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Part Number: [0483211002](#)
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, 0.76µm (30µ") 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) 30
 Plating min: Mating (µm) 0.76
 Plating min: Termination (µin) 100
 Plating min: Termination (µm) 2.54
 Polarized to Mating Part Yes
 Polarized to PCB Yes

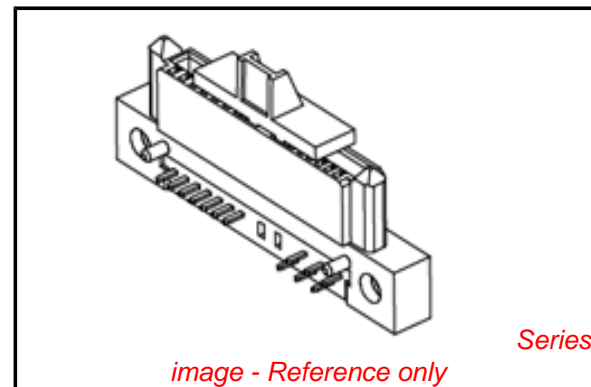


image - Reference only

EU RoHS

**ELV and RoHS
 Compliant**
**REACH SVHC
 Not Reviewed**
**Halogen-Free
 Status**

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

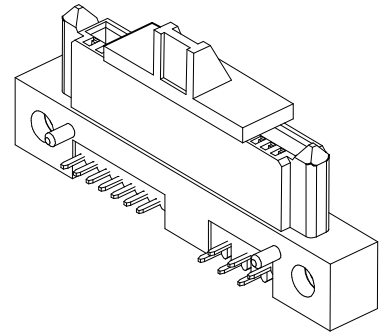
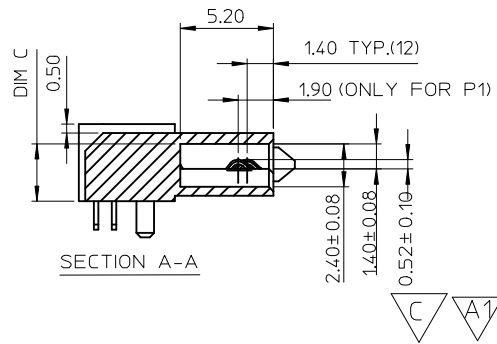
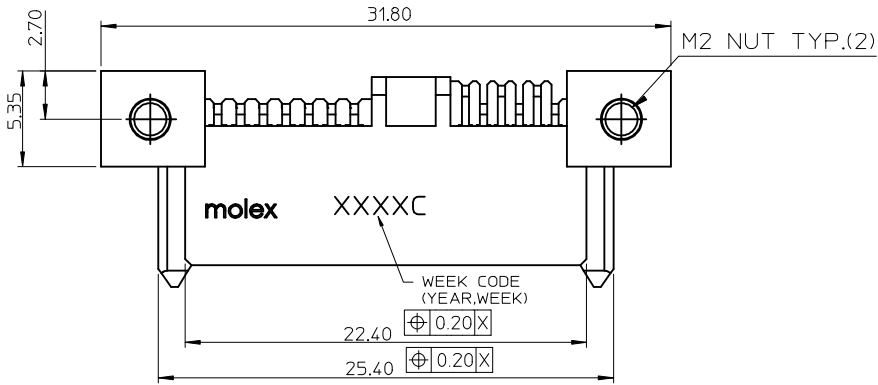
Packaging Specification	PK-48321-001
Product Specification	PS-48321-001
Sales Drawing	E-48321-001, SD-48321-001
Test Summary	TS-48321-001

This document was generated on 05/31/2010

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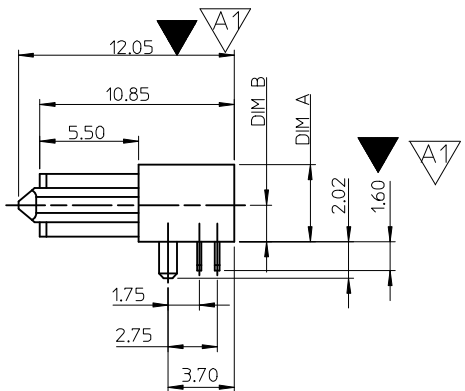
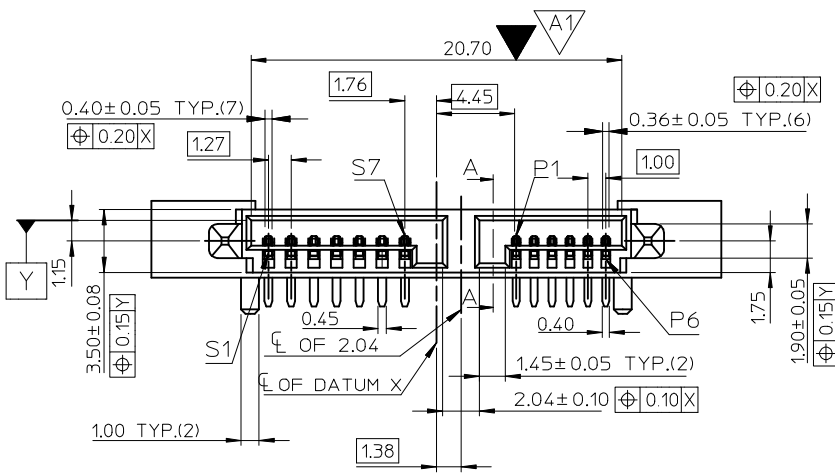
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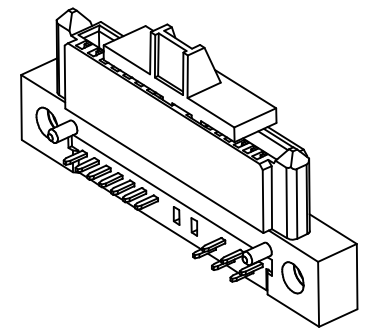


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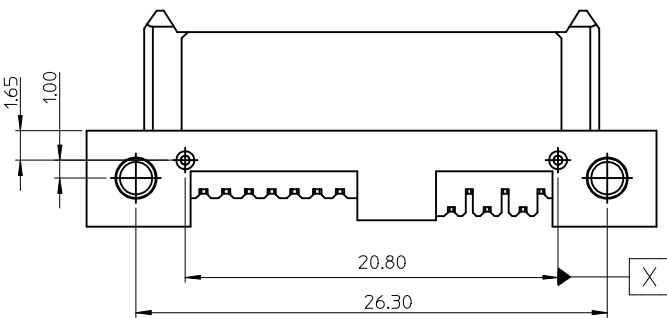


WITHOUT ALIGNMENT
(48321-2XXX)



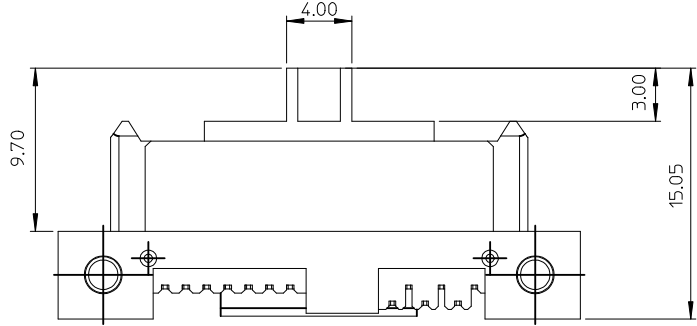
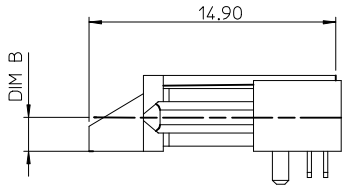
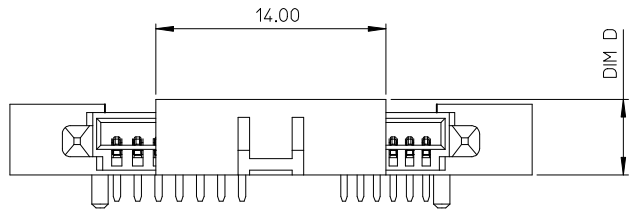
WITH ALIGNMENT
(48321-1XXX)

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SUPPLIER		ACRON		QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION													
REVISION		EC NO: SH2009-0089		2008/09/29		<table border="1"> <tr> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.15</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.15</td> </tr> </table>		mm	INCH	4 PLACES	± ---	3 PLACES	± ---	2 PLACES	± 0.15	1 PLACE	± 0.15	MM ONLY		1:1		METRIC					
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DRWN:LLIU10		CHKD:YLZHU		APPR:HWANG		<table border="1"> <tr> <th>DRAWN BY</th> <th>DATE</th> </tr> <tr> <td>LINDA</td> <td>2007/12/13</td> </tr> <tr> <th>CHECKED BY</th> <th>DATE</th> </tr> <tr> <td>ALLEN LIN</td> <td>2007/12/17</td> </tr> <tr> <th>APPROVED BY</th> <th>DATE</th> </tr> <tr> <td>EICK LAN</td> <td>2007/12/17</td> </tr> </table>		DRAWN BY	DATE	LINDA	2007/12/13	CHECKED BY	DATE	ALLEN LIN	2007/12/17	APPROVED BY	DATE	EICK LAN	2007/12/17	DRAWN BY		DATE		TITLE			
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MATERIAL NO.		SEE TABLE		DOCUMENT NO.		E-48321-001		SHEET NO.																			
SIZE		A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				1 OF 2																			

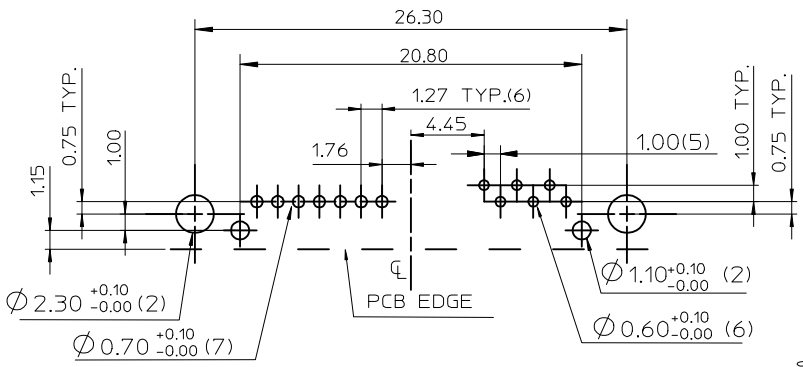
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P/N	PLATING OPTIONS	DIM A	DIM B	DIM C	DIM D	DIM E	PIN ALIGNMENT	WITHSTANDING MFG TEST	ACRON P/N
48321-1000	GOLD FLASH	3.50	1.25	2.40	3.80	0.35	YES	NO	SAT01-A3-R0000
48321-1001	15 MICROINCH							NO	SAT01-A3-R0020
48321-1002	30 MICROINCH							YES	SAT01-A3-R0030
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	2008/09/29
EC NO: SH2009-0089	DRW: NLLIU10	CHKD: YLZHU
	APPR: HWANG	
DESCRIPTION		
REV		

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			
ALLEN LIN	2007/12/17			
APPROVED BY	DATE			
EICK LAN	2007/12/17			
MATERIAL NO.	DOCUMENT NO.			
SEE TABLE	E-48321-001			
SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
A3				

MOLEX INCORPORATED		SHEET NO.
E-48321-001		2 OF 2

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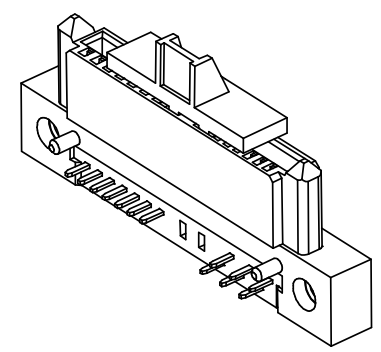
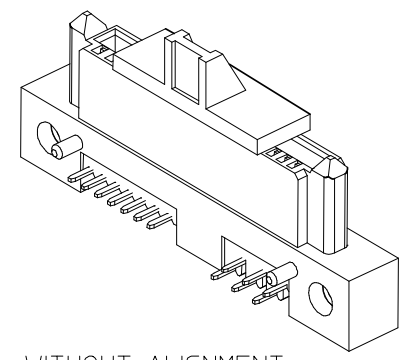
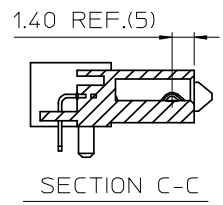
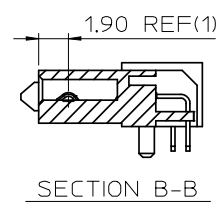
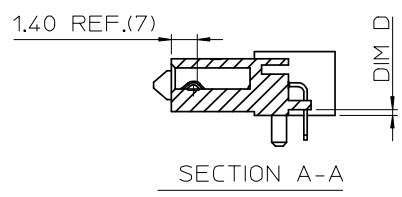
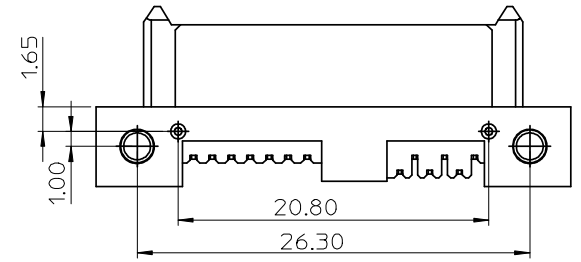
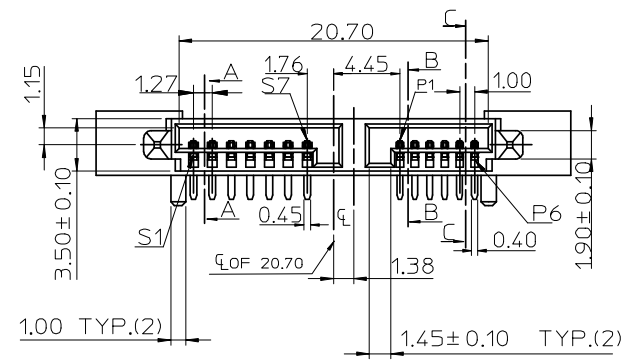
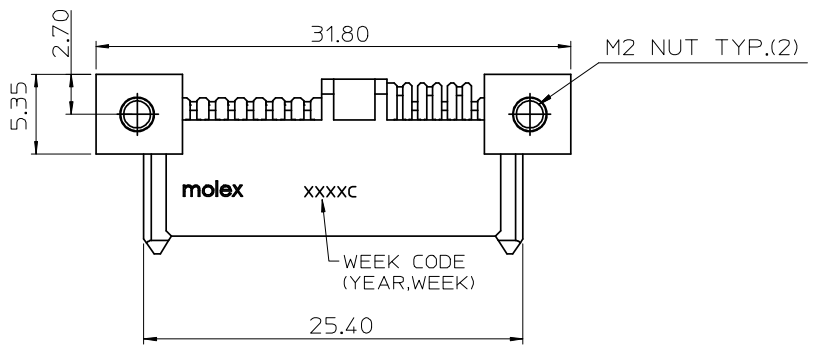
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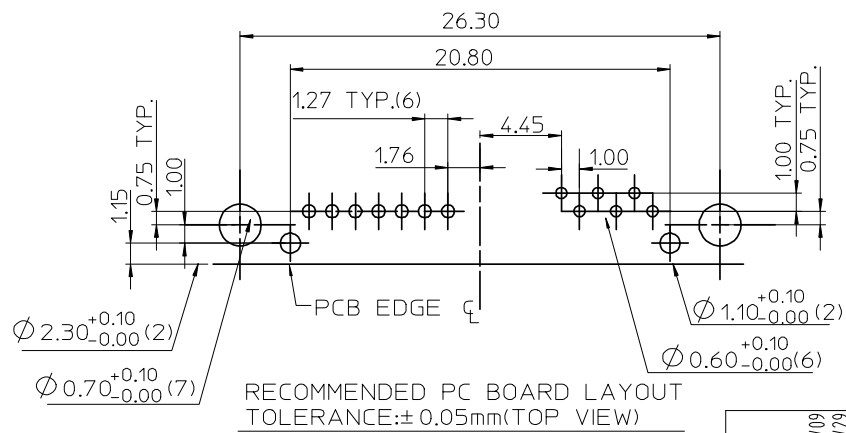
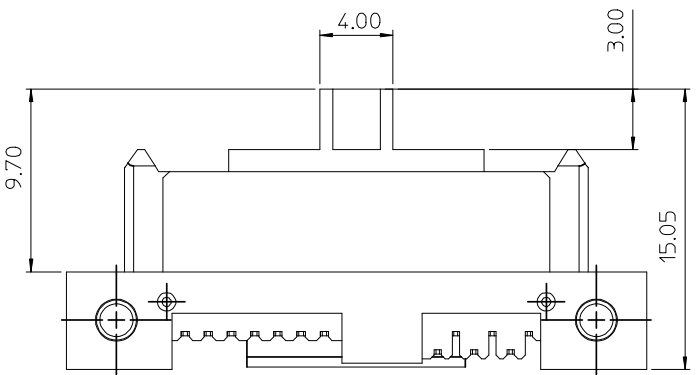
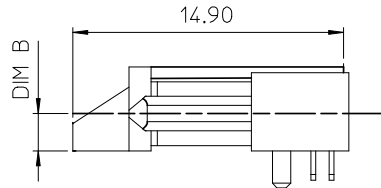
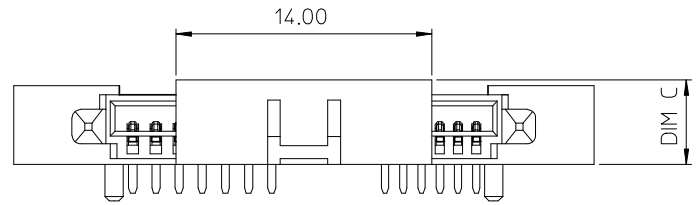
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A



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			
	A1	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	APPROVED BY EICK LAN	DATE 2007/12/17	MOLEX INCORPORATED	DOCUMENT NO. SD-48321-001	SHEET NO. 1 OF 2
			MATERIAL NO.	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

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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	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			
					CHECKED BY ALLEN LIN	DATE 2007/12/17				
					APPROVED BY EICK LAN	DATE 2007/12/17	MATERIAL NO. SEE TABLE DOCUMENT NO. SD-48321-001 SHEET NO. 2 OF 2			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						