

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: **0483212000**
Status: **Active**
Overview: slimline serial ata odd connectors
Description: 1.00mm (.039"), 1.27mm (.050") Pitch Slimline Serial ATA Receptacle, Right Angle, Standard DIP with Nut, Gold (Au) Flash Plating, Mounted Height: 4.25mm (.167"), without pin alignment, Lead free

Documents:

[3D Model](#) [Product Specification PS-48321-001 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

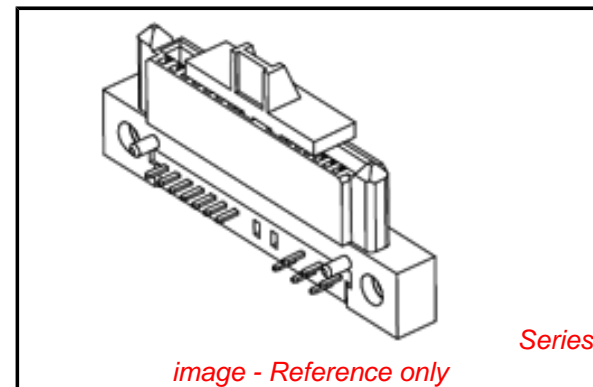
CSA LR19980
 UL E29179

General

Product Family PCB Receptacles
 Series [48321](#)
 Application Board-to-Board
 Comments Standard DIP, with nut; without pin alignment
 Overview [slimline serial ata odd connectors](#)
 Product Name Serial ATA, Slimline Serial ATA

Physical

Circuits (Loaded) 13
 Circuits (maximum) 13
 Color - Resin Black
 Durability (mating cycles max) 500
 Flammability 94V-0
 Glow-Wire Compliant No
 Guide to Mating Part Yes
 Keying to Mating Part Yes
 Lock to Mating Part No
 Material - Metal Copper Alloy
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin High Temperature Thermoplastic
 Number of Rows 1
 Orientation Right Angle
 PC Tail Length (in) 0.063 In
 PC Tail Length (mm) 1.60 mm
 PCB Locator Yes
 PCB Retention Yes
 PCB Thickness Recommended (in) 0.047 In
 PCB Thickness Recommended (mm) 1.20 mm
 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) 100
 Plating min: Termination (µm) 2.54
 Polarized to Mating Part Yes
 Polarized to PCB Yes



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

[48321Series](#)

Mates With

[473001xxx Slimline Serial ATA Plugs](#)

Stackable	No
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-40°C to +85°C
Termination Interface: Style	Through Hole

Electrical

Current - Maximum per Contact	1A
Grounding to PCB	Yes
Voltage - Maximum	15V (RMS)

Material Info

Reference - Drawing Numbers

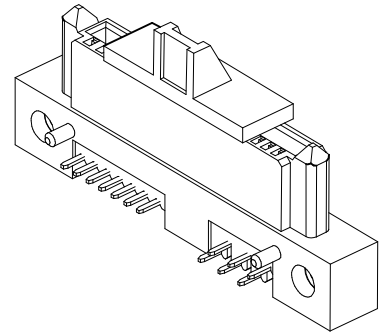
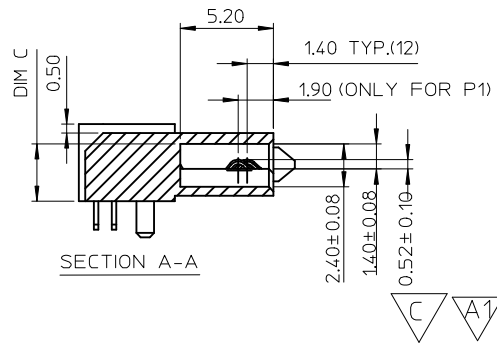
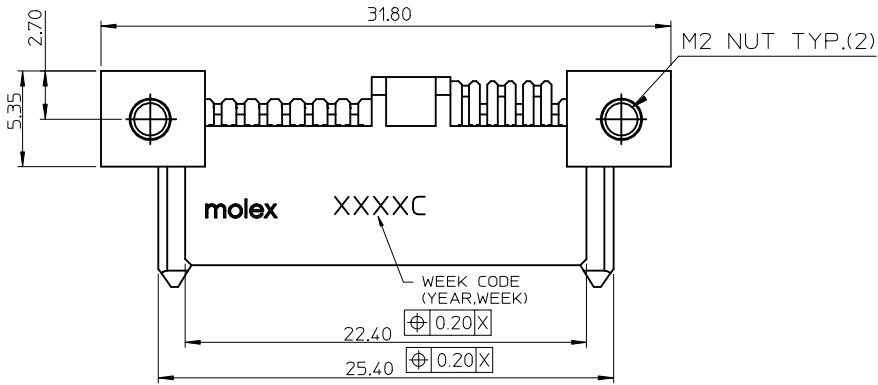
Packaging Specification	PK-48321-001
Product Specification	PS-48321-001
Sales Drawing	E-48321-001, SD-48321-001
Test Summary	TS-48321-001

This document was generated on 05/31/2010

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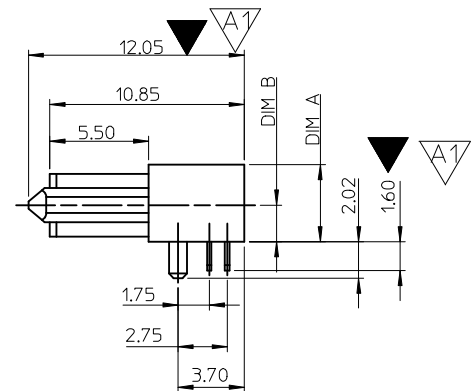
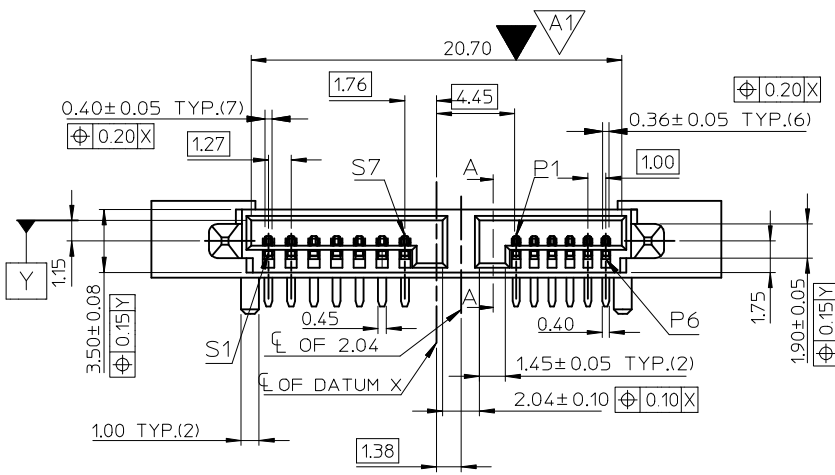
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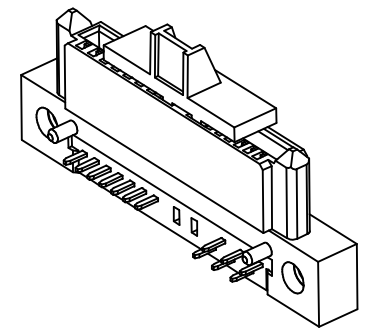


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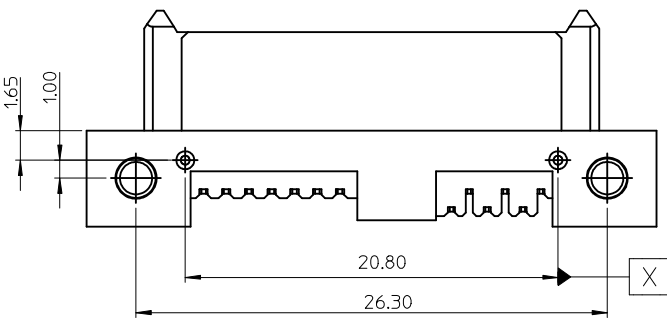


WITHOUT ALIGNMENT
(48321-2XXX)



WITH ALIGNMENT
(48321-1XXX)

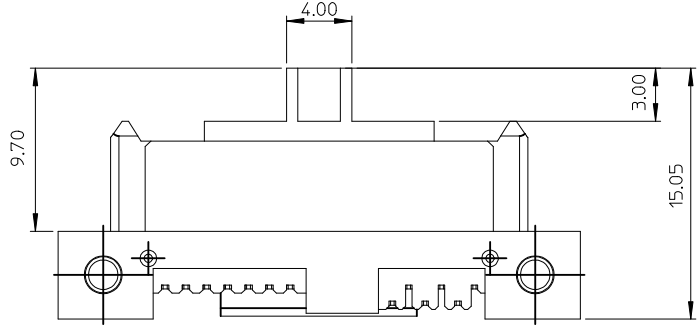
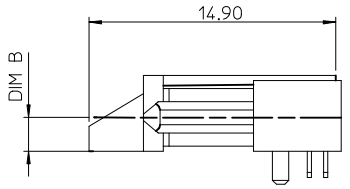
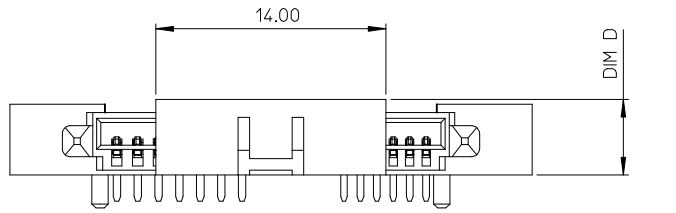
B



A

SUPPLIER		ACRON		THIRD ANGLE PROJECTION																
REVISION EC NO: SH2009-0089 DRWN:LLIU10 CHKD:YLZHU APPR:HWANG REV B	DESCRIPTION 2008/09/29	QUALITY SYMBOLS ▽=3 ∇=1		DIMENSION STYLE MM ONLY																
		GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE 1:1																
		<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>± 0.15</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.15</td> <td>± ---</td> </tr> </tbody> </table>			mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.15	± ---	1 PLACE	± 0.15	± ---	DESIGN UNITS METRIC	
			mm	INCH																
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3 PLACES	± ---	± ---																		
2 PLACES	± 0.15	± ---																		
1 PLACE	± 0.15	± ---																		
ANGULAR ± 2 °		DRAWN BY LINDA		DATE 2007/12/13																
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		CHECKED BY ALLEN LIN		DATE 2007/12/17																
		APPROVED BY EICK LAN		DATE 2007/12/17																
		MATERIAL NO. SEE TABLE		TITLE SLIMLINE SATA RECEPTACLE STANDARD DIP WITH NUT																
		SIZE A3		DOCUMENT NO. E-48321-001																
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		SHEET NO. 1 OF 2																

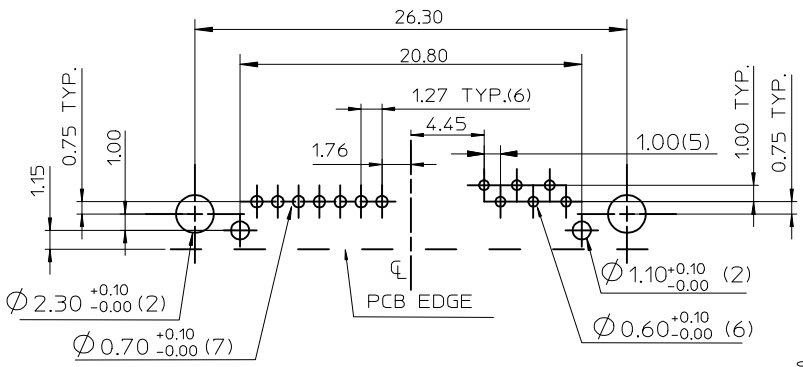
9 8 7 6 5 4 3 2 1



P/N	PLATING OPTIONS	DIM A	DIM B	DIM C	DIM D	DIM E	PIN ALIGNMENT	WITHSTANDING MFG TEST	ACRON P/N
48321-1000	GOLD FLASH	3.50	1.25	2.40	3.80	0.35	YES	NO	SAT01-A3-R0000
48321-1001	15 MICROINCH							NO	SAT01-A3-R0020
48321-1002	30 MICROINCH							YES	SAT01-A3-R0030
48321-2000	GOLD FLASH	4.25	2.00	3.15	4.55	0.40	NO	NO	SAT01-A3-R0101
48321-2001	15 MICROINCH							NO	SAT01-A3-R0121
48321-2002	30 MICROINCH							YES	SAT01-A3-R0131

NOTES:

- MATERIAL:
 - HOUSING & CAP: LIQUID CRYSTAL POLYMER, 6130(L), 30% GLASS FILLED, UL94V-0, COLOR: BLACK.
 - TERMINAL: 0.25mm THICKNESS, PHOSPHOR BRONZE C5210EH.
 - NUT: ZINC ALLOY.
 - ALIGNER: LIQUID CRYSTAL POLYMER, 6130(L), 30% GLASS FILLED, UL94V-0, COLOR: BLACK.
- PLATING:
 - TERMINAL:
 - CONTACT AREA: SEE TABLE.
 - SOLDER TAIL: MATTE TIN PLATED, THICKNESS=100 MICROINCH MIN/2.54 MICROMETER MIN.
 - UNDER PLATE: NICKEL(Ni) PLATED, THICKNESS=50 MICROINCH MIN/1.27 MICROMETER MIN.
 - NUT: NICKEL(Ni) PLATED, THICKNESS=50 MICROINCH MIN/1.27 MICROMETER MIN.
- SCREW MEETS TORQUE WITHSTANDED 2.5 kgf-cm MIN.
- RECOMMENDED PCB THICKNESS: 1.20±0.05mm.
- PRODUCT SPECIFICATION REFER TO PS-48321-001.
- TEST SUMMARY REFER TO TS-48321-001.
- PACKAGING SPECIFICATION REFER TO PK-48321-001.
- MATES WITH: SERIES 47300.
- LEAD FREE & RoHS COMPLIANT PRODUCT.



RECOMMENDED PC BOARD LAYOUT
TOLERANCE: ±0.05mm(TOP VIEW)

SEE SHEET1 EC NO: SH2009-0089 DRW: LLIU10 CHKD: YLZHU APPR: HWANG	REV 2008/08/20 2008/08/09/02 2008/09/29	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY LINDA	DATE 2007/12/13	TITLE SLIMLINE SATA RECEPTACLE STANDARD DIP WITH NUT		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			4 PLACES	± ---	± ---	CHECKED BY ALLEN LIN	DATE 2007/12/17	MOLEX INCORPORATED	
			3 PLACES	± ---	± ---	APPROVED BY EICK LAN	DATE 2007/12/17	DOCUMENT NO. E-48321-001	SHEET NO. 2 OF 2
			2 PLACES	± 0.15	± ---	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
			1 PLACE	± 0.15	± ---				
			ANGULAR ± 2 °						

10 9 8 7 6 5 4 3 2 1

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E

D

C

B

A

F

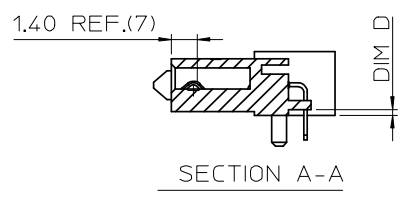
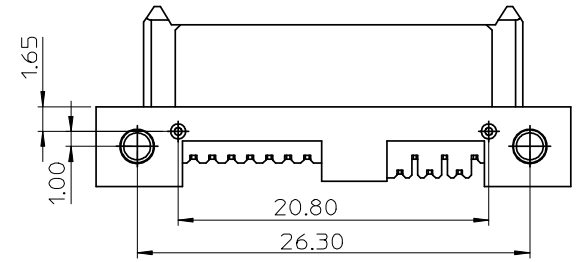
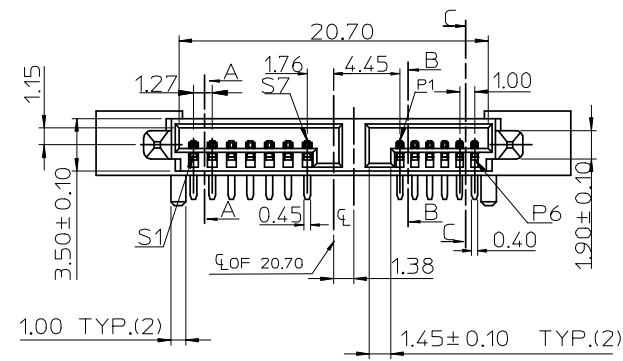
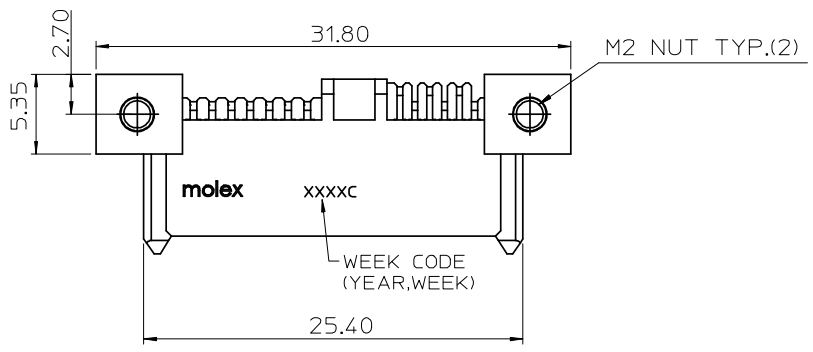
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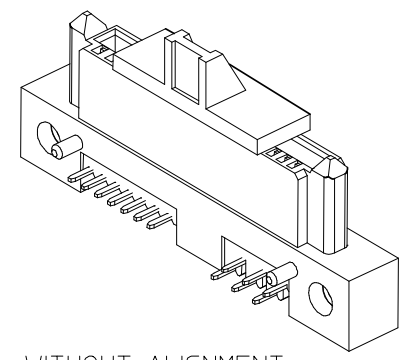
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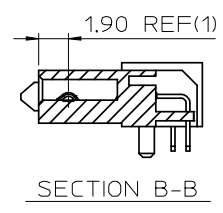
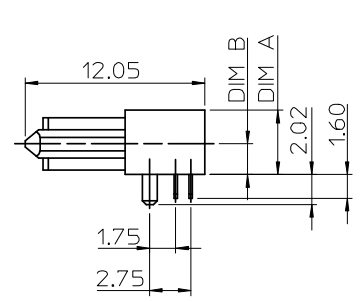
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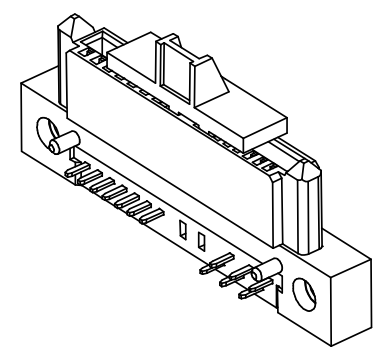
SECTION A-A



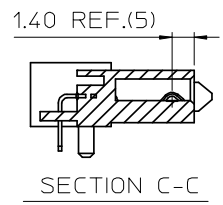
WITHOUT ALIGNMENT
(48321-2XXX)



SECTION B-B



WITH ALIGNMENT
(48321-1XXX)

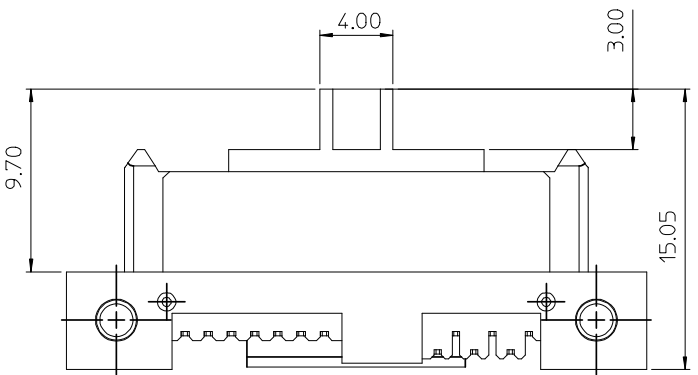
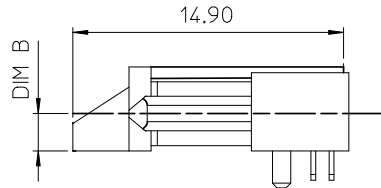
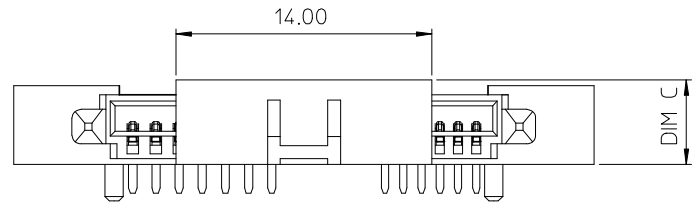


SECTION C-C

CHANGE NUT'S MATERIAL EC NO: SH2008-0659 DRW:LLU10 CH'KD:YLZHU APPR:HWANG 2008/07/29	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± 0.25 ± ---	mm INCH	DRAWN BY LINDA	DATE 2007/12/13	TITLE SLIMLINE SATA RECEPTACLE STANDARD DIP WITH NUT		
		ANGULAR ± 3 °		CHECKED BY ALLEN LIN	DATE 2007/12/17	MOLEX INCORPORATED		
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE	APPROVED BY EICK LAN	DATE 2007/12/17	DOCUMENT NO. SD-48321-001	SHEET NO. 1 OF 2	

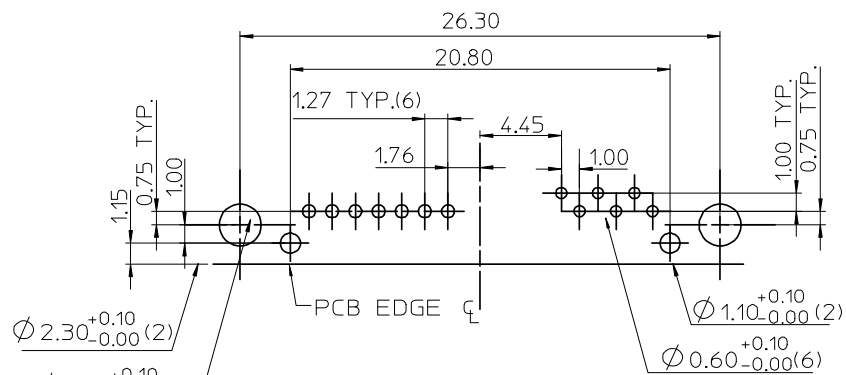
9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1



P/N	PLATING OPTIONS	DIM A	DIM B	DIM C	DIM D	PIN ALIGNMENT	WITHSTANDING MFG TEST
48321-1000	GOLD FLASH	3.50	1.25	3.80	0.35	YES	NO
48321-1001	15 MICROINCH						NO
48321-1002	30 MICROINCH						YES
48321-2000	GOLD FLASH	4.25	2.00	4.55	0.40	NO	NO
48321-2001	15 MICROINCH						NO
48321-2002	30 MICROINCH						YES

- NOTES:**
- MATERIAL:**
HOUSING & CAP: LIQUID CRYSTAL POLYMER, GLASS FIBER FILLED, UL94V-0, COLOR: BLACK.
TERMINAL: COPPER ALLOY.
NUT: ZINC ALLOY.
ALIGNER: LIQUID CRYSTAL POLYMER, GLASS FIBER FILLED, UL94V-0, COLOR: BLACK.
 - PLATING:**
TERMINAL:
CONTACT AREA: SEE TABLE.
SOLDER TAIL: MATTE TIN PLATED, THICKNESS=100 MICROINCH MIN/2.54 MICROMETER MIN.
UNDER PLATE: NICKEL(Ni) PLATED OVERALL.
NUT: NICKEL(Ni) PLATED, THICKNESS=50 MICROINCH MIN/1.27 MICROMETER MIN.
 - RECOMMENDED PCB THICKNESS: 1.20±0.05mm.
 - PRODUCT SPECIFICATION REFER TO PS-48321-001.
 - TEST SUMMARY REFER TO TS-48321-001.
 - PACKAGING SPECIFICATION REFER TO PK-48321-001.
 - MATES WITH: SERIES 47300.
 - LEAD FREE & RoHS COMPLIANT PRODUCT.



RECOMMENDED PC BOARD LAYOUT TOLERANCE: ±0.05mm(TOP VIEW)

SEE SHEET 1 EC NO: SH2008-0659 DRWN: LILIU10 CHKD: YLZHU APPR: HWANG 2008/07/09 2008/07/29	DESCRIPTION REV A1	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		
		▽=0 □=0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± 0.25 ± --- ANGULAR ± 3°	MM ONLY	1:1	METRIC	DRAWN BY: LINDA CHECKED BY: ALLEN LIN APPROVED BY: EICK LAN DATE: 2007/12/13 DATE: 2007/12/17 DATE: 2007/12/17		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE TABLE	TITLE			SLIMLINE SATA RECEPTACLE STANDARD DIP WITH NUT
					SIZE	DOCUMENT NO.			MATERIAL NO.
					A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			MOLEX INCORPORATED SD-48321-001 SHEET NO. 2 OF 2

9 8 7 6 5 4 3 2 1