

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

**Part Number:** [0473001021](#)  
**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, 0.38µm (15µ") Gold (Au) Plating, with Peg, 5.4mm (.213") Mounted Height, Lead-free

**Documents:**

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

**Agency Certification**

CSA LR 19980

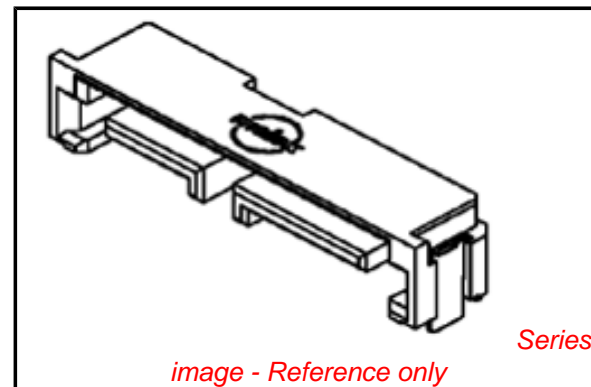
**General**

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) 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](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 |

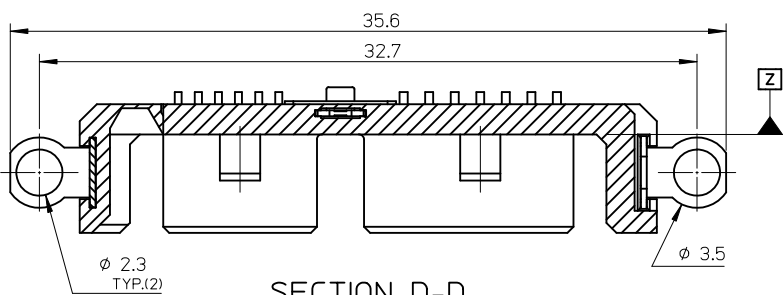
**Material Info**

**Reference - Drawing Numbers**

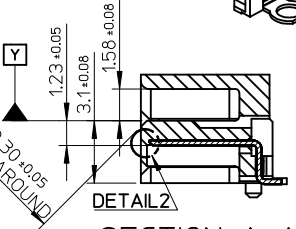
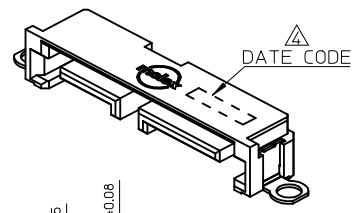
|                         |                            |
|-------------------------|----------------------------|
| Packaging Specification | PK-47300-001, PK-47300-003 |
| Product Specification   | PS-47300-001               |
| Sales Drawing           | SD-47300-100               |

This document was generated on 05/26/2010

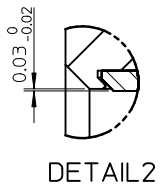
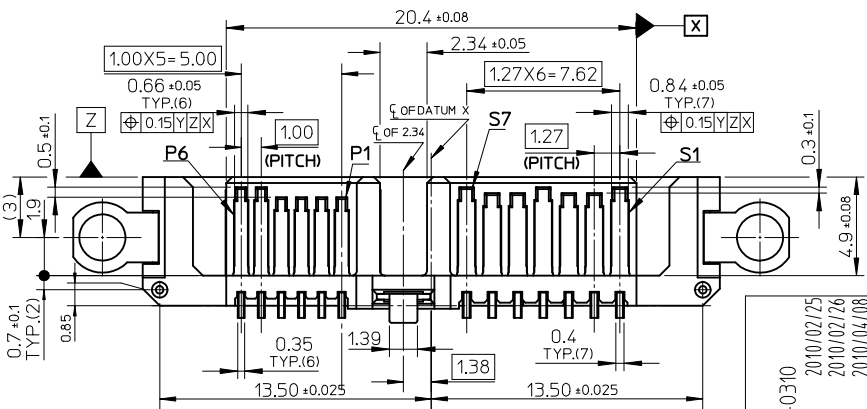
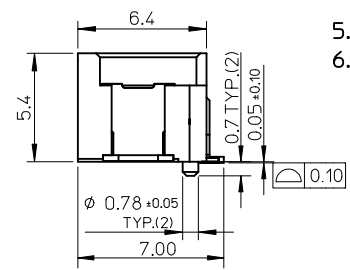
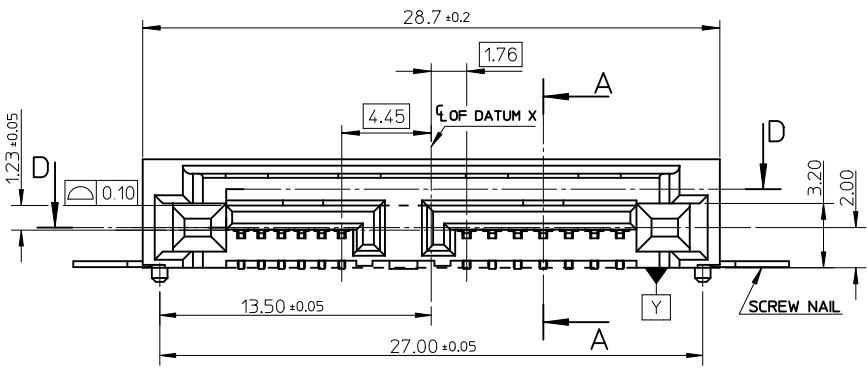
**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**



SECTION D-D



SECTION A-A



DETAIL2

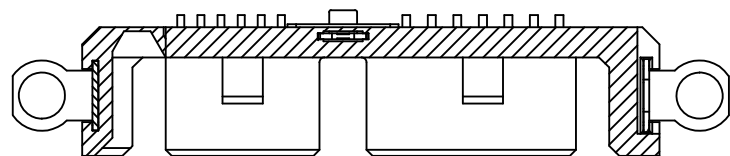
NOTES :

- 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.

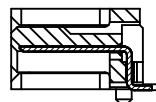
| P/N        | CONTACT PLATING       | NAIL                               |
|------------|-----------------------|------------------------------------|
| 47300-1000 | GOLD FLASH            |                                    |
| 47300-1002 | GOLD 0.38 MICRONS MIN | STAINLESS STEEL, NO PLATING        |
| 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<br>EC NO: SH2010-0310<br>DRWING: GLLI<br>CHKD: CHKD<br>APPR: RZHANG<br>2010/02/25<br>2010/02/26<br>2010/04/08 | QUALITY SYMBOLS<br>$\nabla_{\sigma} = 0$<br>$\nabla_{\sigma} = 0$<br>$\nabla_{\sigma} = 0$ | GENERAL TOLERANCES (UNLESS SPECIFIED)   |  | DIMENSION STYLE<br>MM ONLY |  | SCALE<br>4:1                 |  | DESIGN UNITS<br>METRIC  |  | THIRD ANGLE PROJECTION |  |  |
|   |  | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± --- ± ---<br>1 PLACE ± --- ± --- |  | DRAWN BY<br>GLLI           |  | DATE<br>2010/02/25           |  | TITLE<br>SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER SCREW STANDARD TYPE |  |                        |  |  |
|   |  | ANGULAR ± 3 °   |  | APPROVED BY<br>RZHANG      |  | DATE<br>2010/02/26           |  | MOLEX INCORPORATED  |  |                        |  |  |
|   |  | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |  | MATERIAL NO.<br>SEE TABLE  |  | DOCUMENT NO.<br>SD-47300-100 |  | SHEET NO.<br>1 OF 7   |  |                        |  |  |

10 9 8 7 6 5 4 3 2 1

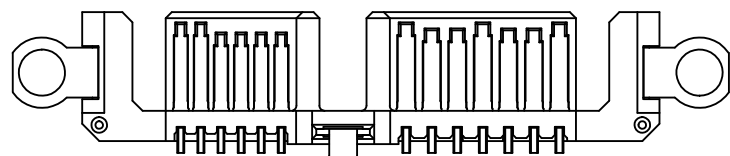
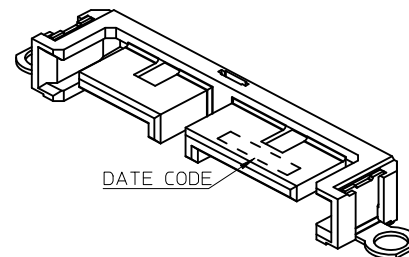
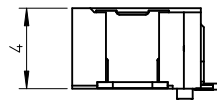
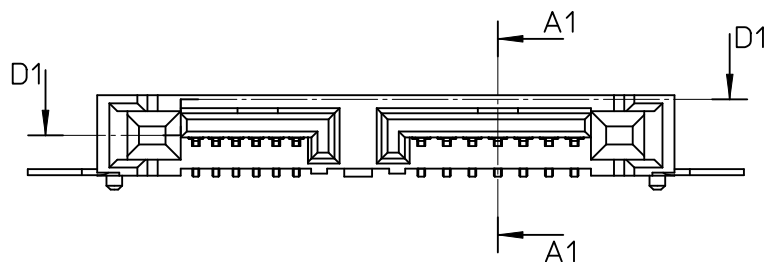


SECTION D1-D1



SECTION A1-A1

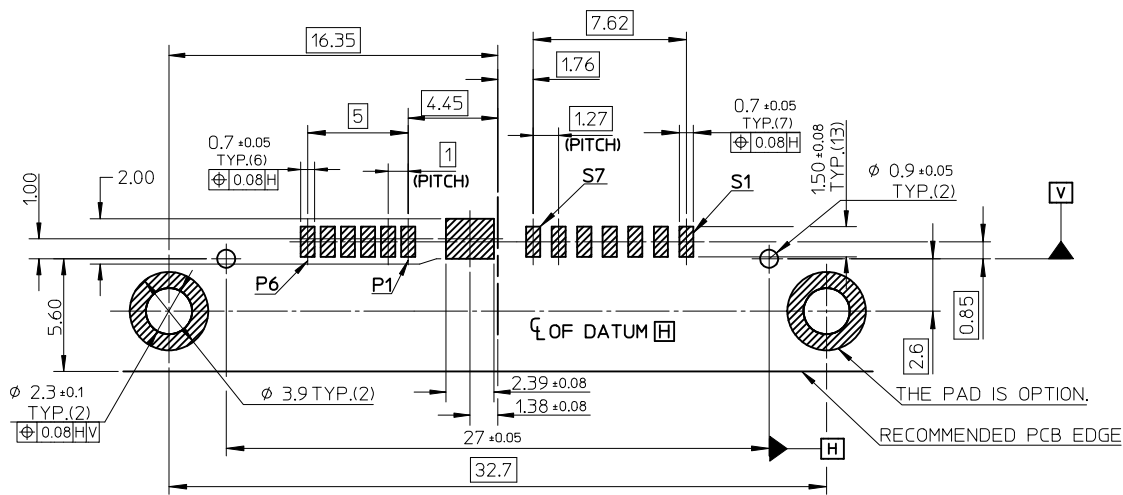
NOTES : OTHER DIMENSIONS AND NOTES REFER TO SHEET-1.



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

|  |  |   |  |  |  |   |   |   |  |
|--|--|---|--|--|--|---|---|---|--|
| <b>REVISED</b><br>EC NO: SH2010-0310<br>DRWNG: GLL1<br>CHKD:<br>APPR: RZHANG<br>REV: J | 2010/02/25<br>2010/02/26<br>2010/04/08 | QUALITY SYMBOLS<br>$\nabla_F=0$<br>$\nabla_E=0$<br>$\nabla_D=0$ | GENERAL TOLERANCES (UNLESS SPECIFIED)  |  | DIMENSION STYLE  | SCALE   | DESIGN UNITS  | THIRD ANGLE PROJECTION  |  |
|  |  |   |  |  | MM ONLY  | 4:1   | METRIC  |   |  |
|  |  |   |  |  |  |   |   |   |  |
|  |  |   |  |  |  |   |   |   |  |
|  |  |   | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± --- ± ---<br>1 PLACE ± --- ± ---<br>ANGULAR ± 3 ° |  | DRAWN BY: GLL1<br>CHECKED BY:<br>APPROVED BY: RZHANG<br>MATERIAL NO. | DATE: 2010/02/25<br>DATE:<br>DATE: 2010/02/26 | TITLE: SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER SCREW LOW TYPE<br>MOLEX INCORPORATED<br>DOCUMENT NO. SD-47300-100 |   |  |
|  |  |   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS   |  | SEE TABLE<br>SIZE: A3  | SHEET NO. 2 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



**RECOMMENDED PCB LAYOUT(CONNECTOR SIDE)**

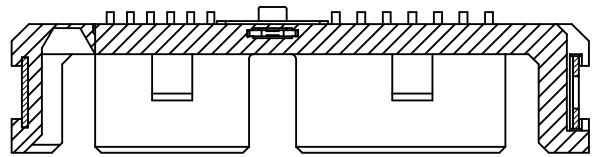
**THICKNESS=0.8MM**

REMARK:

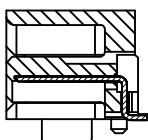
THE PCB LAYOUT IS ONLY FOR 47300-100X, 47300-101X.

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

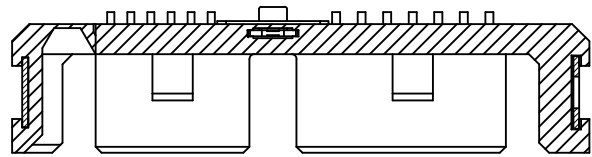
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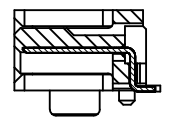
SECTION D-D



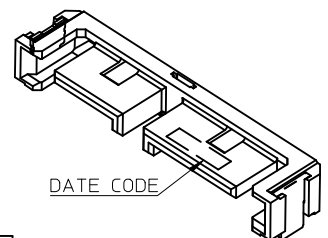
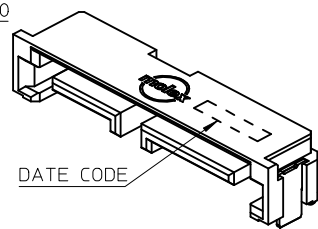
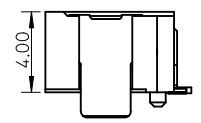
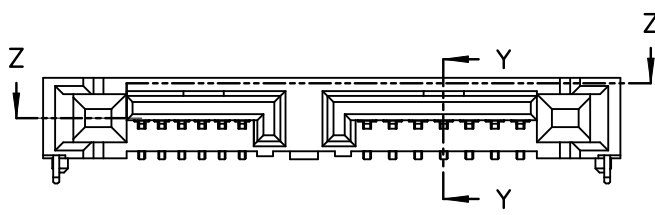
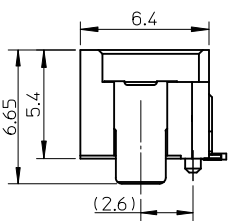
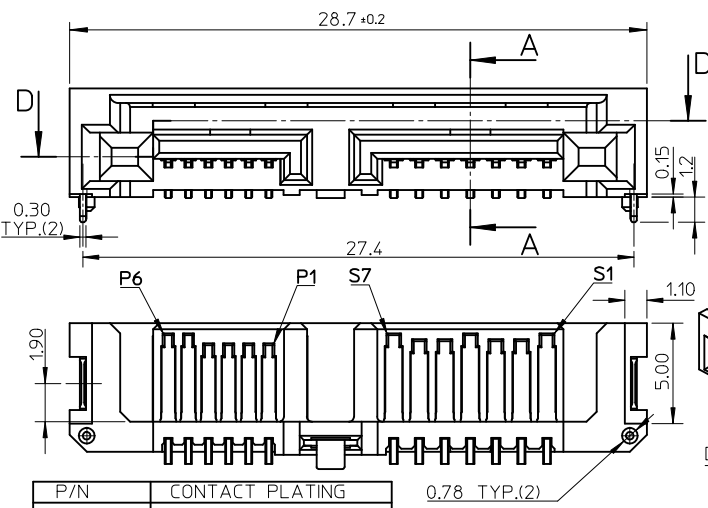
SECTION A-A



SECTION Z-Z

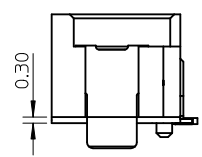
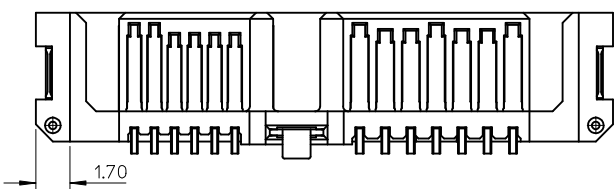


SECTION Y-Y



| 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         | ▽E=0            |
| J       | REV         | ▽D=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 |
|-------|--------------|
| 4:1   | METRIC       |

THIRD ANGLE PROJECTION

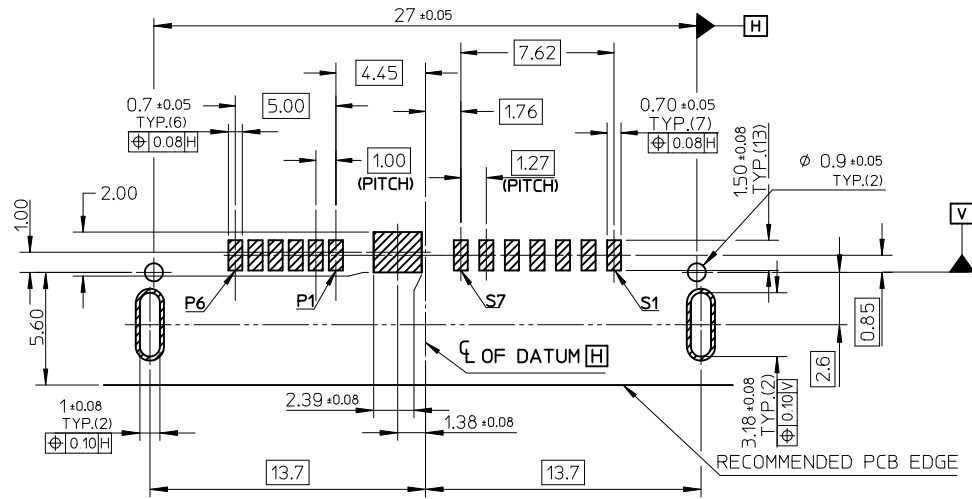
TITLE  
SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER  
SOLDERING STANDARD TYPE

**molex** MOLEX INCORPORATED

DOCUMENT NO. SD-47300-100 SHEET NO. 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

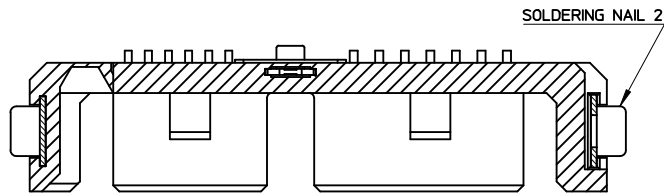


RECOMMEND PCB LAYOUT (THICKNESS=0.8)

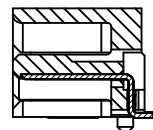
REMARK:

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

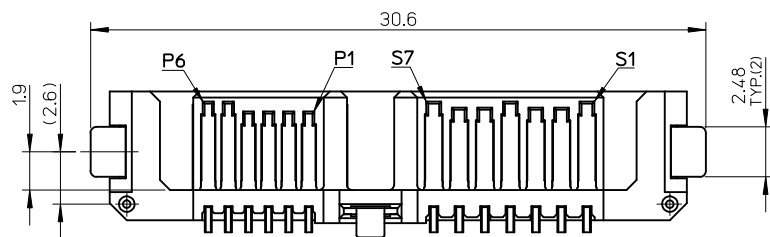
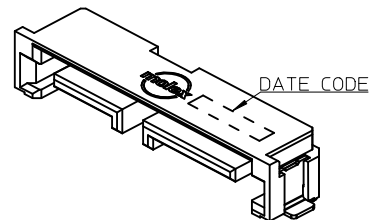
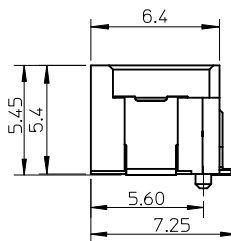
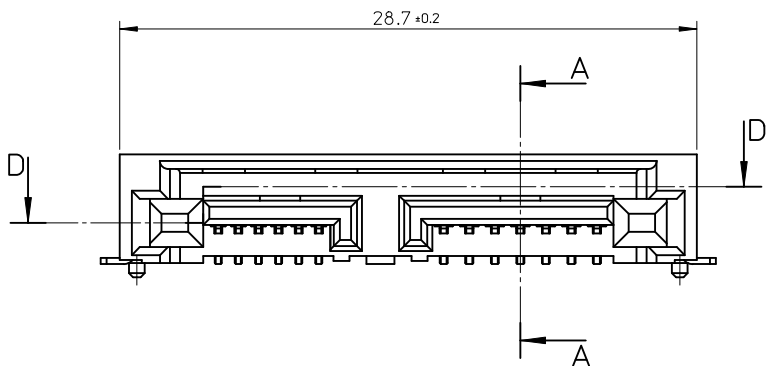
|   |   |   |  |                                   |   |   |                              |                     |
|---|---|---|--|-----------------------------------|---|---|------------------------------|---------------------|
| REVISED<br>EC NO: SH2010-0310<br>DRWNG: GLL I<br>CHKD: 2010/02/26<br>APPR: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



SECTION D-D



SECTION A-A



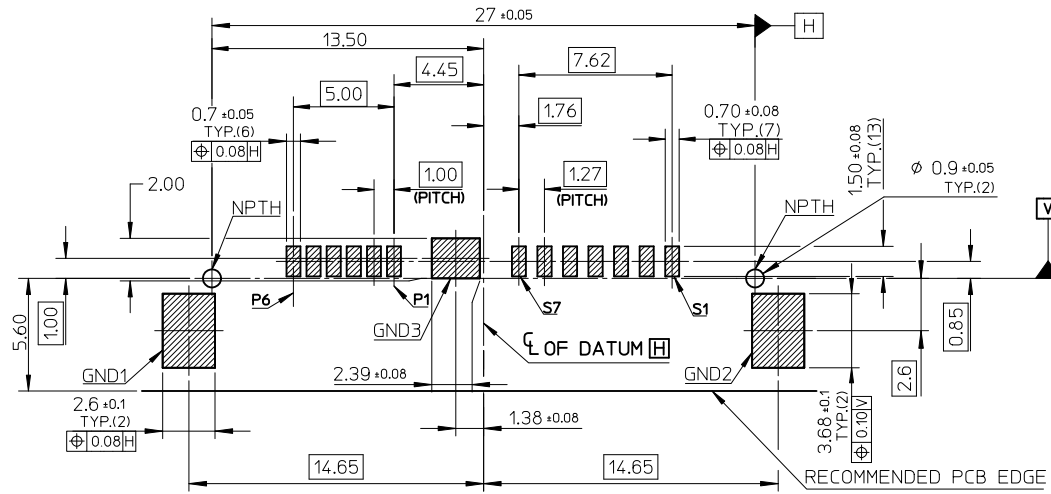
| P/N        | CONTACT PLATING       |
|------------|-----------------------|
| 47300-1042 | GOLD 0.76 MICRONS MIN |
| 47300-1041 | GOLD 0.38 MICRONS MIN |
| 47300-1040 | GOLD FLASH            |

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<br>EC NO: SH2010-0310<br>DRWN:GLL 2010/02/25<br>CHKD: 2010/07/26<br>APPR:RZHANG 2010/04/08 | DESCRIPTION<br>J  | QUALITY SYMBOLS                                    | GENERAL TOLERANCES (UNLESS SPECIFIED)   | DIMENSION STYLE | SCALE                                   | DESIGN UNITS       | THIRD ANGLE PROJECTION |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
|--|---|--|---|-----------------|---|--------------------|------------------------|-------|-------|----------|-------|-------|----------|-------|-------|---------|-------|-------|---------|-----|--------|--|
|  |   | $\nabla_A = 0$<br>$\nabla_C = 0$<br>$\nabla_P = 0$ | <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 | ± --- | ± --- | MM ONLY | 4:1 | METRIC |  |
|  |   |  | mm  | INCH            |   |                    |                        |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
|  |   | 4 PLACES   | ± ---   | ± ---           |   |                    |                        |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
| 3 PLACES   | ± ---   | ± ---  |   |                 |   |                    |                        |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
| 2 PLACES   | ± ---   | ± ---  |   |                 |   |                    |                        |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
| 1 PLACE  | ± ---   | ± ---  |   |                 |   |                    |                        |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
|  | DRAWN BY: GLL<br>CHECKED BY:<br>APPROVED BY: RZHANG<br>DATE: 2010/02/25 | TITLE  | SLIMLINE SATA PLUG FOR OPTIC DISK DRIVER FITTING STANDARD TYPE  |                 |   |                    |                        |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
|  |   |  | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  | SEE TABLE       | APPROVED BY: RZHANG<br>DATE: 2010/02/26 | MOLEX INCORPORATED | SHEET NO. 6 OF 7       |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |





**RECOMMEND PCB LAYOUT**

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

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