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Part Number: [0780110011](#)
Status: **Active**
Description: 1.27mm (.050") Pitch Serial ATA Host Receptacle, 8.15mm Height, SMT, Vertical, with 1.00mm (.039") Plastic Locating Peg, Pick-and-Place Cap, 0.76µm (30µ") Gold (Au) Selective Plating, 22 Circuits, Lead-free

Documents:

[3D Model](#) [Product Specification PS-78011-002 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR 19980
 UL E29179

General

Product Family PCB Receptacles
 Series [78011](#)
 Application Board-to-Board
 Comments 1.00mm (.039") Plastic Locating Peg| With Cap
 Product Name Serial ATA

Physical

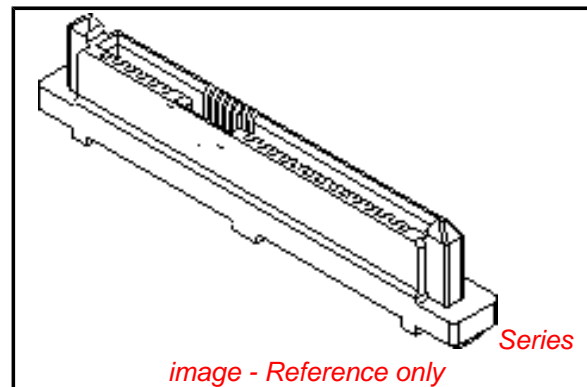
Circuits (Loaded) 22
 Circuits Detail Power 15 pins|Signal 7 pins
 Durability (mating cycles max) 500
 Flammability 94V-0
 Glow-Wire Compliant No
 Lock to Mating Part Yes
 Material - Metal Copper Alloy
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Number of Rows 1
 Orientation Vertical
 PCB Locator Yes
 PCB Retention Yes
 PCB Thickness Recommended (in) 0.062 In
 PCB Thickness Recommended (mm) 1.60 mm
 Packaging Type Embossed Tape on Reel
 Pitch - Mating Interface (in) 0.050 In
 Pitch - Mating Interface (mm) 1.27 mm
 Plating min: Mating (µin) 30
 Plating min: Mating (µm) 0.76
 Plating min: Termination (µin) 101.6
 Plating min: Termination (µm) 2.54
 Polarized to Mating Part Yes
 Polarized to PCB Yes
 Surface Mount Compatible (SMC) N/A
 Temperature Range - Operating -40°C to +105°C
 Termination Interface: Style Surface Mount

Electrical

Current - Maximum per Contact 1.5A
 Voltage - Maximum 30V

Solder Process Data

Duration at Max. Process Temperature (seconds) 10
 Lead-free Process Capability Reflow Capable (SMT 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

[78011Series](#)

Mates With

[78012](#) Serial Attached SCSI Combo Device Plug, [87679](#) Serial ATA Combo Plug, [87703](#) Serial ATA Combo Plug, [87799](#) Serial ATA Combo Plug

Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

Material Info

Reference - Drawing Numbers

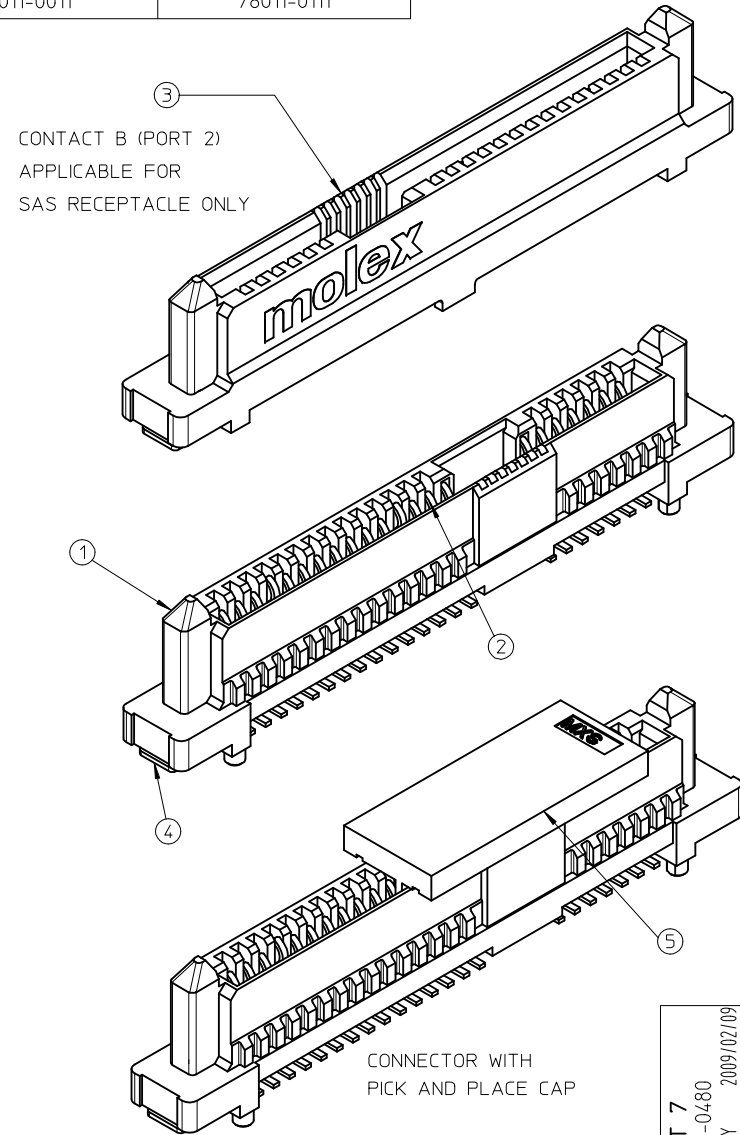
Product Specification	PS-78011-002
Sales Drawing	SD-78011-101

This document was generated on 03/18/2010

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10	9	8	7	6	5	4	3	2	1
PART NUMBER									
PACKING WITH TAPE AND REEL		PACKING WITH PACKAGING TRAY							
78011-0011		78011-0111							

NO.	PART NAME	QTY.	MATERIAL
1	HOUSING	1	NYLON(IPA), UL 94V-0, COLOR: BLACK
2	CONTACT A	22	COPPER ALLOY
3	CONTACT B	0	-----
4	FITTING-NAIL	2	COPPER ALLOY
5	PICK & PLACE CAP	1	PA46, UL 94V-0, COLOR: BLACK.



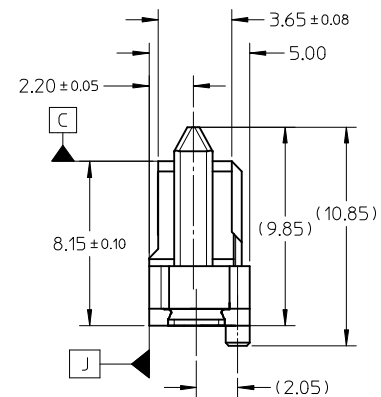
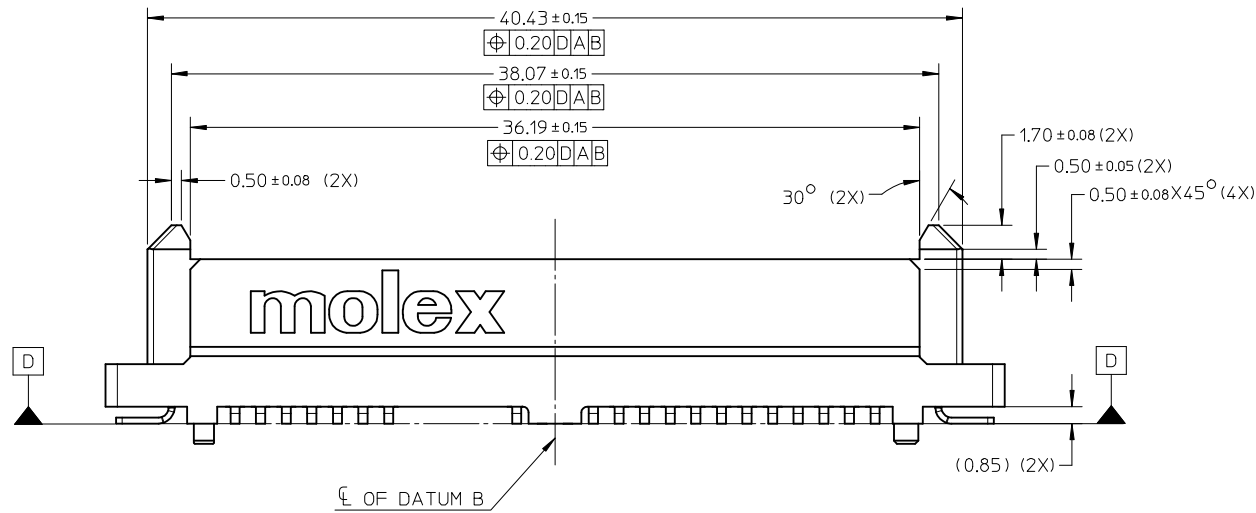
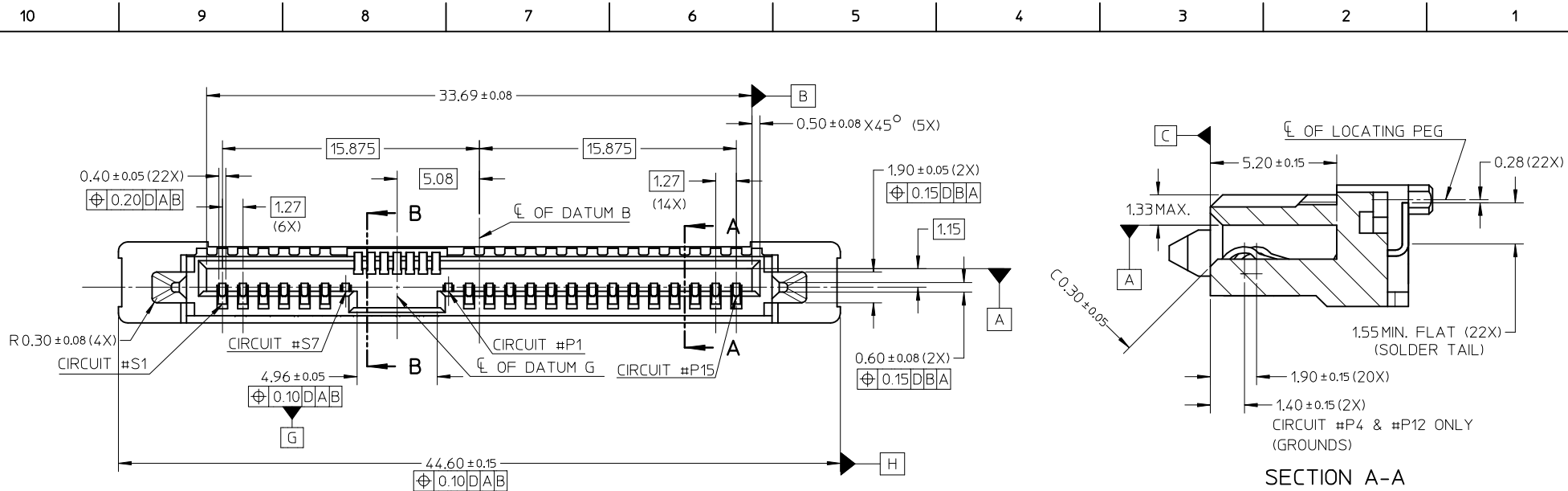
NOTES:

1. MATERIAL: REFER TO ABOVE PART-LIST.
2. PLATING SPECIFICATION: REFER TO TABLE-1.
3. APPLICABLE INDUSTRY SPECIFICATION : SERIAL ATA WORKGROUP.
4. PRODUCT SPECIFICATION: PS-78011-002.
5. PACKING: REFER TO PACKING INFORMATION (SHEET 6/6).
6. DATE CODE FORMAT: YEAR & DAY OF MANUFACTURE.
7. MOLEX LOGO IS LOCATED APPROXIMATELY AS SHOW.
8. MAXIMUM WARPAGE OF 0.13MM OVER THE LENGTH OF THE CONNECTOR IN ANY DIRECTION BEFORE AND AFTER EXPOSURE TO MAX. 260°C FOR 10 SECONDS.
9. THIS SATA RECEPTACLE CAN BE CONVERTED TO A SAS RECEPTACLE IF FILLED WITH PORT 2 TERMINALS.

TABLE-1: (CONTACTS AND FITTING-NAIL PLATING SPECIFICATION)

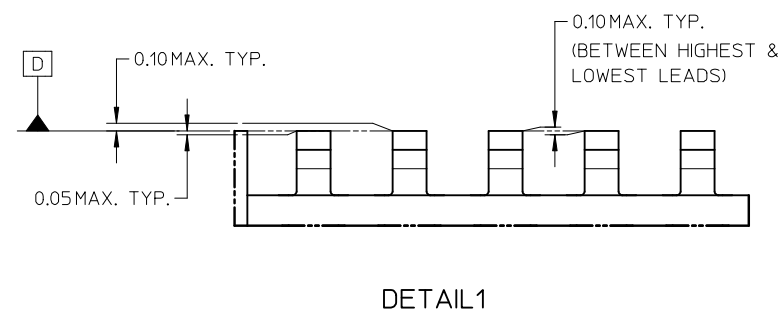
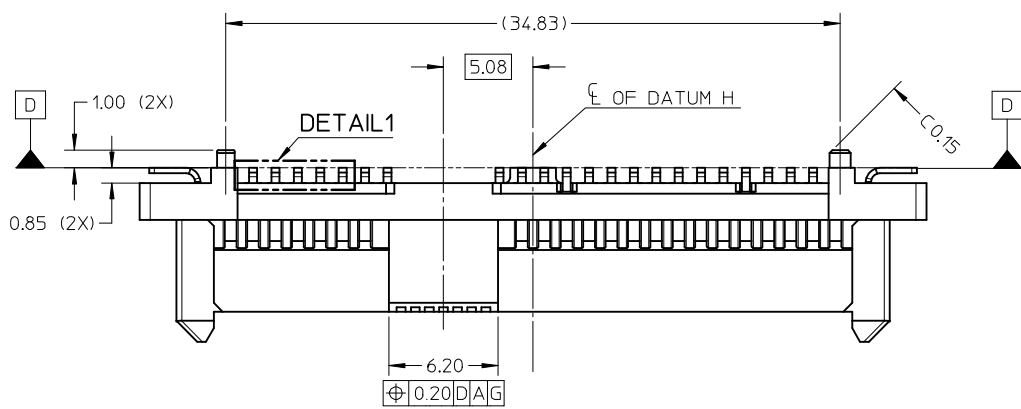
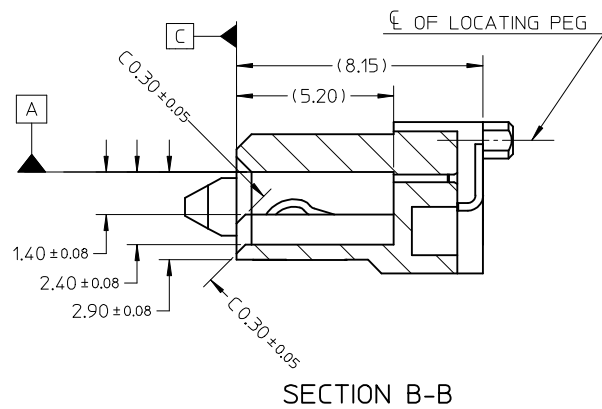
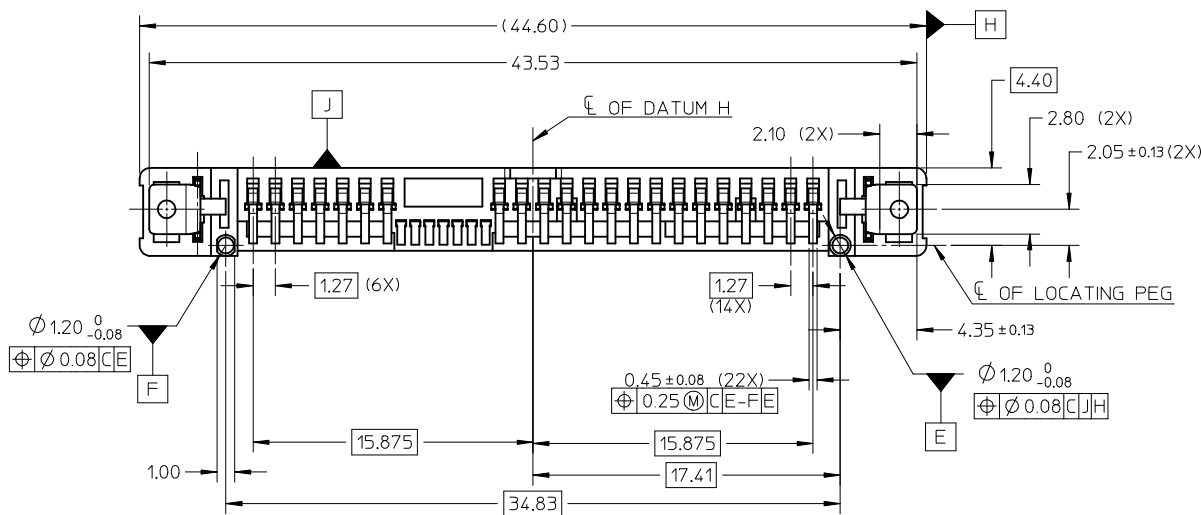
PART NAME	MATING AREA	TERMINAL AREA	OTHERS AREA
CONTACT	SELECTIVE GOLD (0.76µm MIN.)	TIN (2.54µm MIN.)	NICKEL PLATING
	OVER 1.27µm MIN. NICKEL UNDERPLATE		
FITTING-NAIL	TIN OVER NICKEL PLATING		

SEE SHEET 7 EC NO: S2009-0480 DRWN:GEMARLY 2009/02/09 CHKD:CGOH 2009/02/09 APPR:BOKOK 2009/02/12	DESCRIPTION QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
				MM ONLY	NTS	METRIC		
				DRAWN BY	DATE	TITLE		
				CGTAN	2005/11/10	SERIAL ATA RECEPTACLE VERTICAL MOUNT SMT		
				CHECKED BY	DATE	MOLEX INCORPORATED		
		SHONG	2005/11/24	SD-78011-101				
		APPROVED BY	DATE	SHEET NO.				
		KCLING	2005/11/24	1 OF 7				
		MATERIAL NO.		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
		SEE TABLE						



SEE SHEET 7 EC NO: S2009-0480 DRW: MEMARLY 2009/02/09 CHKD: CGOH 2009/02/09 APPR: BOKOK 2009/02/12	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY	DATE	TITLE			
		4 PLACES	± ---	± ---	CGTAN	2005/11/10	SERIAL ATA RECEPTACLE VERTICAL MOUNT SMT			
		3 PLACES	± ---	± ---	CHECKED BY	DATE	MOLEX INCORPORATED			
	2 PLACES	± 0.20	± ---	SHONG	2005/11/24	DOCUMENT NO.		SHEET NO.		
	1 PLACE	± ---	± ---	APPROVED BY	DATE	SD-78011-101		2 OF 7		
	ANGULAR ± 3 °		KCLING		2005/11/24					
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
	SIZE	A3								

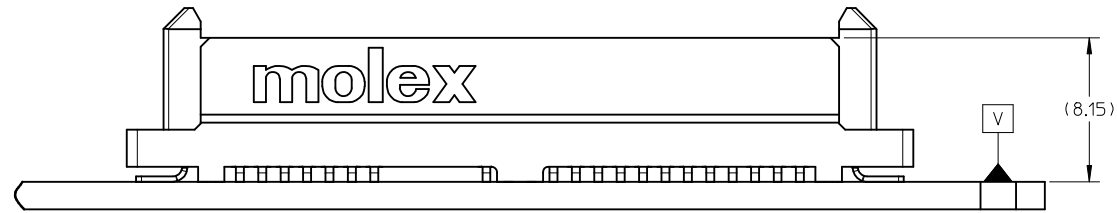
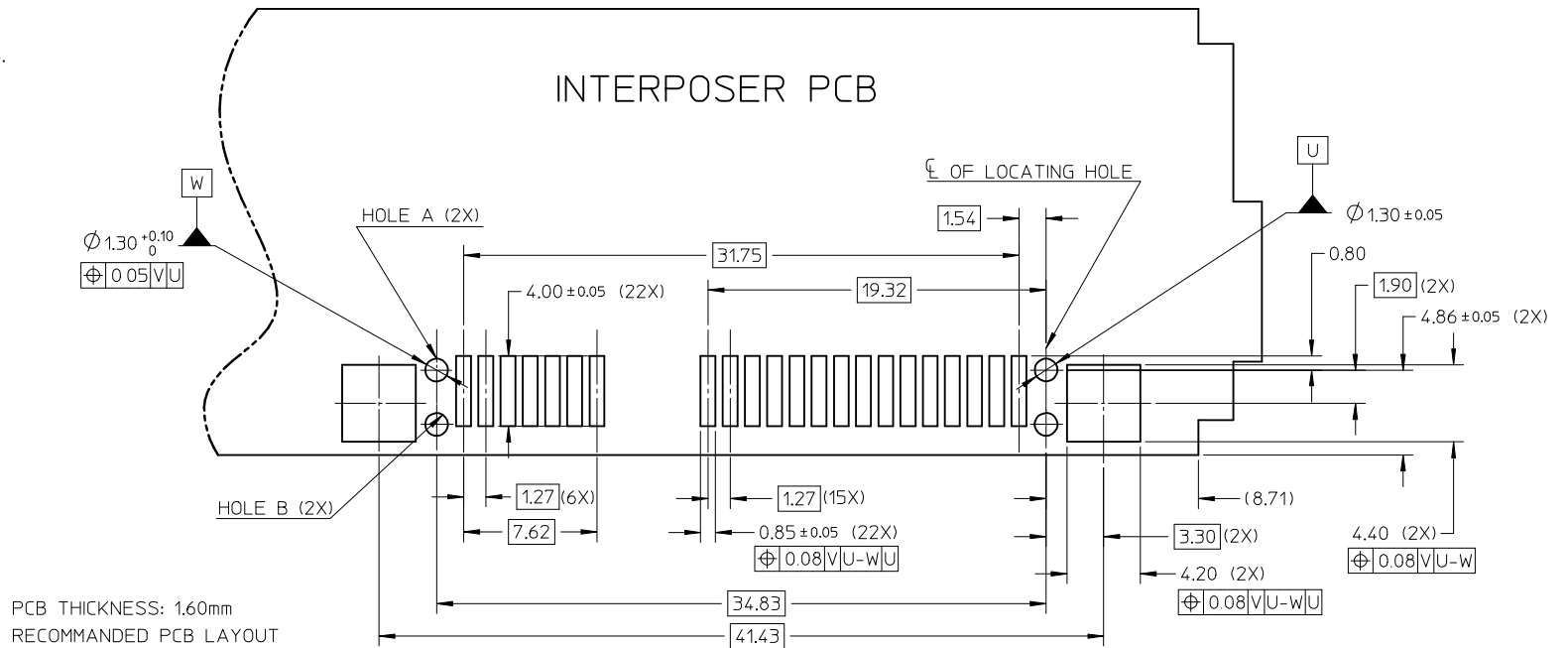
10 9 8 7 6 5 4 3 2 1



SEE SHEET 7 EC NO: S2009-0480 DRWN: MEMARLY 2009/02/09 CHKD: CGOH 2009/02/09 APPR: BOKOK 2009/02/12	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY	DATE	TITLE			
		4 PLACES	± ---	± ---	CGTAN	2005/11/10	SERIAL ATA RECEPTACLE VERTICAL MOUNT SMT			
		3 PLACES	± ---	± ---	CHECKED BY	DATE	MOLEX INCORPORATED			
	2 PLACES	± 0.20	± ---	SHONG	2005/11/24	DOCUMENT NO.		SHEET NO.		
	1 PLACE	± ---	± ---	APPROVED BY	DATE	SD-78011-101		3 OF 7		
	ANGULAR ± 3 °		KCL ING		2005/11/24					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						
		SIZE A3								

9 8 7 6 5 4 3 2 1

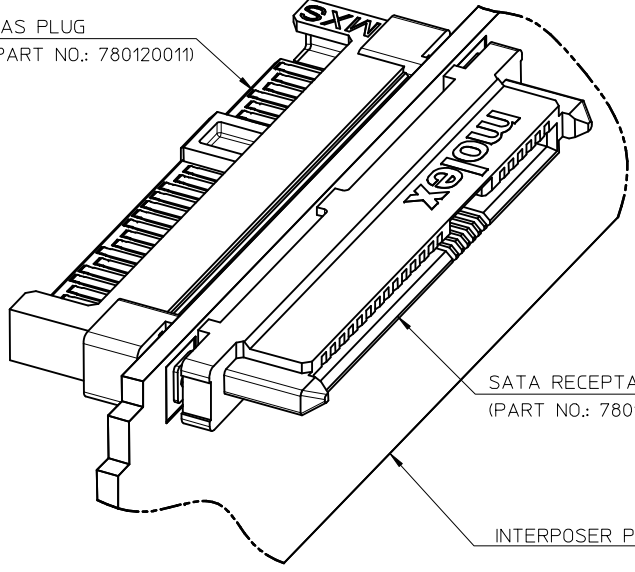
NOTES:
 1. REFER TO SD-78012-101
 FOR HOLES B DETAIL DIMENSIONS.



SEE SHEET 7	EC NO: S2009-0480 DRWN: MEMARLY 2009/02/09 CHKD: CGOH 2009/02/09 APPR: BOKOK 2009/02/12	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
				mm	INCH	DRAWN BY CGTAN	DATE 2005/11/10	TITLE SERIAL ATA RECEPTACLE VERTICAL MOUNT SMT				
			4 PLACES	± ---	± ---	CHECKED BY SHONG	DATE 2005/11/24	MOLEX INCORPORATED				
			3 PLACES	± ---	± ---	APPROVED BY KCLING	DATE 2005/11/24	DOCUMENT NO. SD-78011-101				
			2 PLACES	± 0.20	± ---	MATERIAL NO. SEE TABLE		SHEET NO. 4 OF 7				
			1 PLACE	± ---	± ---	SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
			ANGULAR ± 3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS							

NOTES:
 1. APPLICATION AS SHOWN IN SHEET 5/7.
 2. REFER TO SD-78012-101 FOR THE DETAILS OF SAS PLUG.

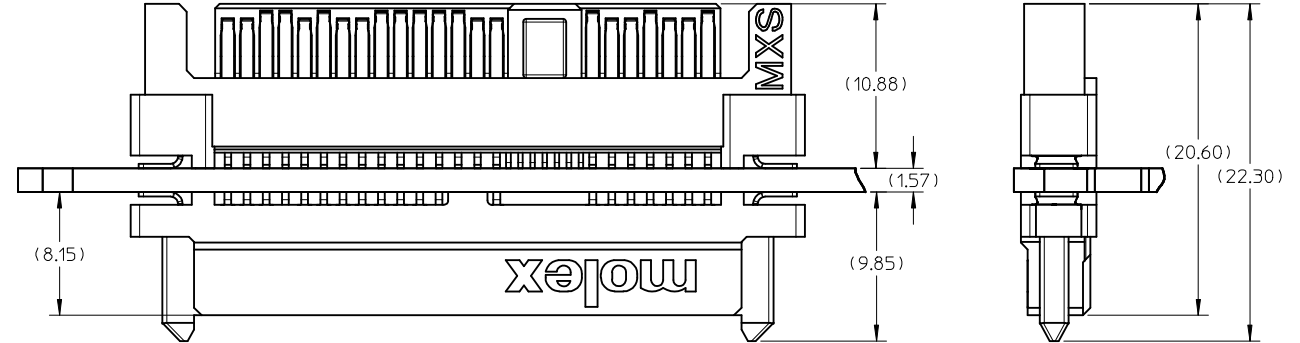
SAS PLUG
 (PART NO.: 780120011)



SATA RECEPTACLE
 (PART NO.: 780110011)

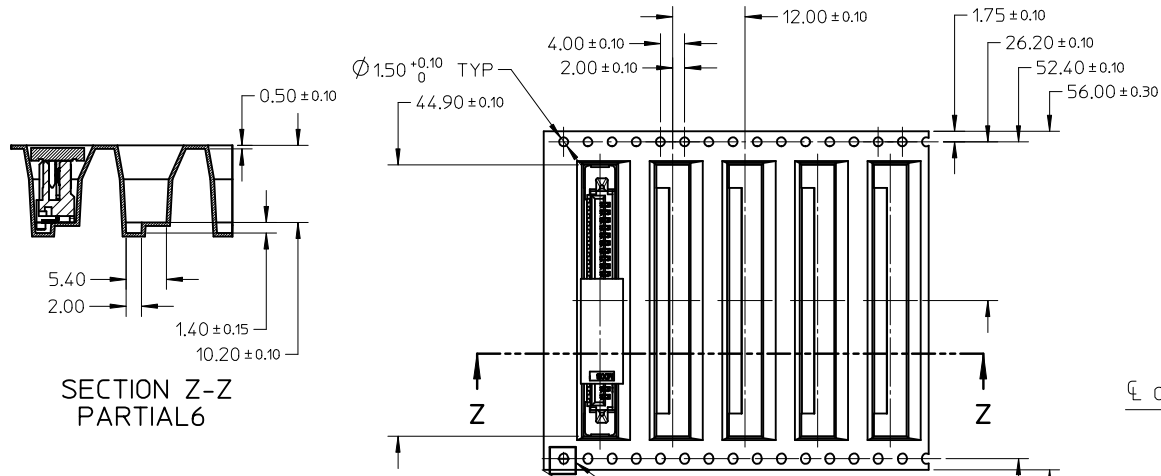
INTERPOSER PCB

PARTIAL3

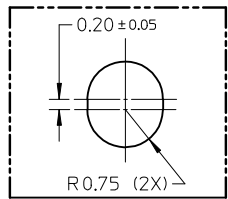


SEE SHEET 7 EC NO: S2009-0480 DRWN:GEMARLY 2009/02/09 CHKD:CGOH 2009/02/09 APPR:BOKOK 2009/02/12	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		▼=0 □=0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	DRAWN BY CGTAN CHECKED BY SHONG APPROVED BY KCLING MATERIAL NO.	DATE 2005/11/10 DATE 2005/11/24 DATE 2005/11/24	TITLE SERIAL ATA RECEPTACLE VERTICAL MOUNT SMT		MOLEX INCORPORATED DOCUMENT NO. SD-78011-101	SHEET NO. 5 OF 7
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
						SIZE A3			

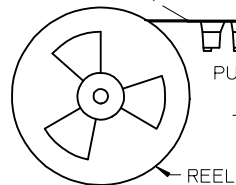
PACKING INFORMATION
TAPE AND REEL PACKING



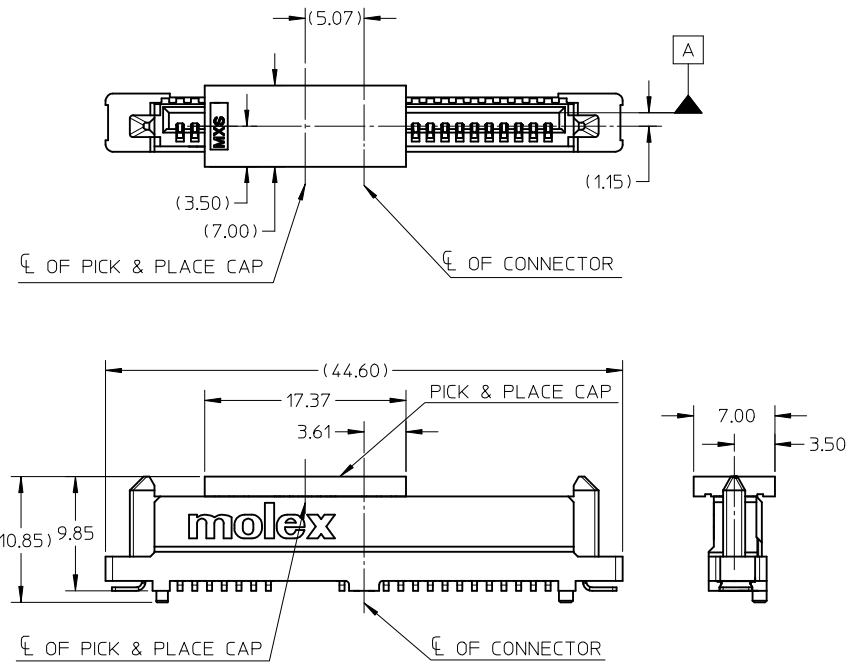
SECTION Z-Z
PARTIAL6



DETAIL2

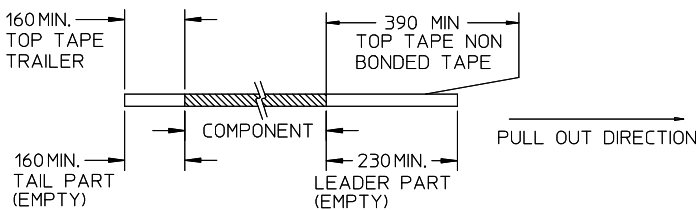


PULL OUT DIRECTION

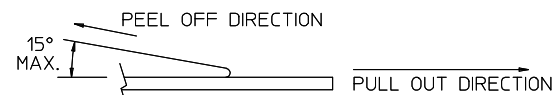


NOTES:

1. LEADER AND TRAILER TAPE



2. PEELING OFF FORCE OF THE TOP TAPE: 80gf MAX.
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)

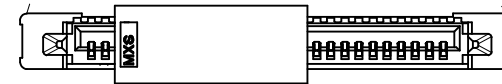
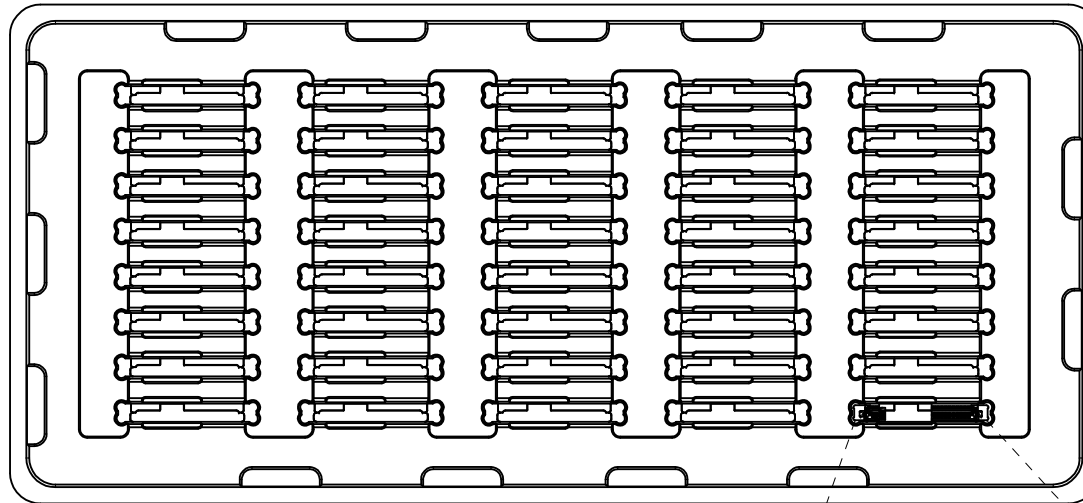


- 3. TAPE AND REEL SPECIFICATION IS AS PER EIA-481.
- 4. TAPE AND REEL QUANTITY : 450 PCS/ REEL.
- 5. THE TAPE IS TREATED FOR ANTI-STATIC.

SEE SHEET 7 EC NO: S2009-0480 DRW:GEMARLY 2009/02/09 CHKD:CGOH 2009/02/09 APPR:BOKOK 2009/02/12	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
				MM ONLY	NTS	METRIC		
			mm	INCH	DRAWN BY	DATE	TITLE	
		4 PLACES	± ---	± ---	CGTAN	2005/11/10	SERIAL ATA RECEPTACLE VERTICAL MOUNT SMT	
3 PLACES	± ---	± ---	CHECKED BY	DATE	MOLEX INCORPORATED		SHEET NO. 6 OF 7	
2 PLACES	± 0.20	± ---	SHONG	2005/11/24				
1 PLACE	± ---	± ---	APPROVED BY	DATE	DOCUMENT NO.			
	ANGULAR ± 3 °		KCLING	2005/11/24	SD-78011-101			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

10 9 8 7 6 5 4 3 2 1

PACKING INFORMATION
 PACKING WITH TRAY



PART ORIENTATION IN TRAY

NOTES:

1. TRAY MATERIAL: 0.70mm THICKNESS (BEFORE FORMING), APET-CLEAR, ANTISTATIC.
2. PACKING QUANTITY: 40PCS/TRAY.

CHANGED TRAY EC NO: S2009-0480 DRWNG: GEMEARLY 2009/02/09 CHKD: CGOH 2009/02/09 APPR: BOKOK 2009/02/12	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		▼=0 □=0	mm	INCH	DRAWN BY CGTAN	DATE 2005/11/10	TITLE SERIAL ATA RECEPTACLE VERTICAL MOUNT SMT				
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± ---	ANGULAR ± 3 °		CHECKED BY SHONG	DATE 2005/11/24	MOLEX MOLEX INCORPORATED				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		APPROVED BY KCLING	DATE 2005/11/24	DOCUMENT NO. SD-78011-101		SHEET NO. 7 OF 7	

9 8 7 6 5 4 3 2 1