

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

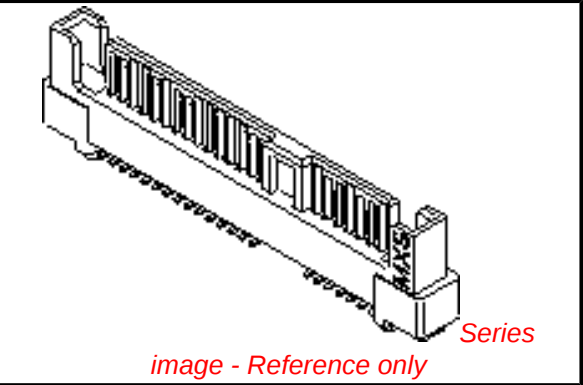
0780120011

Status:

Active

Description:

1.27mm (.050") Pitch, Serial Attached SCSI Combo Device Plug, Vertical, Surface Mount, 29 Circuits, Plastic Locating Pegs, Pick-and-Place Cap, Embossed Tape on Reel, Lead-free



Documents:	
3D Model	Product Specification PS-78012-002 (PDF)
Drawing (PDF)	RoHS Certificate of Compliance (PDF)

Agency Certification	
CSA	LR 19980
UL	E29179
General	
Product Family	I/O Connectors
Series	78012
Application	Wire-to-Board
Comments	With Cap
Component Type	Plug
Product Name	SAS
Type	N/A
Physical	
Boot Color	N/A
Circuits (Loaded)	29
Circuits (maximum)	29
Color - Resin	Black
Durability (mating cycles max)	500
Flammability	94V-0
Gender	Plug
Lock to Mating Part	None
Material - Metal	Brass
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Vertical
PC Tail Length (in)	0.000 In
PC Tail Length (mm)	0.00 mm
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.57 mm
Packaging Type	Embossed Tape on Reel
Panel Mount	Yes
Pitch - Mating Interface (in)	0.031 In, 0.050 In
Pitch - Mating Interface (mm)	0.80 mm, 1.27 mm
Pitch - Term. Interface (in)	0.050 In
Pitch - Term. Interface (mm)	1.27 mm
Plating min: Mating (µin)	30
Plating min: Mating (µm)	0.76
Plating min: Termination (µin)	76.400
Plating min: Termination (µm)	1.91
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

78012Series

Mates With

78011 SATA Receptacle, SFF 8482 Unshielded Dual Port Serial Attachment Connector

Ports	1
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-40°C to +85°C
Termination Interface: Style	Surface Mount
Waterproof / Dustproof	No
Wire Size AWG	N/A

Electrical

Current - Maximum per Contact	1.5A
Shielded	No
Voltage - Maximum	30V

Solder Process Data

Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

Material Info

Reference - Drawing Numbers

Product Specification	PS-78012-002
Sales Drawing	SD-78012-101

This document was generated on 04/02/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

F

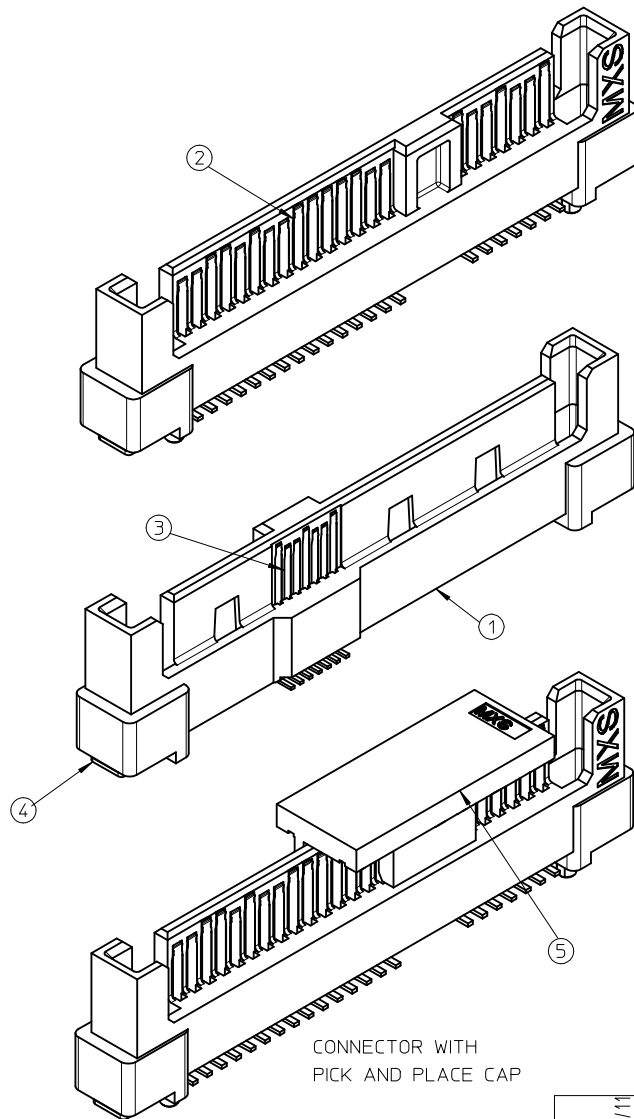
E

D

C

B

A



CONNECTOR WITH
PICK AND PLACE CAP

NO.	PART NAME	QTY.	MATERIAL
1	HOUSING	1	NYLON(PA), UL 94V-0, COLOR: BLACK
2	CONTACT A	22	COPPER ALLOY
3	CONTACT B	7	COPPER ALLOY
4	FITTING-NAIL	2	COPPER ALLOY
5	PICK & PLACE CAP	1	PA46, UL 94V-0, COLOR: BLACK

NOTES:

1. MATERIAL: REFER TO THE ABOVE PART-LIST.
2. PLATING SPECIFICATION: REFER TO TABLE-1.
3. APPLICABLE INDUSTRY SPECIFICATION :
SFF-8482 UNSHIELDED DUAL PORT SERIAL ATTACHMENT CONNECTOR.
4. PRODUCT SPECIFICATION: PS-78012-002.
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.

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

PART NAME	MATING AREA	TERMINAL AREA	OTHERS AREA
CONTACT	GOLD (0.76μm MIN.)	TIN (1.91μm MIN.)	NICKEL PLATING
	OVER 1.27μm MIN. NICKEL UNDERPLATE		
FITTING-NAIL	TIN OVER NICKEL UNDERPLATE		

SEE SHEET 6 EC NO: S2009-0661 DRWNGEMARLY CHKD:CGOH APPR:BOKOK REV A2	DESCRIPTION 2009/03/11 2009/03/12 2009/03/13	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 ATTACH SCSI (SAS) PLUG, VERTICAL MOUNT SMT					
			4 PLACES	± ---	± ---	CHECKED BY	DATE						
			3 PLACES	± ---	± ---	SHONG	2005/11/24						
			2 PLACES	± 0.20	± ---	APPROVED BY		DATE	MOLEX INCORPORATED				
			1 PLACE	± ---	± ---	KCLING		2005/11/24					
			ANGULAR ± 3 °			MATERIAL NO.		DOCUMENT NO.					
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			78012-0011		SD-78012-101					
						SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
					SHEET NO. 1 OF 6								

F

E

D

C

B

A

F

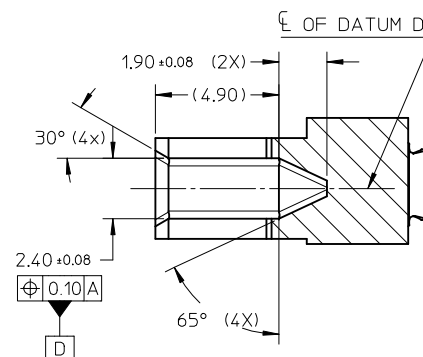
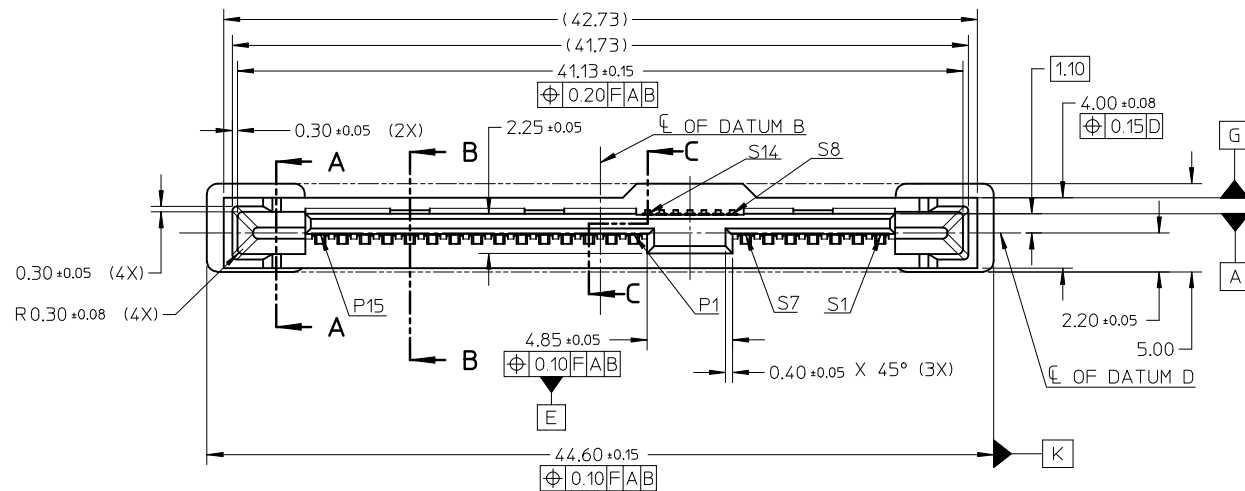
E

D

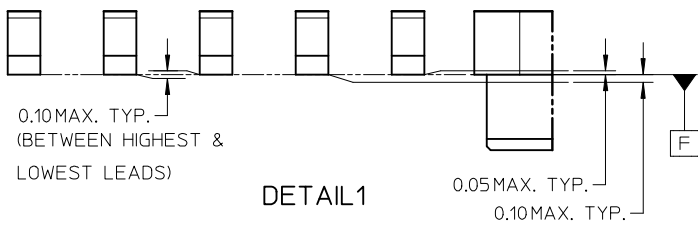
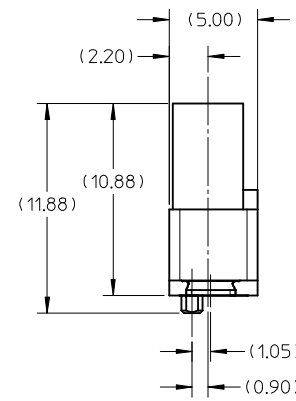
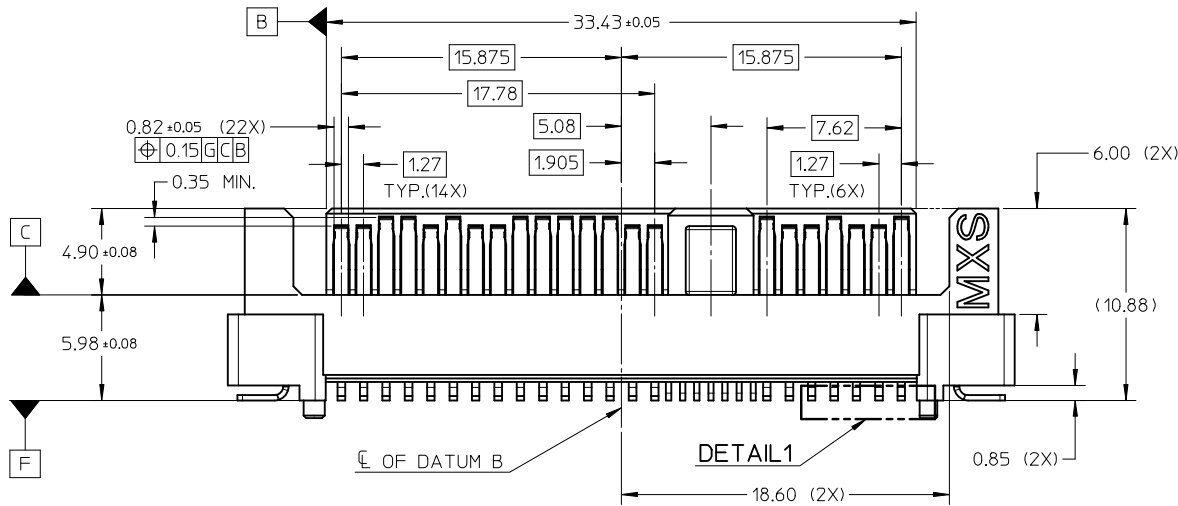
C

B

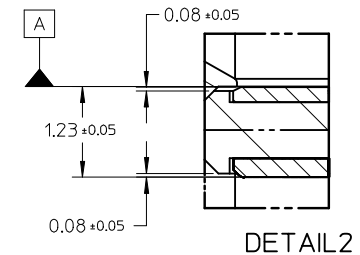
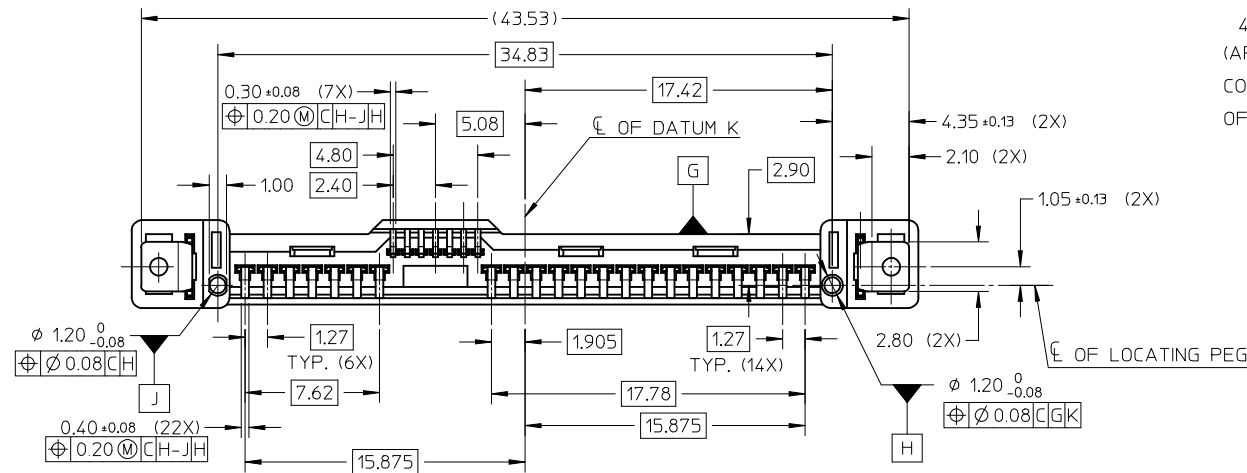
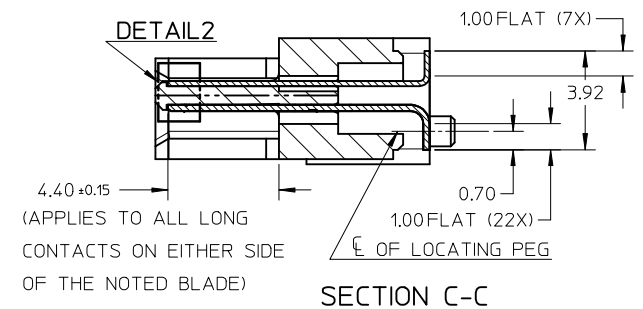
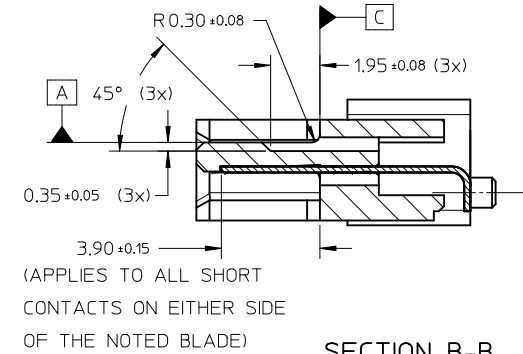
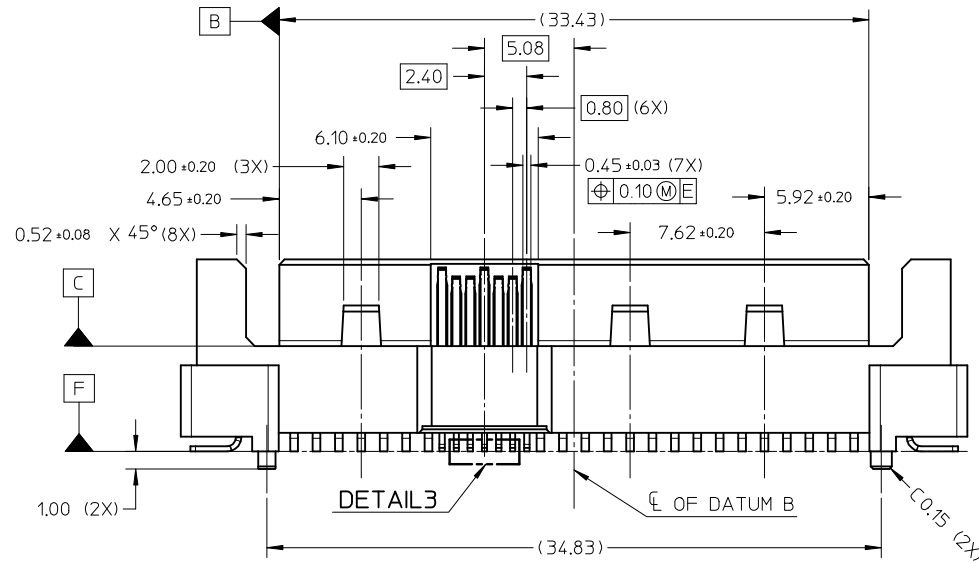
A



SECTION A-A



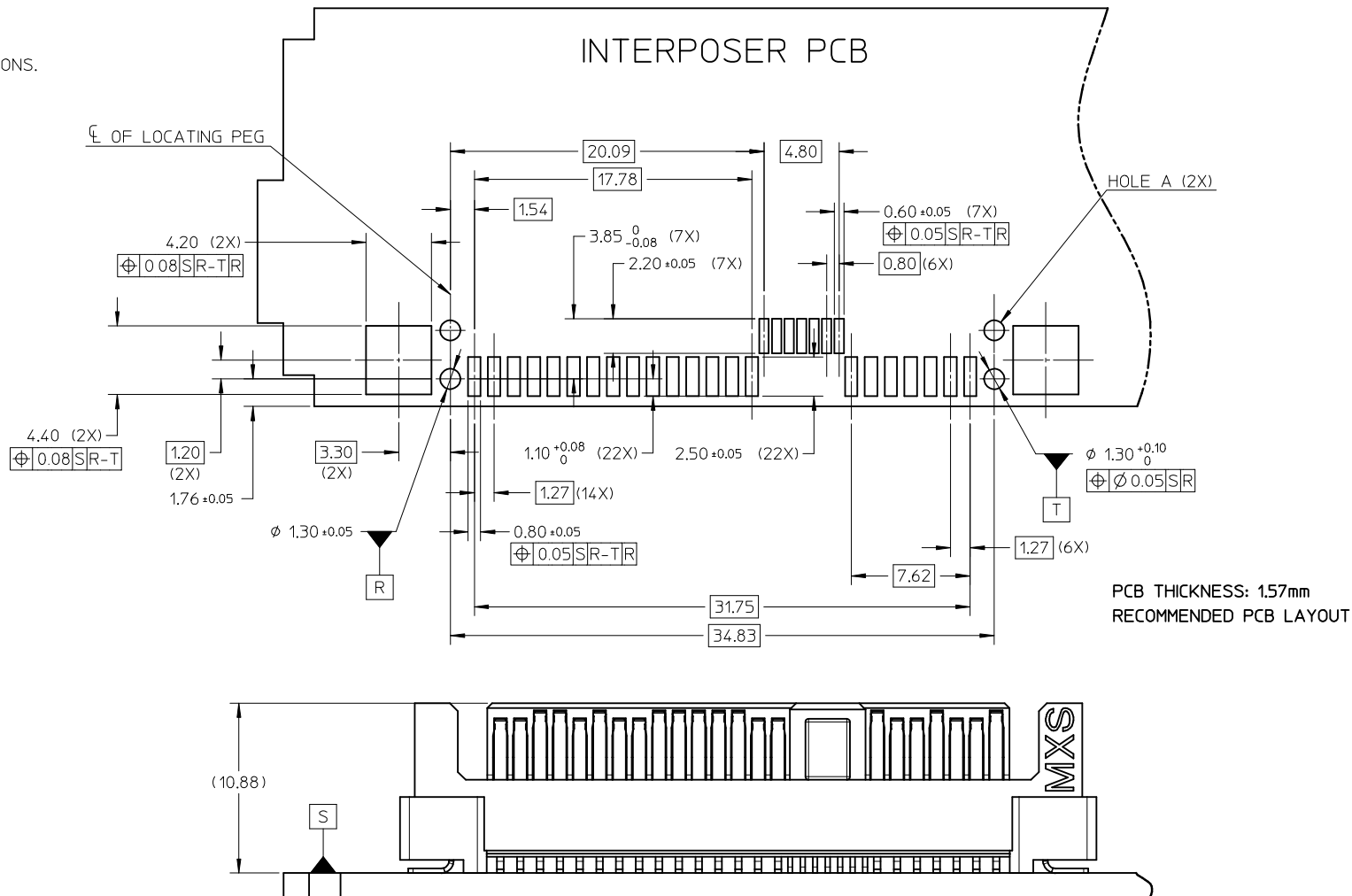
SEE SHEET 6 EC NO: S2009-0661 DRAWN: MENARLY CHKD: CGOH APPR: BOKOK	DESCRIPTION	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION					
				mm	INCH	DRAWN BY	DATE	TITLE SERIAL ATTACH SCSI (SAS) PLUG, VERTICAL MOUNT SMT						
			4 PLACES	±	---	±	---						CGTAN	2005/11/10
			3 PLACES	±	---	±	---	CHECKED BY	DATE	MOLEX INCORPORATED				
			2 PLACES	±	0.20	±	---	SHONG	2005/11/24					
	1 PLACE	±	---	±	---	APPROVED BY	DATE	DOCUMENT NO. SD-78012-101						
ANGULAR ± 3 °			KCLING		2005/11/24	SHEET NO. 2 OF 6								
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					MATERIAL NO. 78012-0011						THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
					SIZE A3									



SEE SHEET 6 EC NO: S2009-0661 DRWNGEMARLY CHKD:CGOH APPR:BOKOK 2009/03/11 2009/03/12 2009/03/13	DESCRIPTION	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 ATTACH SCSI (SAS) PLUG, VERTICAL MOUNT SMT			
			4 PLACES	± ---	± ---	CHECKED BY	DATE				
			3 PLACES	± ---	± ---	SHONG	2005/11/24				
			2 PLACES	± 0.20	± ---	APPROVED BY	DATE				
			1 PLACE	± ---	± ---	KCLING	2005/11/24				
			ANGULAR ± 3 °		MATERIAL NO. 78012-0011		DOCUMENT NO. SD-78012-101		SHEET NO. 3 OF 6		
			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						
			A2		SIZE A3						

NOTES:

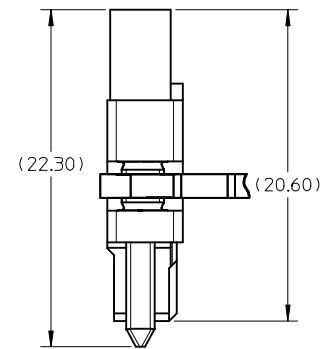
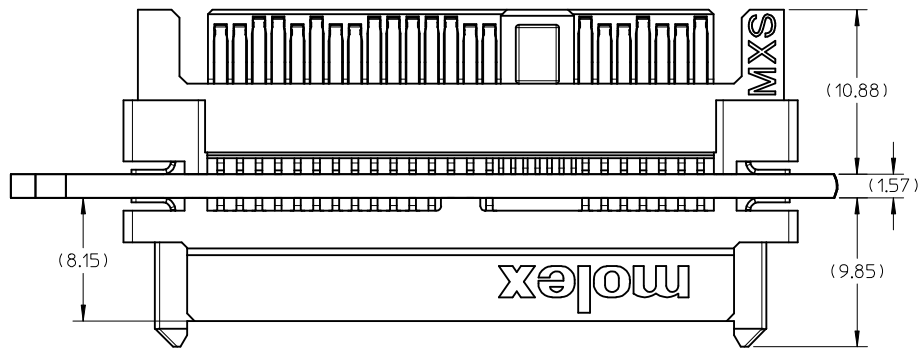
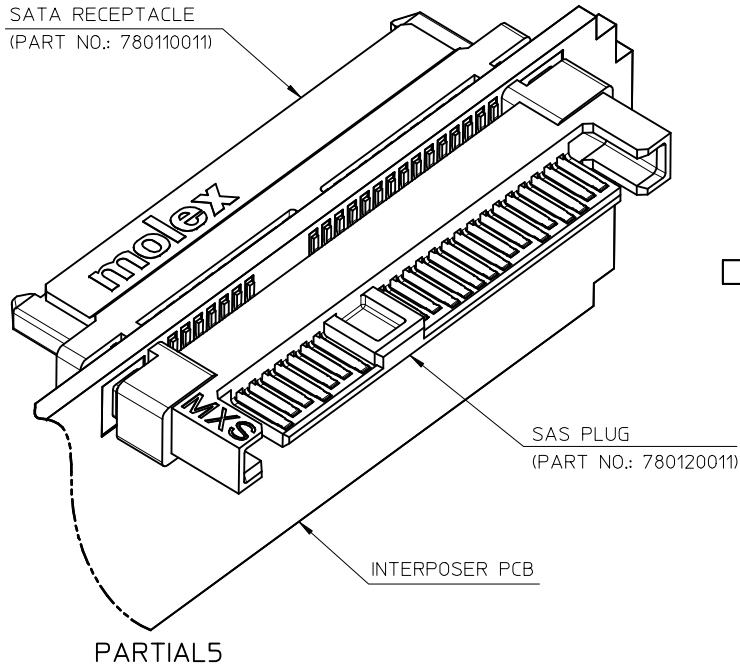
- REFER TO SD-78011-101 FOR HOLES A DETAIL DIMENSIONS.



QUALITY SYMBOLS		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 ATTACH SCSI (SAS) PLUG, VERTICAL MOUNT SMT	
				3 PLACES	± ---	CHECKED BY	DATE	MOLEX INCORPORATED	
				2 PLACES	± 0.20	SHONG	2005/11/24	DOCUMENT NO.	
				1 PLACE	± ---	APPROVED BY	DATE	SHEET NO.	
				ANGULAR ± 3 °		KCLING	2005/11/24	4 OF 6	
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.			
						78012-0011		SD-78012-101	
						THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

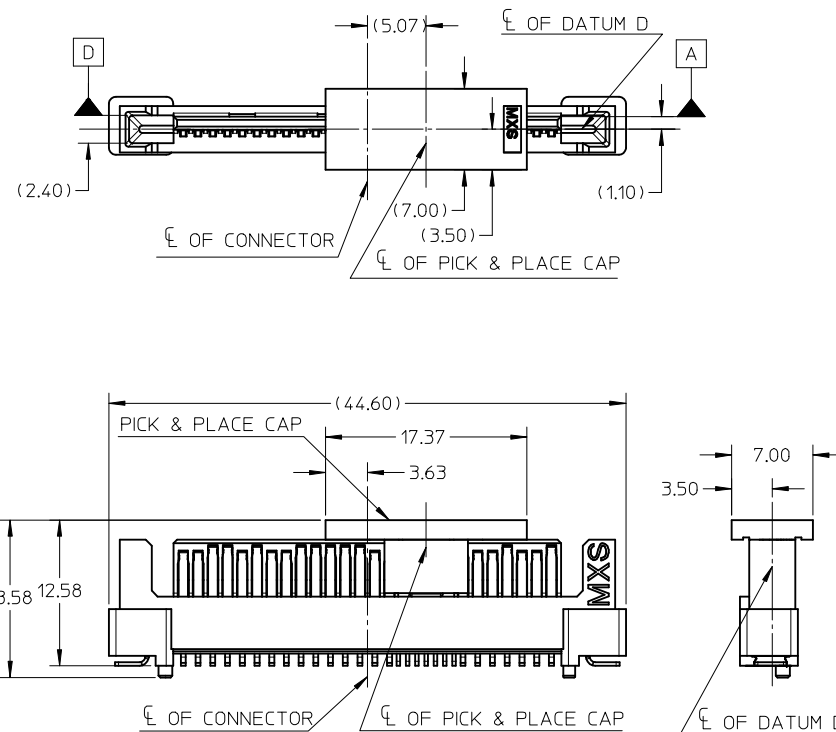
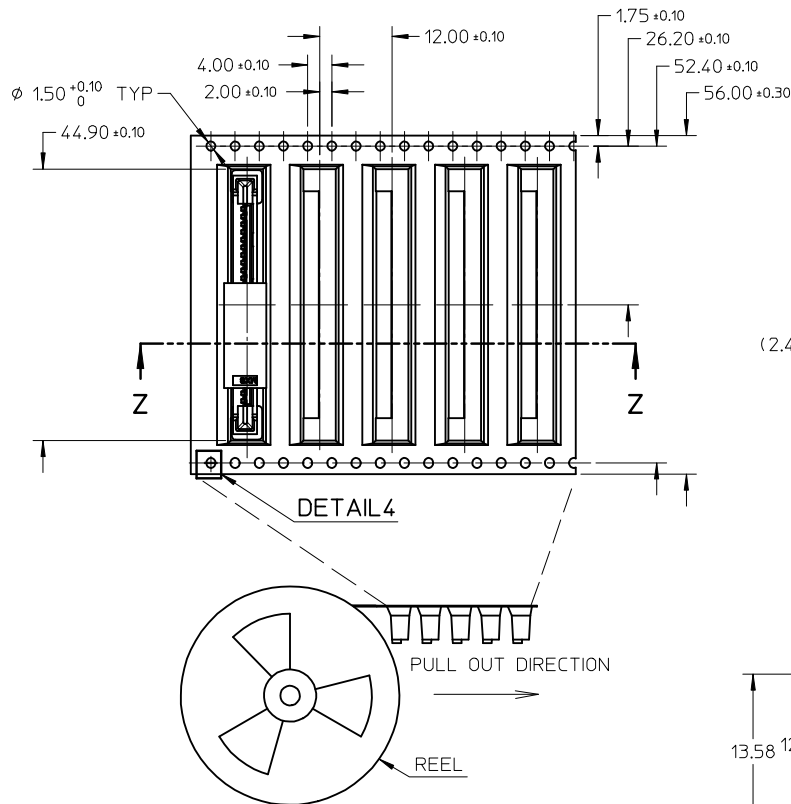
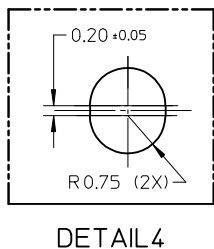
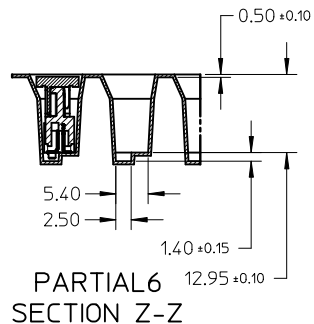
10 9 8 7 6 5 4 3 2 1

- NOTES:
1. APPLICATION AS SHOWN IN SHEET 5/6.
 2. REFER TO SD-78011-101 FOR THE DETAILS OF SATA RECEPTACLE.



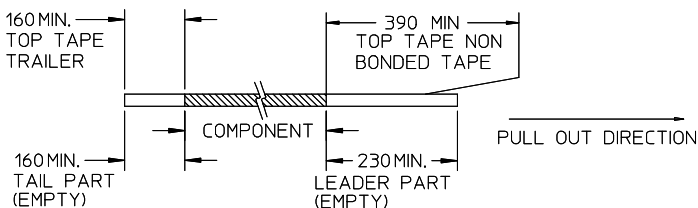
SEE SHEET 6 EC NO: S2009-0661 DRWN:GMENARLY CHKD:CGOH APPR:BOKOK	2009/03/11 2009/03/12 2009/03/13	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
						DRAWN BY CGTAN	DATE 2005/11/10	TITLE SERIAL ATTACH SCSI (SAS) PLUG, VERTICAL MOUNT SMT			
						CHECKED BY SHONG	DATE 2005/11/24				
						APPROVED BY KCL ING	DATE 2005/11/24	MOLEX INCORPORATED			
				ANGULAR ± 3 °		MATERIAL NO. 78012-0011					
				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					

TAPE & REEL PACKING

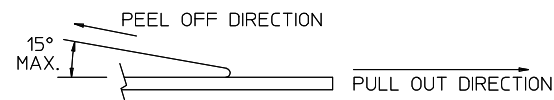


NOTES:

1. LEADER AND TRAILER TAPE



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



- TAPE AND REEL SPECIFICATION IS AS PER EIA-481.
- TAPE AND REEL QUANTITY : 250 PCS/ REEL.
- THE TAPE IS TREATED FOR ANTI-STATIC.

CHANGED T&R QTY	EC NO: S2009-0661	2009/03/11	2009/03/12	2009/03/13
DRWN:GEMARLY	CHKD:CGOH	APPR:BOKOK		
A2				

QUALITY SYMBOLS	DESCRIPTION
▽=0	
◻=0	

GENERAL TOLERANCES (UNLESS SPECIFIED)	
4 PLACES	± ---
3 PLACES	± ---
2 PLACES	± 0.20
1 PLACE	± ---
ANGULAR ± 3 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
CGTAN	2005/11/10
CHECKED BY	DATE
SHONG	2005/11/24
APPROVED BY	DATE
KCLING	2005/11/24
MATERIAL NO.	
78012-0011	
SIZE	
A3	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	
TITLE		
SERIAL ATTACH SCSI (SAS) PLUG, VERTICAL MOUNT SMT		
MOLEX INCORPORATED		
DOCUMENT NO.		SHEET NO.
SD-78012-101		6 OF 6
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		