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Part Number: [0784480001](#)
Status: **Active**
Overview: [serial ata combo plugs and receptacles](#)
Description: 1.27mm (.050") Pitch Serial ATA Device Plug, Straddle Mount, with Latch, 22 Circuits, Tape on Reel Packaging, Lead-free

Documents:

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)
[Product Specification PS-78448-001 \(PDF\)](#)

Agency Certification

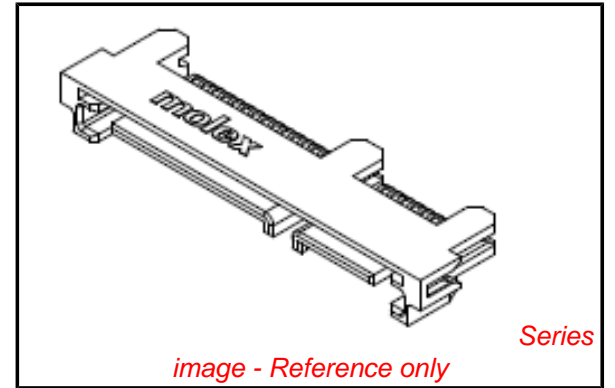
CSA LR19980
 UL E29179

General

Product Family PCB Headers
 Series [78448](#)
 Application Board-to-Board
 Comments Latch version
 Overview [serial ata combo plugs and receptacles](#)
 Product Name Serial ATA

Physical

Breakaway No
 Circuits (Loaded) 22
 Circuits (maximum) 22
 Color - Resin Black
 Durability (mating cycles max) 500
 First Mate / Last Break Yes
 Flammability 94V-0
 Glow-Wire Compliant No
 Guide to Mating Part Yes
 Keying to Mating Part Yes
 Lock to Mating Part Yes
 Material - Metal Copper Alloy
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin High Temperature Thermoplastic
 Number of Rows 1
 Orientation Parallel
 PCB Locator No
 PCB Retention None
 PCB Thickness Recommended (in) 0.041 In
 PCB Thickness Recommended (mm) 1.04 mm
 Packaging Type Embossed Tape on Reel
 Pitch - Mating Interface (in) 0.050 In
 Pitch - Mating Interface (mm) 1.27 mm
 Pitch - Term. Interface (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
 Stackable No
 Temperature Range - Operating 0°C to +55°C



EU RoHS

ELV and RoHS Compliant
REACH SVHC Contains SVHC: No
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

[78448Series](#)

Mates With

Molex Serial ATA and SAS Receptacles

Termination Interface: Style Straddle 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)
Max. Cycles at Max. Process Temperature 1
Process Temperature max. C 260

Material Info

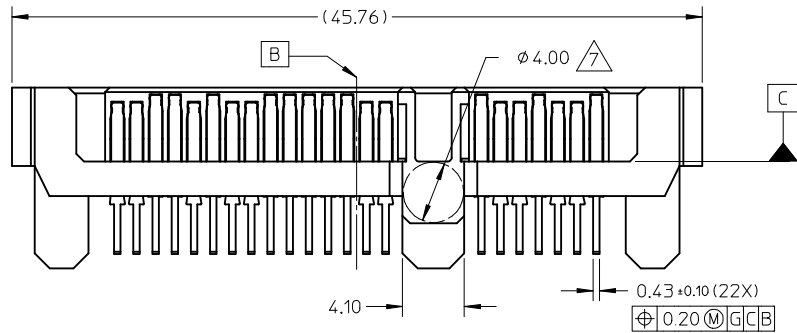
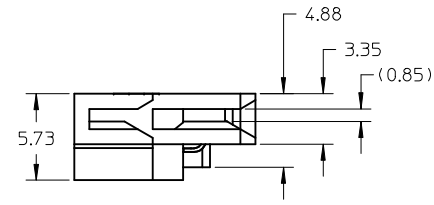
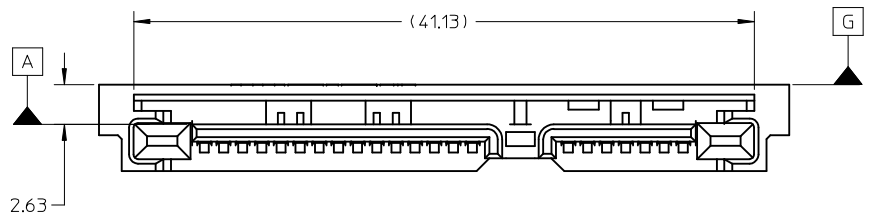
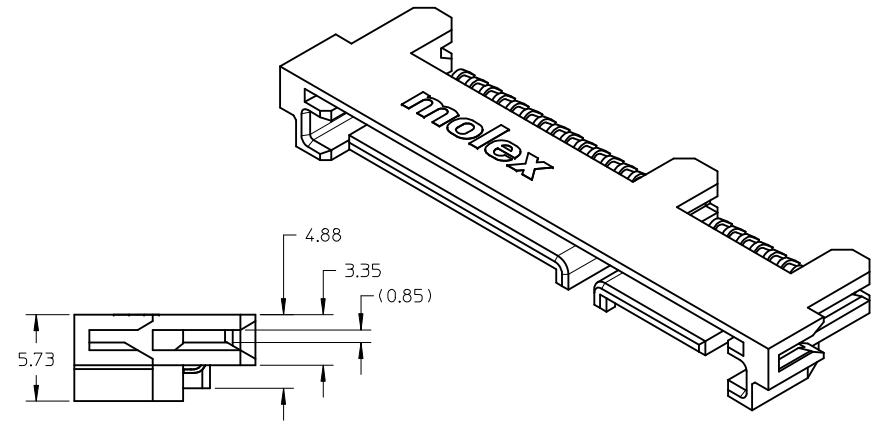
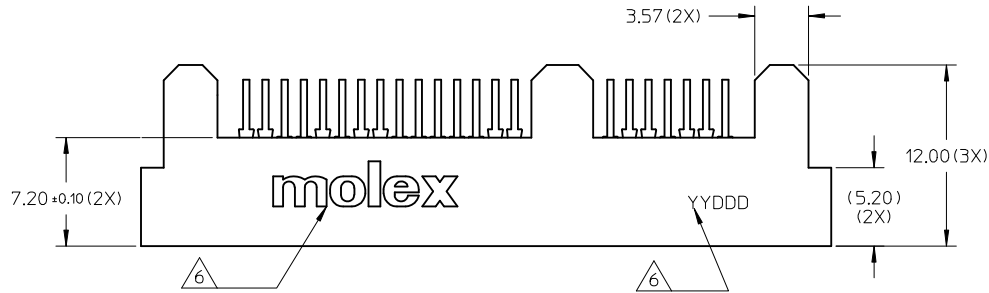
Reference - Drawing Numbers

Product Specification PS-78448-001
Sales Drawing SD-78448-001

This document was generated on 05/31/2010

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PART NUMBER	PACKAGING
78448-0001	TAPE & REEL
78448-0011	TRAY

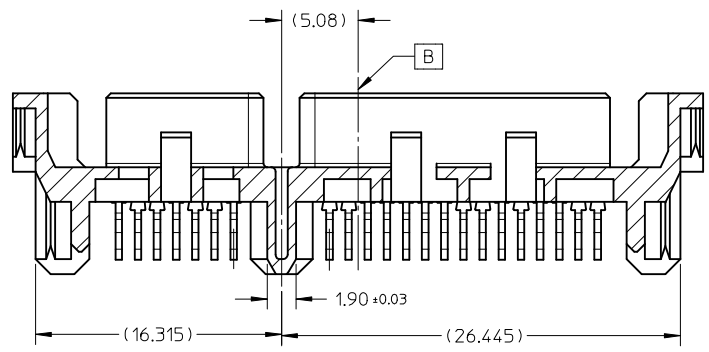


NOTES:

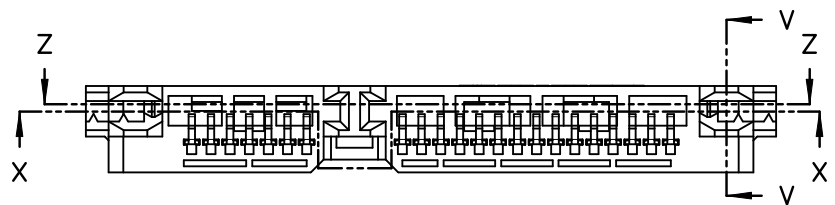
- MATERIALS:
HOUSING: LCP, UL94V-0, COLOR: BLACK
TERMINAL: COPPER ALLOY.
- FINISHES:
CONTACT: 0.76µM MIN. GOLD OVER 1.27µM MIN. NICKEL UNDERPLATE.
SOLDERTAIL: 2.54µM MIN. TIN OVER 1.27µM MIN. NICKEL UNDERPLATE.
- PRODUCT SPECIFICATION: PS-78448-001
- PACKAGING INFORMATION: SEE TABLE.
- MATES WITH: MOLEX SATA AND SAS RECEPTACLES SERIES
- MOLEX LOGO AND DATE CODE LOCATED APPROXIMATELY AS SHOWN.
- VACUUM PICKUP AREA.
- NON-FUNCTIONAL CORING MAY VARY.

SEE SHEET 3 EC NO: S2009-0651 DRWN:GMENARLY 2009/03/13 CHKD:CGOH 2009/03/13 APPR:BOKOK 2009/03/14	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY GMENARLY	DATE 2008/07/15	TITLE SERIAL ATA PLUG WITH LATCHING STRADDLE MOUNT			
		4 PLACES	± ---	± ---	CHECKED BY YKOH	DATE 2008/08/01	MOLEX INCORPORATED			
		3 PLACES	± ---	± ---	APPROVED BY BOKOK	DATE 2008/08/01	DOCUMENT NO. SD-78448-001		SHEET NO. 1 OF 6	
			2 PLACES	± 0.20	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				
			1 PLACE	± ---	± ---	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
			ANGULAR ± 3 °		SEE TABLE					

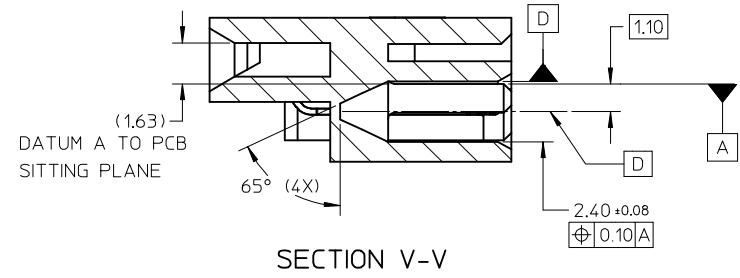
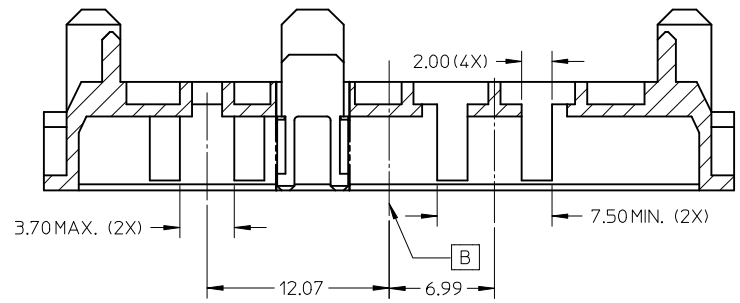
10 9 8 7 6 5 4 3 2 1



SECTION Z-Z



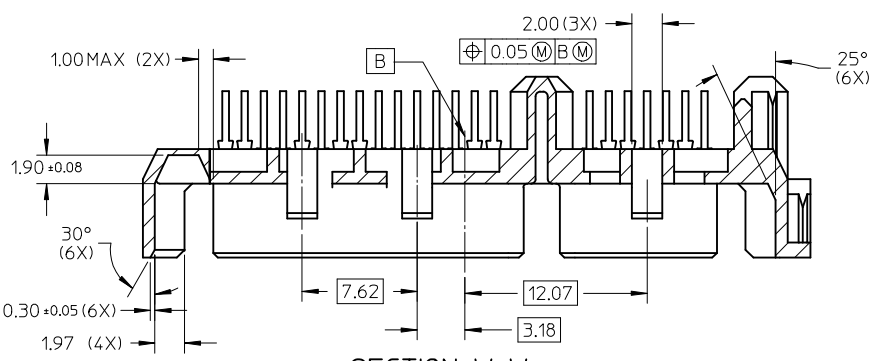
SECTION X-X



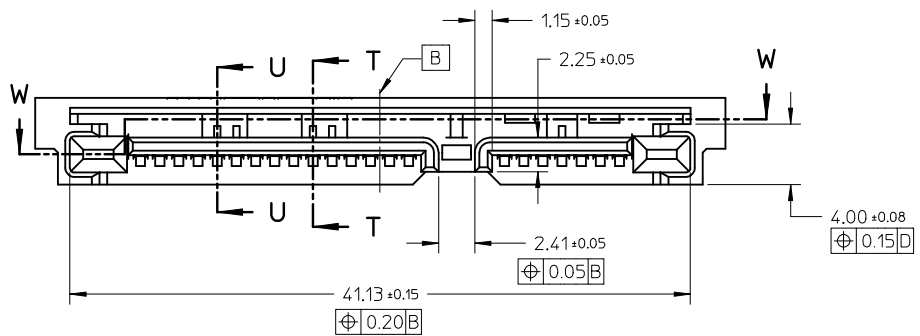
SECTION V-V

SEE SHEET 3 EC NO: S2009-0651 DRWN:GMENARLY 2009/03/13 CHKD:CGOH 2009/03/13 APPR:BOKOK 2009/03/14	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 ± --- ± ---	DRAWN BY DATE GMENARLY 2008/07/15 CHECKED BY DATE YKOH 2008/08/01 APPROVED BY DATE BOKOK 2008/08/01		TITLE		SERIAL ATA PLUG WITH LATCHING STRADDLE MOUNT			
		ANGULAR ± 3 °		MATERIAL NO.		MOLEX INCORPORATED				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		DOCUMENT NO.		SD-78448-001		
				SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
								SHEET NO. 2 OF 6		

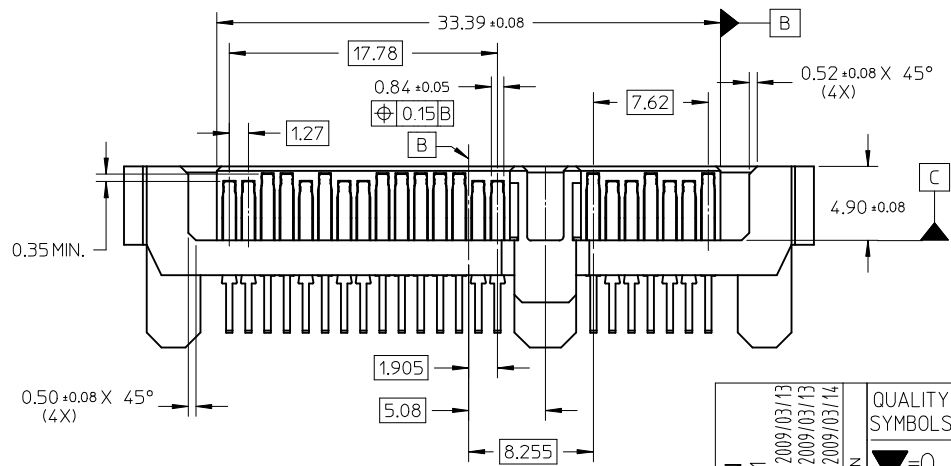
9 8 7 6 5 4 3 2 1



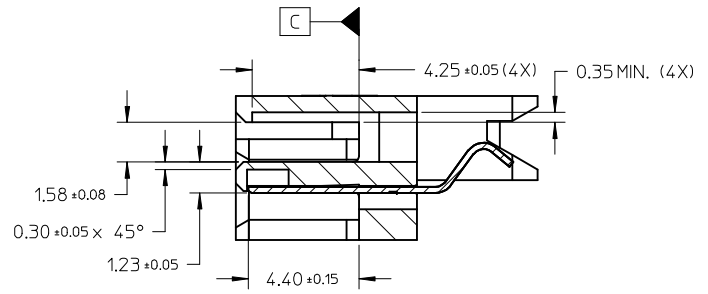
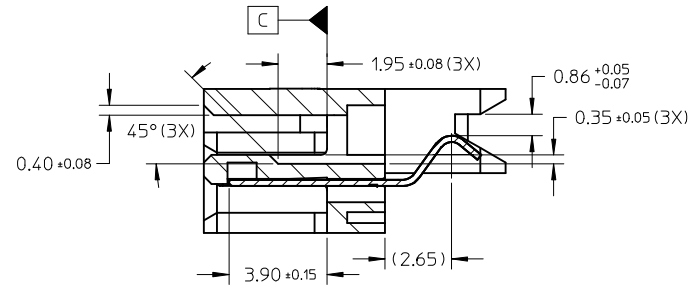
SECTION W-W



SECTION U-U



SECTION T-T

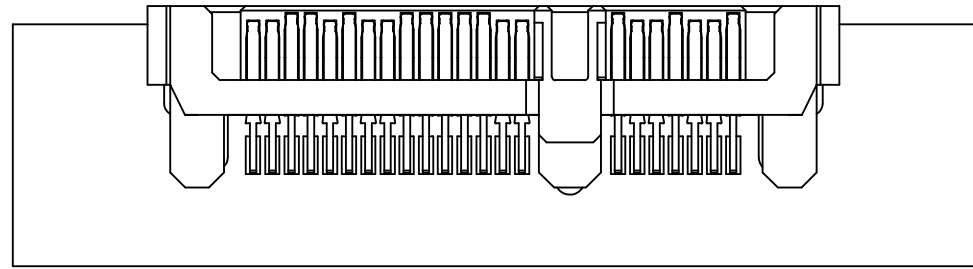
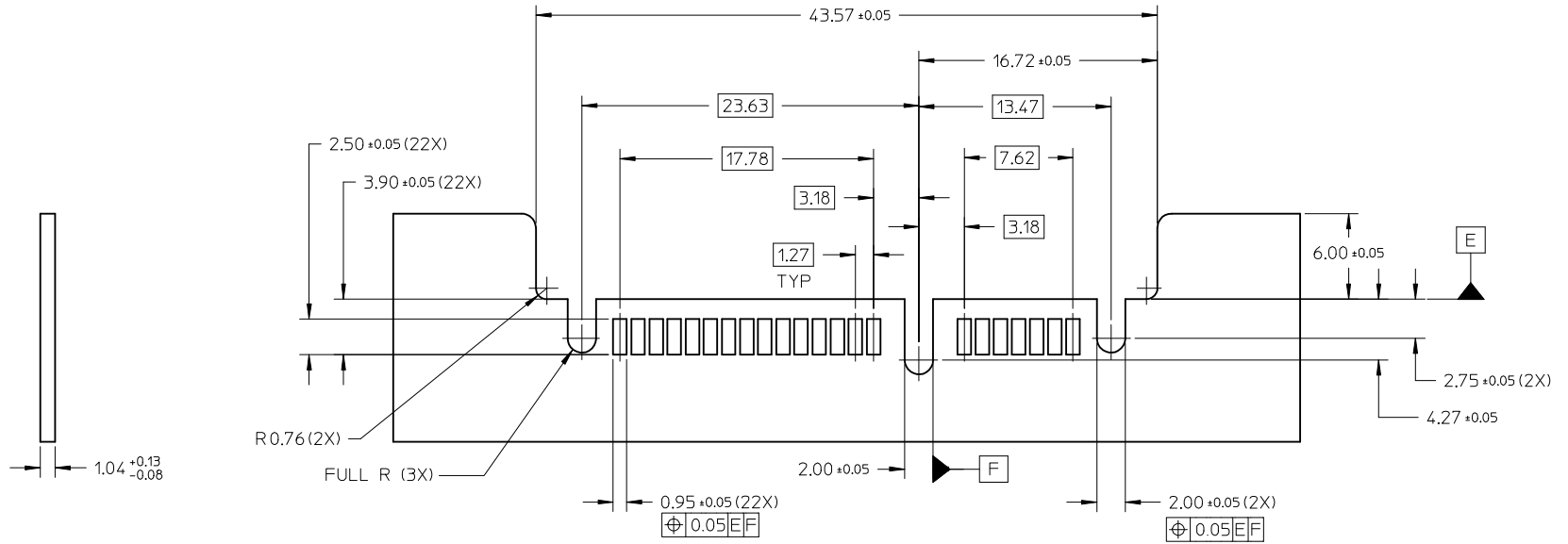


REV	DESCRIPTION	DATE	APPR	CHKD	DRWN	EC NO
A2	ADD DIMENSION	2009/03/13	BOKOK	CGOH	GMENARLY	S2009-0651
		2009/03/13				
		2009/03/14				

QUALITY SYMBOLS		
▽=0		
∇=0		
GENERAL TOLERANCES (UNLESS SPECIFIED)		
	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.20	± ---
1 PLACE	± ---	± ---
ANGULAR ± 3 °		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM ONLY		NTS	METRIC	☉
DRAWN BY	DATE	TITLE		
GMENARLY	2008/07/15	SERIAL ATA PLUG WITH LATCHING STRADDLE MOUNT		
CHECKED BY	DATE	MOLEX INCORPORATED		
YKOH	2008/08/01	SD-78448-001		
APPROVED BY	DATE	SHEET NO.		
BOKOK	2008/08/01	3 OF 6		
MATERIAL NO.	DOCUMENT NO.	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
SEE TABLE				

10 9 8 7 6 5 4 3 2 1



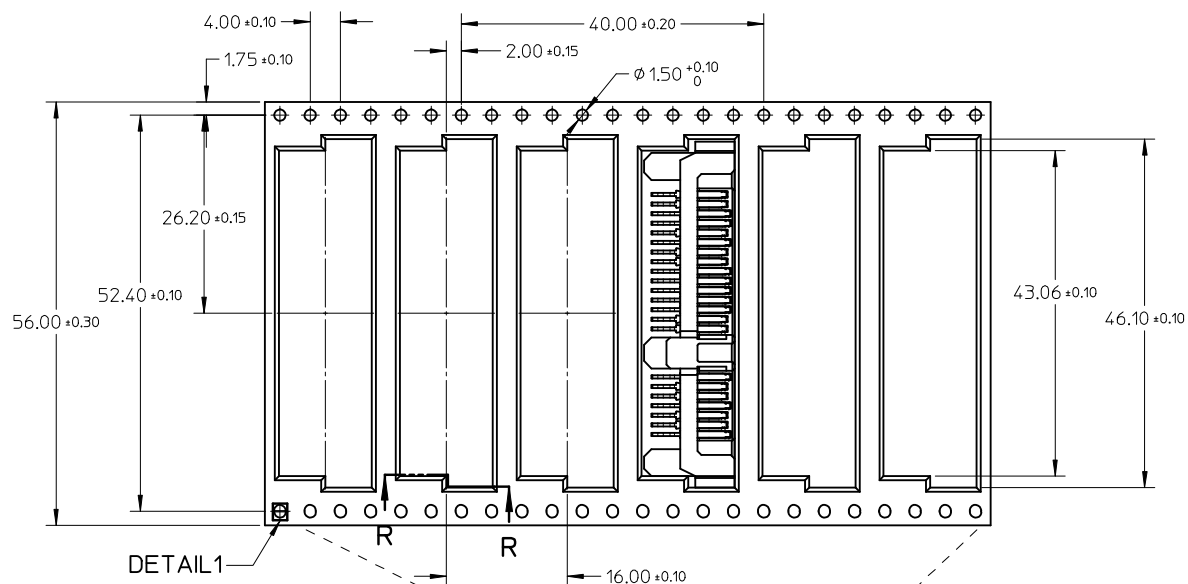
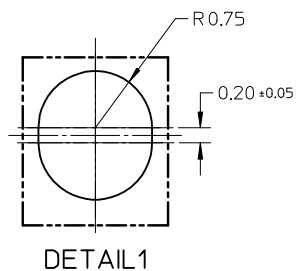
RECOMMENDED PCB LAYOUT

SEE SHEET 3 EC NO: S2009-0651 DRWN:GMENARLY 2009/03/13 CHKD:CGOH 2009/03/13 APPR:BOKOK 2009/03/14	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▼=0 □=0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	MM ONLY	NTS	METRIC	
	DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY	DATE	TITLE	
	REV		GMENARLY	2008/07/15	SERIAL ATA PLUG WITH LATCHING STRADDLE MOUNT	
			CHECKED BY	DATE	MOLEX INCORPORATED	
			YKOH	2008/08/01		
			APPROVED BY	DATE	SD-78448-001	
			BOKOK	2008/08/01		
			MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
			SEE TABLE		4 OF 6	
			SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
			A3			

9 8 7 6 5 4 3 2 1

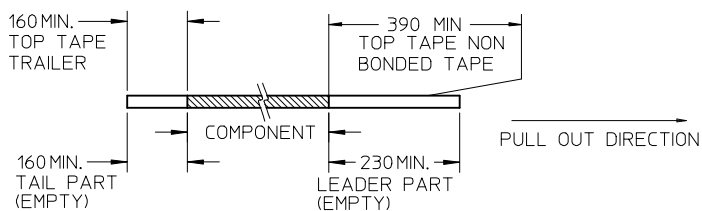
PACKAGING INFORMATION

PART ORIENTATION IN TAPE & REEL

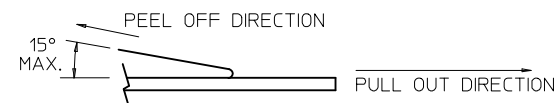


NOTES:

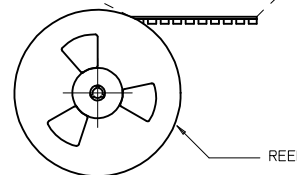
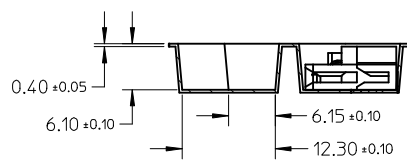
1. LEADER AND TRAILER TAPE



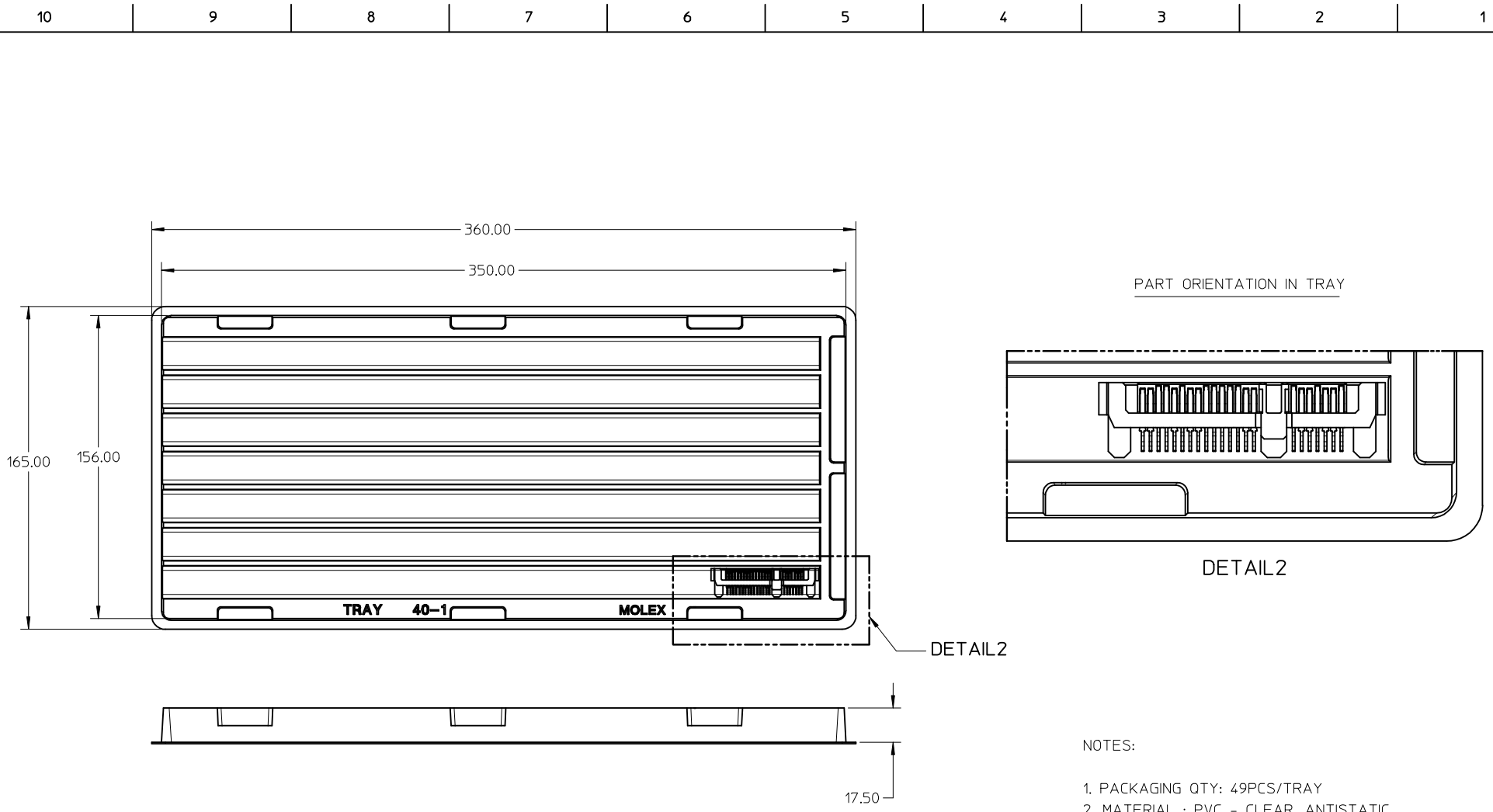
2. PEELING OFF FORCE OF THE TOP TAPE: 20 - 80gf. (PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)



- 3. TAPE AND REEL SPECIFICATION IS AS PER EIA-481.
- 4. TAPE AND REEL QUANTITY : 650 PCS/ REEL.
- 5. THE TAPE IS TREATED FOR ANTI-STATIC.



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	▽=0 ◻=0	mm	INCH	MM ONLY	NTS	METRIC	
		4 PLACES ± ---	± ---	DRAWN BY	DATE	TITLE	
		3 PLACES ± ---	± ---	CHECKED BY	DATE	SERIAL ATA PLUG WITH LATCHING STRADDLE MOUNT	
	2 PLACES ± 0.20	± ---	APPROVED BY	DATE	MOLEX INCORPORATED		
	1 PLACE ± ---	± ---	BOKOK	2008/08/01	DOCUMENT NO. SD-78448-001		
	ANGULAR ± 3 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.	SHEET NO. 5 OF 6		
A2	REV	SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			



- NOTES:
1. PACKAGING QTY: 49PCS/TRAY
 2. MATERIAL : PVC - CLEAR, ANTISTATIC

SEE SHEET 3 EC NO: S2009-0651 DRWN:GMENARLY 2009/03/13 CHKD:CGOH 2009/03/13 APPR:BOKOK 2009/03/14	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		$\nabla=0$ $\square=0$	mm	INCH	DRAWN BY GMENARLY	DATE 2008/07/15	TITLE SERIAL ATA PLUG WITH LATCHING STRADDLE MOUNT				
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± ---	ANGULAR ± 3 °		CHECKED BY YKOH	DATE 2008/08/01	MOLEX INCORPORATED				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		MATERIAL NO.	DOCUMENT NO.	SHEET NO.			
A2				A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					