

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: **0483211001**
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, 0.38µm (15µ") Gold (Au) Plating, Mounted Height: 3.50mm (.150"), with LCP 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 and 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) 15
 Plating min: Mating (µm) 0.38
 Plating min: Termination (µin) 100
 Plating min: Termination (µm) 2.54
 Polarized to Mating Part Yes
 Polarized to PCB Yes

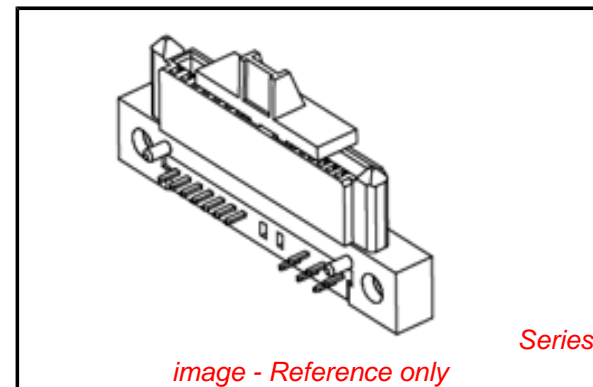


image - Reference only

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

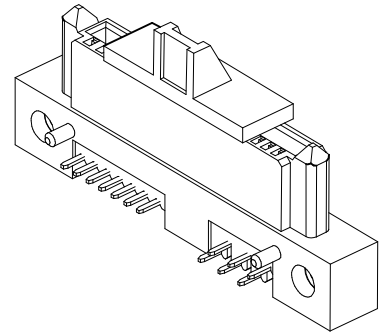
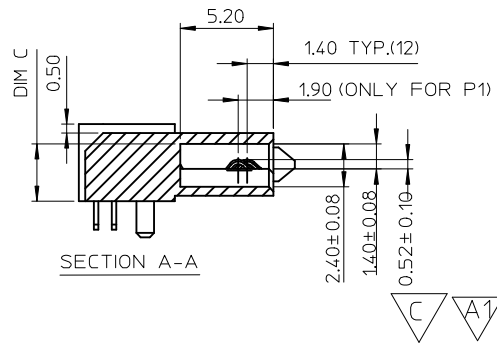
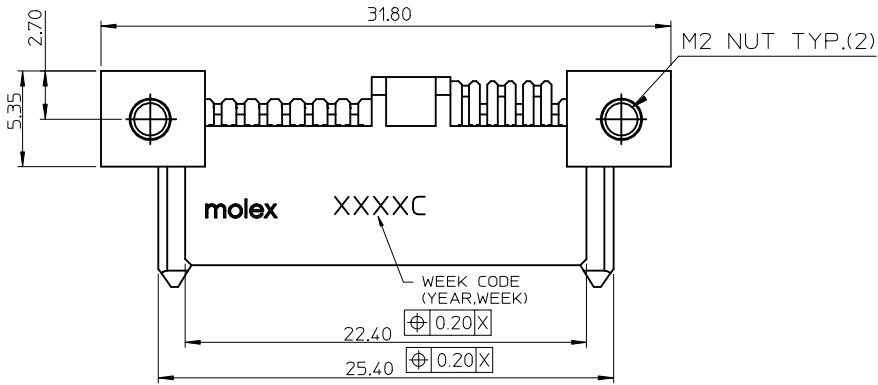
Packaging Specification	PK-48321-001
Product Specification	PS-48321-001
Sales Drawing	E-48321-001, SD-48321-001
Test Summary	TS-48321-001

This document was generated on 05/31/2010

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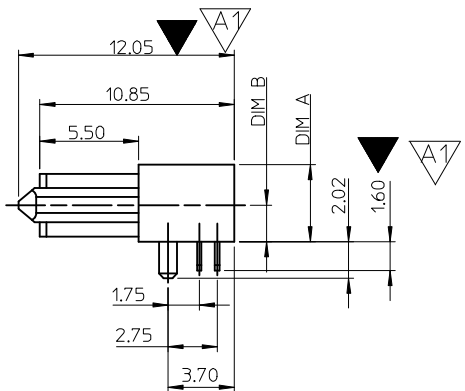
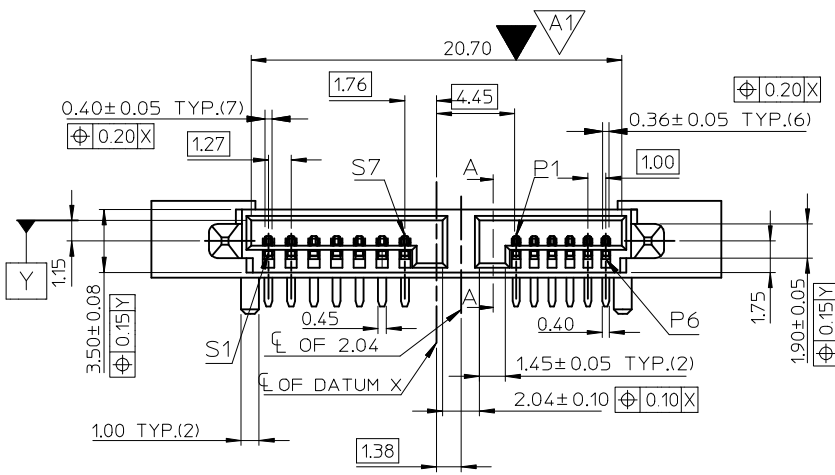
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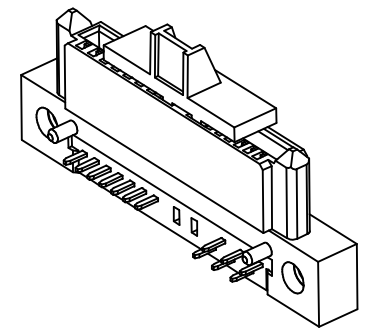


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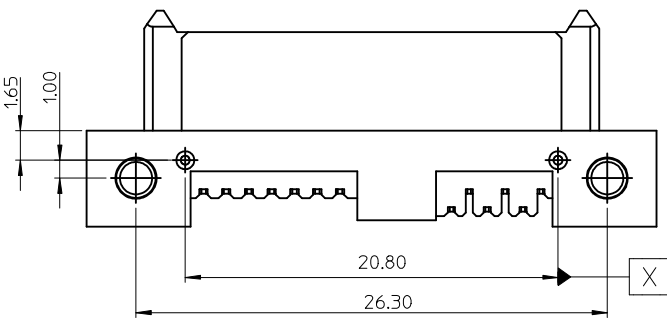


WITHOUT ALIGNMENT
(48321-2XXX)



WITH ALIGNMENT
(48321-1XXX)

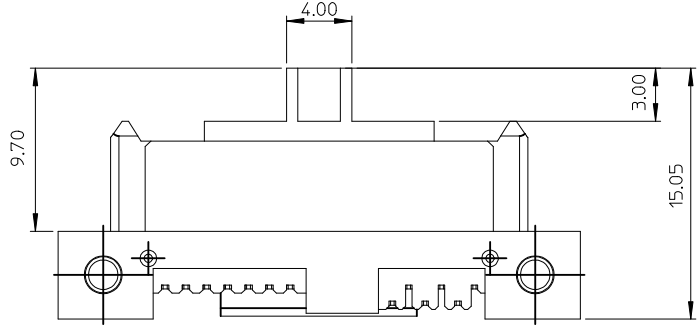
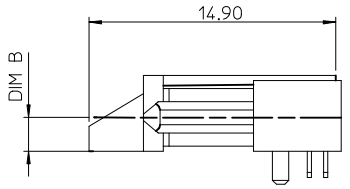
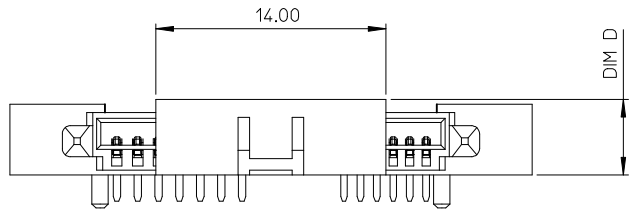
B



A

SUPPLIER		ACRON		THIRD ANGLE PROJECTION	
REVISION		QUALITY SYMBOLS		DRAWN BY	
EC NO: SH2009-0089		▽=3		DATE	
DRWN:LLIU10		▽=1		LINDA	
CHKD:YLZHU				DATE	
APPR:HWANG				2007/12/13	
REV		DESCRIPTION		CHECKED BY	
B		GENERAL TOLERANCES (UNLESS SPECIFIED)		ALLEN LIN	
		mm		DATE	
		INCH		2007/12/17	
		4 PLACES ± --- ± ---		APPROVED BY	
		3 PLACES ± --- ± ---		DATE	
		2 PLACES ± 0.15 ± ---		2007/12/17	
		1 PLACE ± 0.15 ± ---		EICK LAN	
		ANGULAR ± 2 °		DATE	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		2007/12/17	
		SIZE		MATERIAL NO.	
		A3		SEE TABLE	
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		DOCUMENT NO.	
				E-48321-001	
				SHEET NO.	
				1 OF 2	

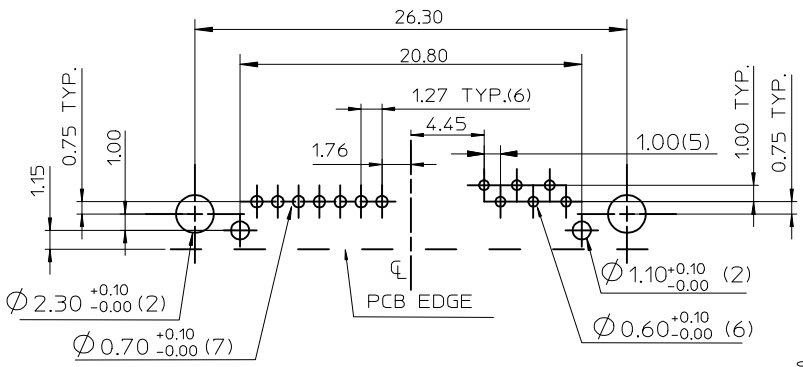
9 8 7 6 5 4 3 2 1



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	2008/08/20
EC NO: SH2009-0089	2008/08/09/02
DRW: LLIU10	
CHKD: YLZHU	
APPR: HWANG	2008/09/29
REV	DESCRIPTION

QUALITY SYMBOLS	▽=0
	∇=0
GENERAL TOLERANCES (UNLESS SPECIFIED)	mm
	INCH
	4 PLACES ± --- ± ---
	3 PLACES ± --- ± ---
	2 PLACES ± 0.15 ± ---
1 PLACE ± 0.15 ± ---	
ANGULAR ± 2 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM ONLY		1:1	METRIC	
DRAWN BY	DATE	TITLE		
LINDA	2007/12/13	SLIMLINE SATA RECEPTACLE STANDARD DIP WITH NUT		
CHECKED BY	DATE	MOLEX MOLEX INCORPORATED		
ALLEN LIN	2007/12/17			
APPROVED BY	DATE	DOCUMENT NO.		
EICK LAN	2007/12/17	E-48321-001		
MATERIAL NO.		SHEET NO.		
SEE TABLE		2 OF 2		

SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
A3			

10 9 8 7 6 5 4 3 2 1

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E

D

C

B

A

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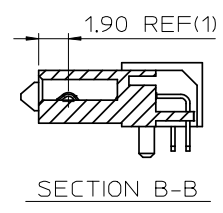
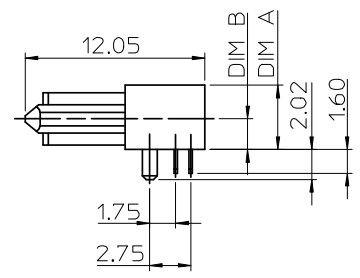
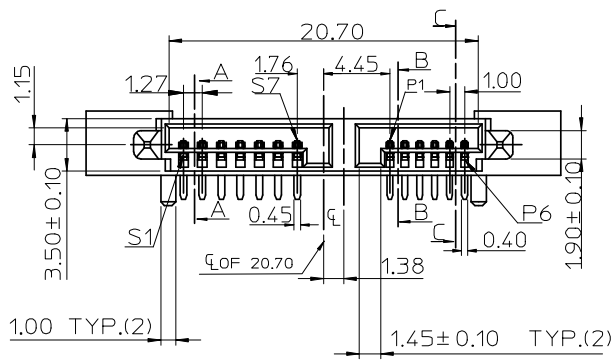
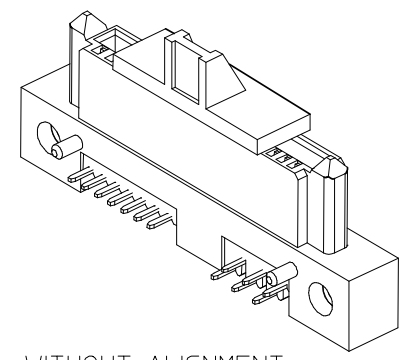
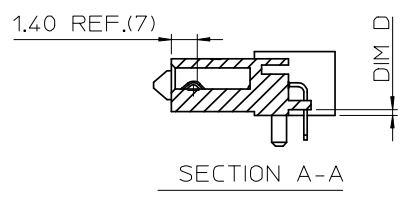
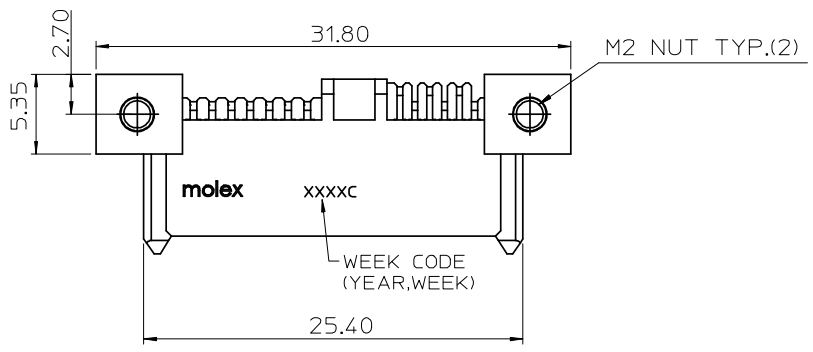
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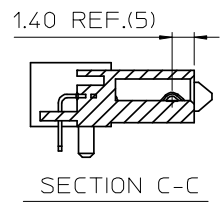
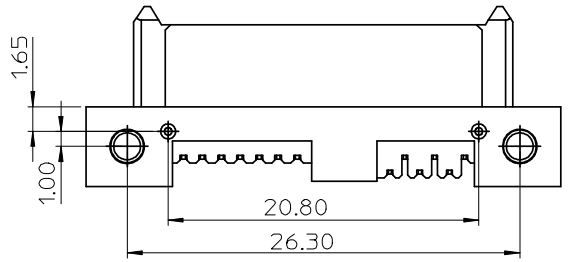
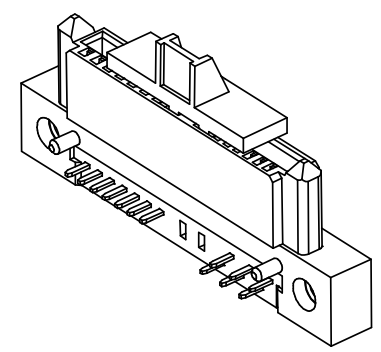
C

B

A



WITHOUT ALIGNMENT
(48321-2XXX)



WITH ALIGNMENT
(48321-1XXX)

CHANGE NUT'S MATERIAL	2008/07/29
EC NO: SH2008-0659	DESCRIPTION
DRW:LLU10	
CHKD:YLZHU	
APPR:HWANG	
A1	REV

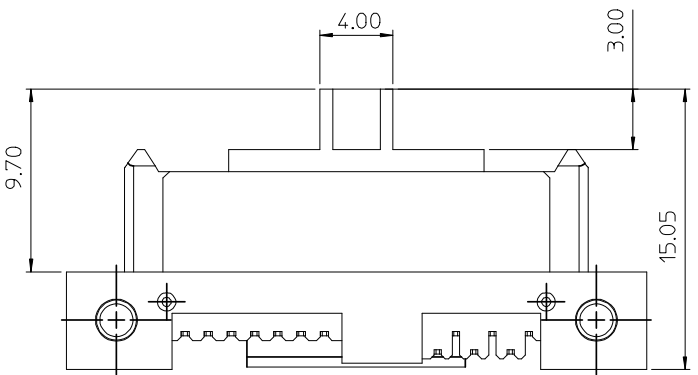
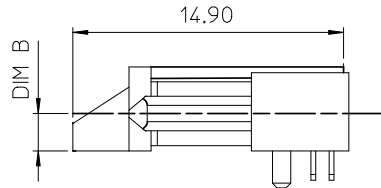
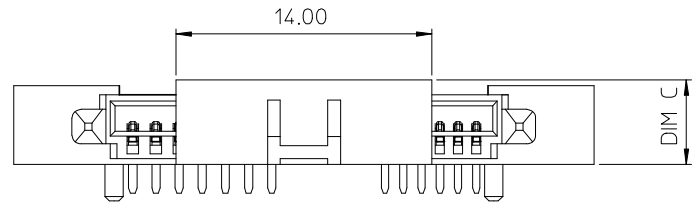
QUALITY SYMBOLS
$\blacktriangledown = 0$
$\nabla = 0$

GENERAL TOLERANCES (UNLESS SPECIFIED)	mm	INCH
4 PLACES	\pm ---	\pm ---
3 PLACES	\pm ---	\pm ---
2 PLACES	\pm 0.25	\pm ---
1 PLACE	\pm 0.25	\pm ---
ANGULAR \pm 3°		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
LINDA	2007/12/13
CHECKED BY	DATE
ALLEN LIN	2007/12/17
APPROVED BY	DATE
EICK LAN	2007/12/17
MATERIAL NO.	
SEE TABLE	
SIZE	
A3	

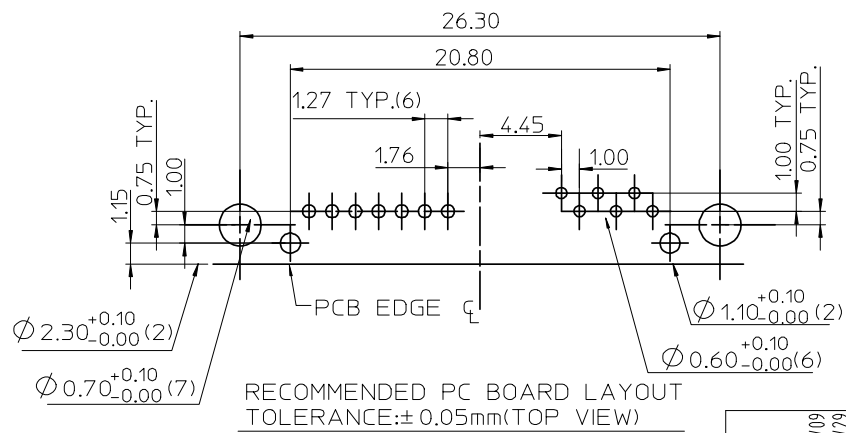
SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
1:1	METRIC	
TITLE		
SLIMLINE SATA RECEPTACLE STANDARD DIP WITH NUT		
MOLEX INCORPORATED		SHEET NO.
DOCUMENT NO.		1 OF 2
SD-48321-001		
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9 8 7 6 5 4 3 2 1



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.



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	
		$\nabla=0$ $\sphericalangle=0$	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± 0.25 ± --- ANGULAR ± 3°	MM ONLY	1:1	METRIC		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: LINDA DATE: 2007/12/13 CHECKED BY: ALLEN LIN DATE: 2007/12/17 APPROVED BY: EICK LAN DATE: 2007/12/17	TITLE	SLIMLINE SATA RECEPTACLE STANDARD DIP WITH NUT		
				MATERIAL NO. SEE TABLE SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	MOLEX INCORPORATED DOCUMENT NO. SD-48321-001 SHEET NO. 2 OF 2			