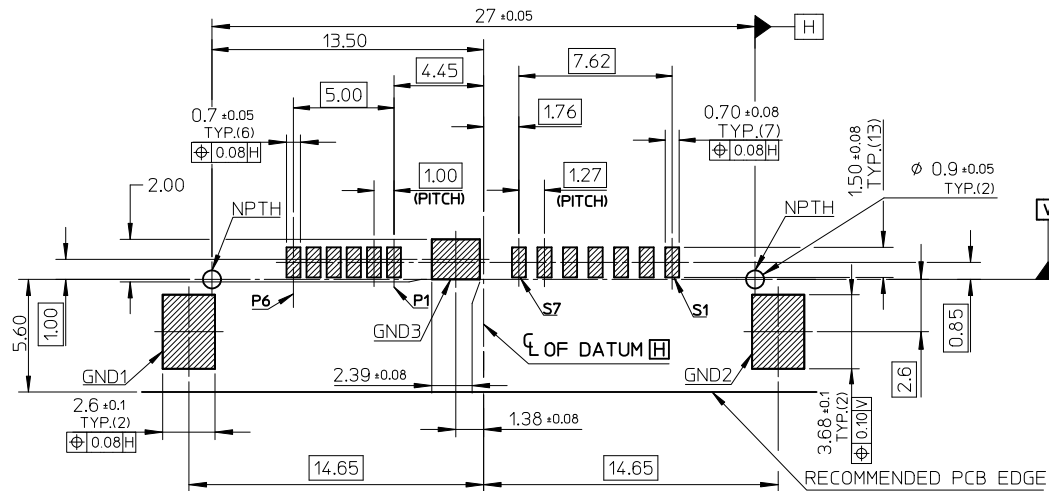


| P/N | CONTACT PLATING |
|------------|-----------------------|
| 47300-1042 | GOLD 0.76 MICRONS MIN |
| 47300-1041 | GOLD 0.38 MICRONS MIN |
| 47300-1040 | GOLD FLASH |

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



RECOMMEND PCB LAYOUT

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

| REVISED IEC NO: SH2010-0310 DRWNG:GLL1 CHYKD: 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 | | | | | | | | | | | | | | | |
|---|---|---|---|-------|-----------------|------------|---|------------------------|-------|----------|-------------|-------|----------|--------|------------|---------|--------------|-------|---------|------------|--------|--|--|
| | | $\nabla_F = 0$ $\nabla_E = 0$ $\nabla_A = 0$ | <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <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> </table> | | mm | INCH | 4 PLACES | ± --- | ± --- | 3 PLACES | ± --- | ± --- | 2 PLACES | ± --- | ± --- | 1 PLACE | ± --- | ± --- | MM ONLY | 4:1 | METRIC | | |
| | | | mm | INCH | | | | | | | | | | | | | | | | | | | |
| | | 4 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | | |
| 3 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | <table border="1"> <tr> <td>DRAWN BY</td> <td>DATE</td> <td>TITLE</td> </tr> <tr> <td>GLL1</td> <td>2010/02/25</td> <td>SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER FITTING TYPE</td> </tr> <tr> <td>CHECKED BY</td> <td>DATE</td> <td></td> </tr> <tr> <td>APPROVED BY</td> <td>DATE</td> <td></td> </tr> <tr> <td>RZHANG</td> <td>2010/02/26</td> <td></td> </tr> <tr> <td>MATERIAL NO.</td> <td></td> <td></td> </tr> <tr> <td>SEE REMARK</td> <td></td> <td></td> </tr> </table> | DRAWN BY | DATE | TITLE | GLL1 | 2010/02/25 | SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER FITTING TYPE | CHECKED BY | DATE | | APPROVED BY | DATE | | RZHANG | 2010/02/26 | | MATERIAL NO. | | | SEE REMARK | | | MOLEX INCORPORATED DOCUMENT NO. SD-47300-100 SHEET NO. 7 OF 7 |
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| RZHANG | 2010/02/26 | | | | | | | | | | | | | | | | | | | | | | |
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