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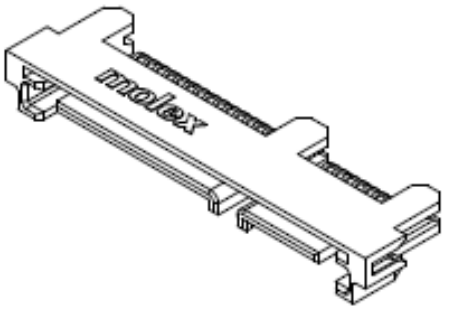
Part Number: 0784480001
Status: Active
Overview: serial_ata_combo_plugs_and_receptacles
Description: 1.27mm (.050") Pitch Serial ATA Device Plug, Straddle Mount, with Latch, 22 Circuits, Tape on Reel Packaging, Lead-free



Series image - Reference only

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
Halogen-Free

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

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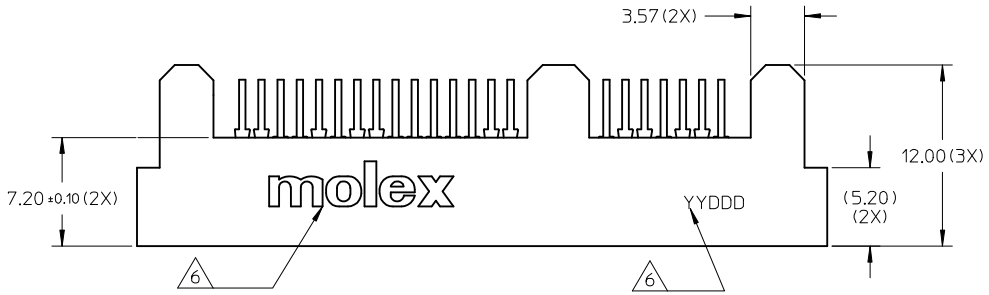
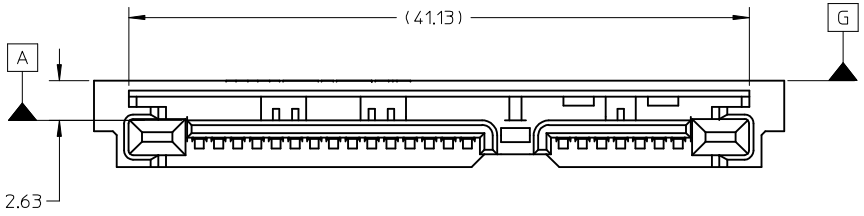
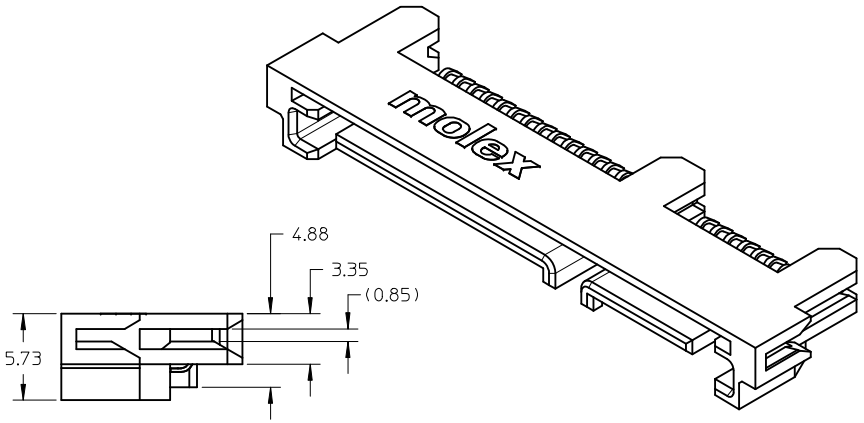
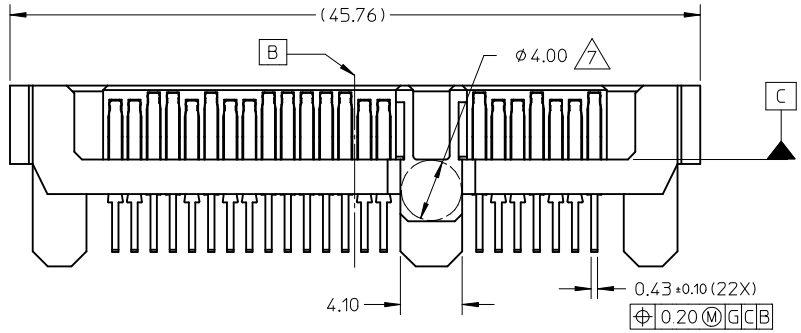
PART NUMBER	PACKAGING
78448-0001	TAPE & REEL
78448-0011	TRAY









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

SEE SHEET 3
EC NO: S2009-0651 2009/03/13
DRWN:GMENARLY 2009/03/13
CHKD:CGOH 2009/03/14
APPR:BOKOK
DESCRIPTION
REV

A2

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: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

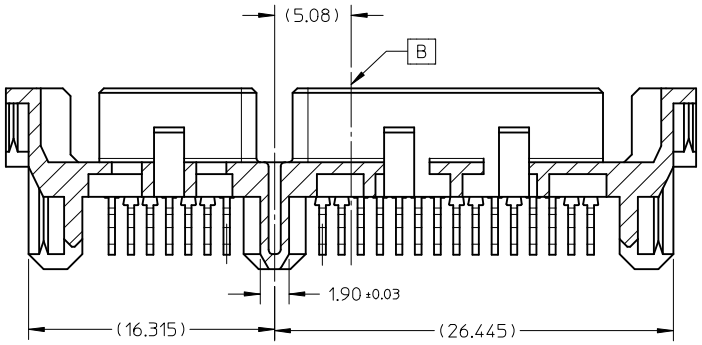
		DATE
DRAWN BY	GMENARLY	2008/07/15
CHECKED BY	YKOH	2008/08/01
APPROVED BY	BOKOK	2008/08/01

TITLE: SERIAL ATA PLUG WITH LATCHING STRADDLE MOUNT

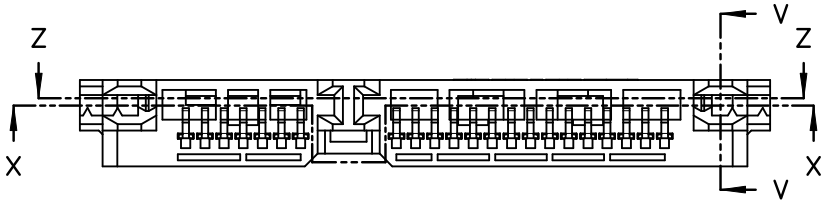
MOLEX INCORPORATED

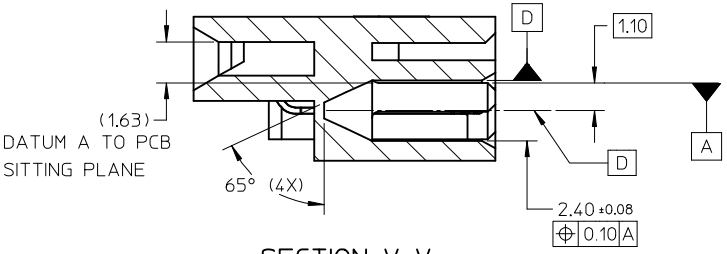
MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-78448-001
SHEET NO.: 1 OF 6
SIZE: A3

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

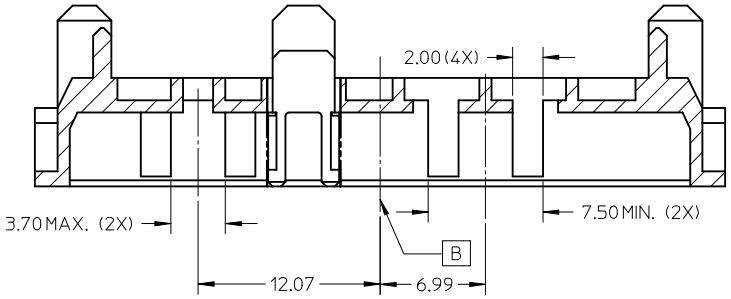


SECTION Z-Z





SECTION V-V



SECTION X-X

SEE SHEET 3	EC NO: S2009-0651	2009/03/13	DRWN: GMENARLY	2009/03/13	CH'KD: CGOH	2009/03/14	APPR: BOKOK
DESCRIPTION	REV	A2					

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: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY	GMENARLY	DATE 2008/07/15
CHECKED BY	YKOH	DATE 2008/08/01
APPROVED BY	BOKOK	DATE 2008/08/01

TITLE: SERIAL ATA PLUG WITH LATCHING STRADDLE MOUNT

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-78448-001
SHEET NO.: 2 OF 6

SIZE A3

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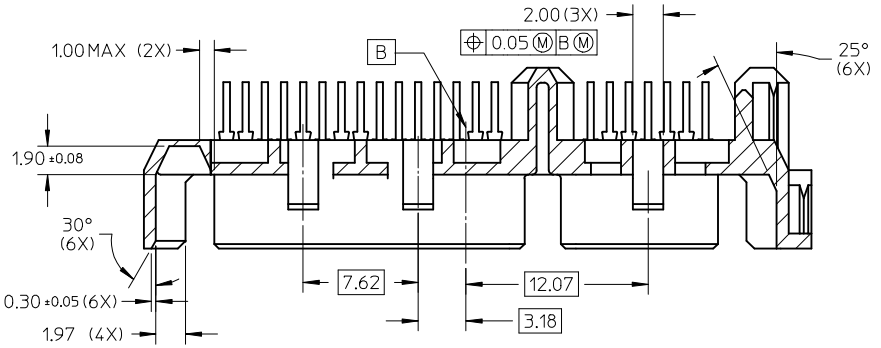
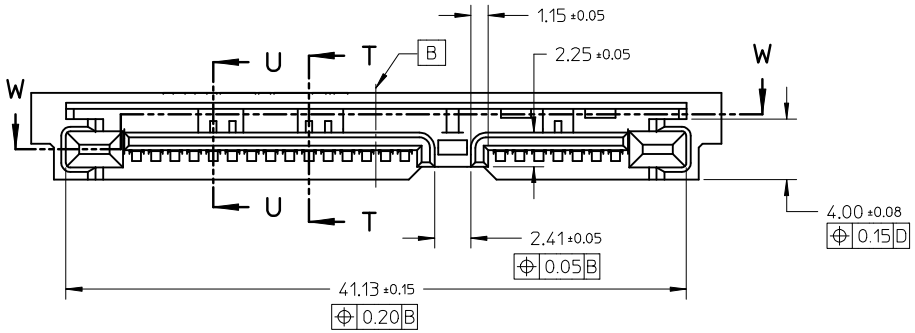
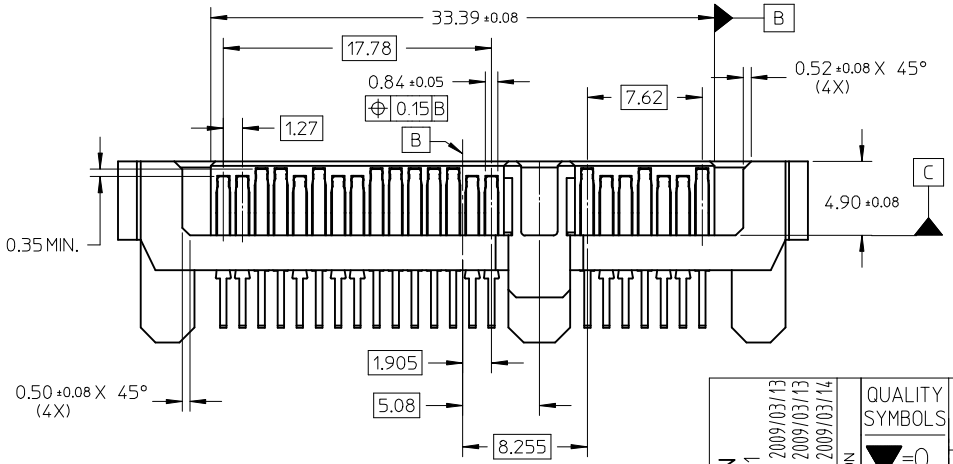
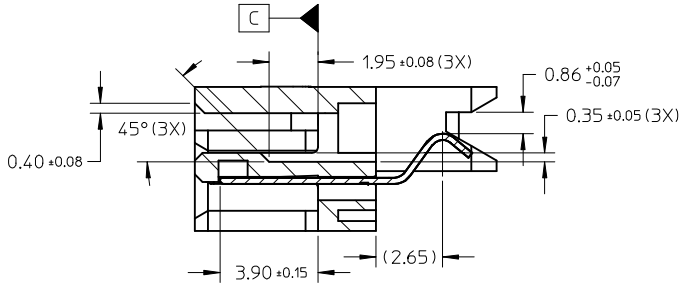


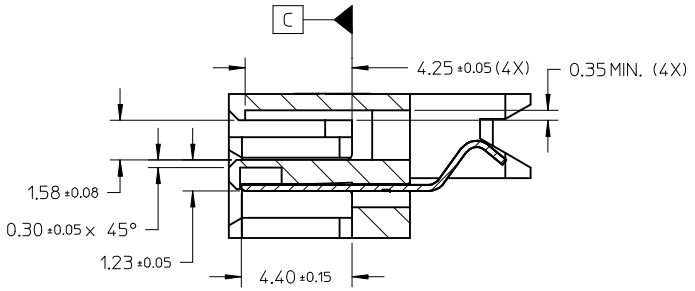
SECTION W-W





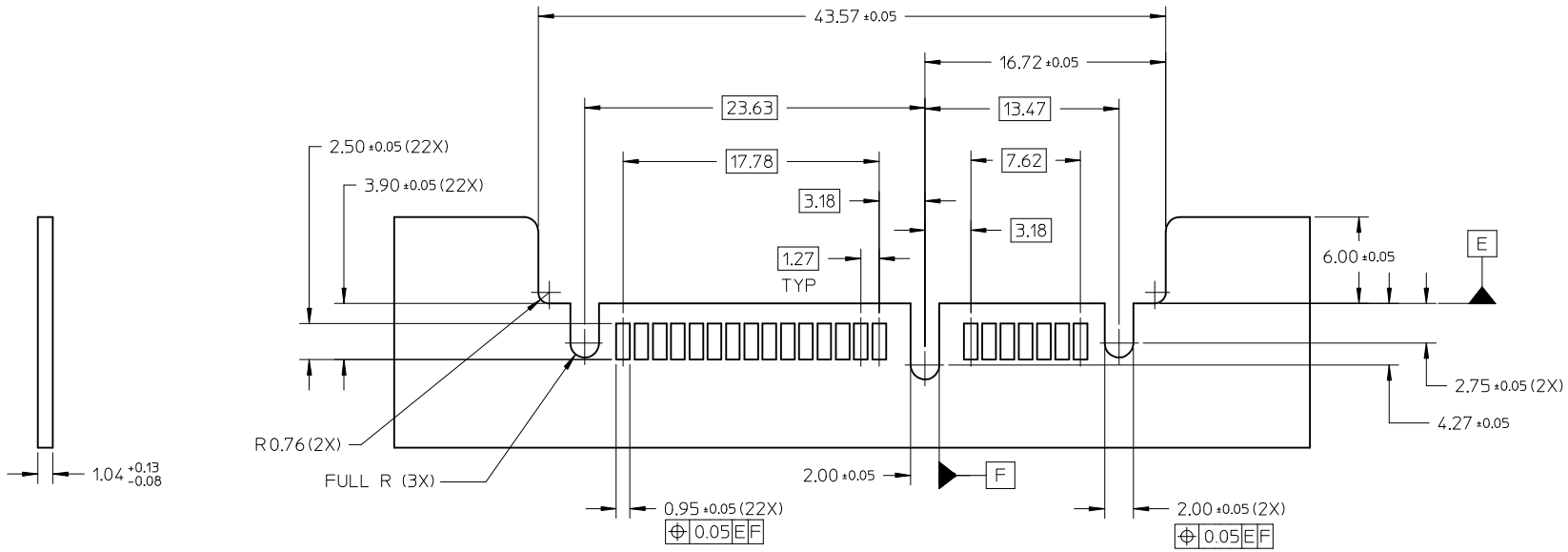


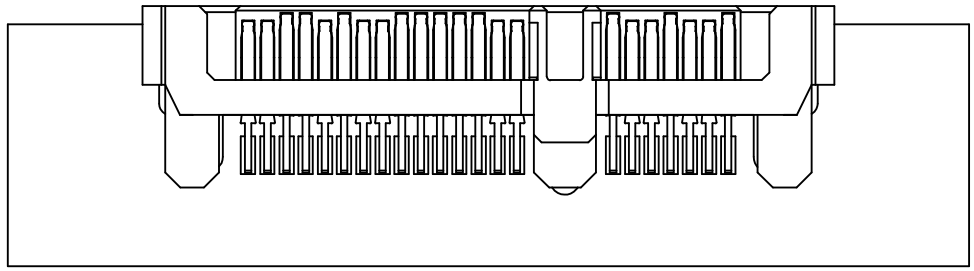
SECTION U-U



SECTION T-T

ADD DIMENSION EC NO: S2009-0651 DRWN:GMENARLY 2009/03/13 CH'KD:CGOH 2009/03/13 APPR:BOKOK 2009/03/14 DESCRIPTION	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: MM ONLY SCALE: NTS DESIGN UNITS: METRIC THIRD ANGLE PROJECTION DRAWN BY: GMENARLY DATE: 2008/07/15 CHECKED BY: YKOH DATE: 2008/08/01 APPROVED BY: BOKOK DATE: 2008/08/01 MATERIAL NO.: SEE TABLE	TITLE: SERIAL ATA PLUG WITH LATCHING STRADDLE MOUNT MOLEX INCORPORATED DOCUMENT NO.: SD-78448-001 SHEET NO.: 3 OF 6 SIZE: A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION
A2 REV					



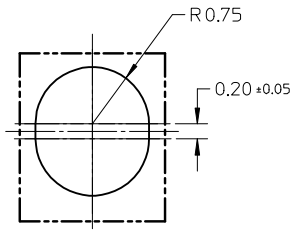


RECOMMENDED PCB LAYOUT

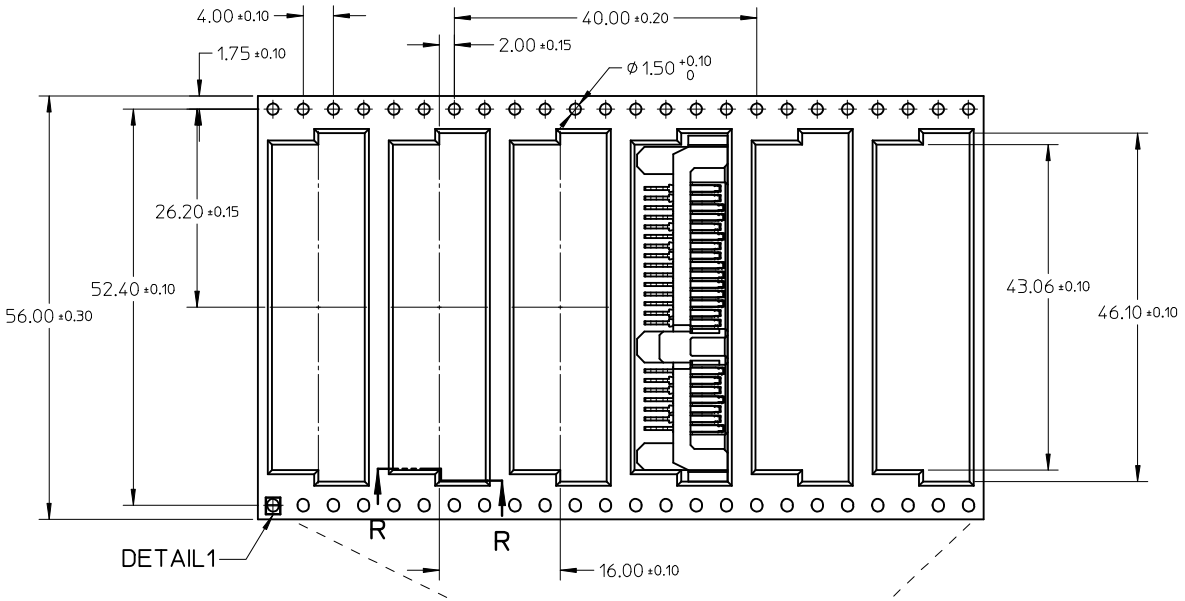
SEE SHEET 3	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
EC NO: S2009-0651 2009/03/13	▼=0		mm / INCH	MM ONLY	NTS	METRIC	
DRWN:GMENARLY 2009/03/13	Ⓒ▽=0	4 PLACES	± --- / ± ---	DRAWN BY: GMENARLY DATE: 2008/07/15	TITLE: SERIAL ATA PLUG WITH LATCHING STRADDLE MOUNT		
CH'KD:CGOH 2009/03/14		3 PLACES	± --- / ± ---	CHECKED BY: YKOH DATE: 2008/08/01			
APPR:BOKOK		2 PLACES	± 0.20 / ± ---	APPROVED BY: BOKOK DATE: 2008/08/01	molex MOLEX INCORPORATED		
DESCRIPTION		1 PLACE	± --- / ± ---	MATERIAL NO.: SEE TABLE	DOCUMENT NO.: SD-78448-001		SHEET NO.: 4 OF 6
REV		ANGULAR ± 3 °			SIZE: A3		
A2	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		

PACKAGING INFORMATION

PART ORIENTATION IN TAPE & REEL

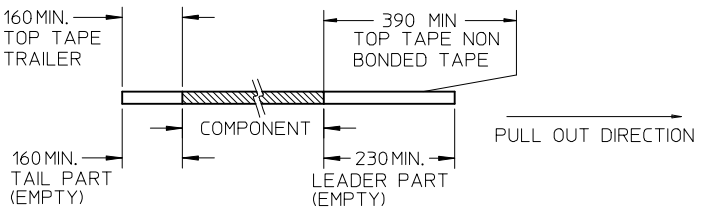


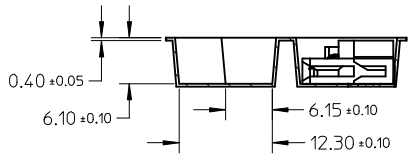
DETAIL1



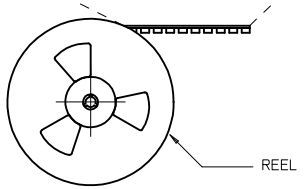
NOTES:

1. LEADER AND TRAILER TAPE



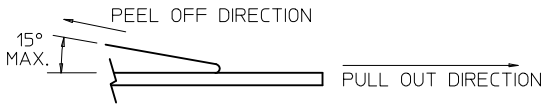


PARTIAL1
OF SECTION R-R



PULL OUT DIRECTION

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.

SEE SHEET 3	EC NO: S2009-0651	2009/03/13	DESCRIPTION
	DRWN:GMENARLY	2009/03/13	
	CH'KD:CGOH	2009/03/14	
	APPR:BOKOK		
A2			REV

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	MM ONLY	SCALE	NTS
DESIGN UNITS	METRIC		THIRD ANGLE PROJECTION
DRAWN BY	GMENARLY	DATE	2008/07/15
CHECKED BY	YKOH	DATE	2008/08/01
APPROVED BY	BOKOK	DATE	2008/08/01
MATERIAL NO.	SEE TABLE		
DOCUMENT NO.	SD-78448-001		SHEET NO. 5 OF 6
SIZE	A3		

TITLE: SERIAL ATA PLUG WITH LATCHING STRADDLE MOUNT

MOLEX INCORPORATED

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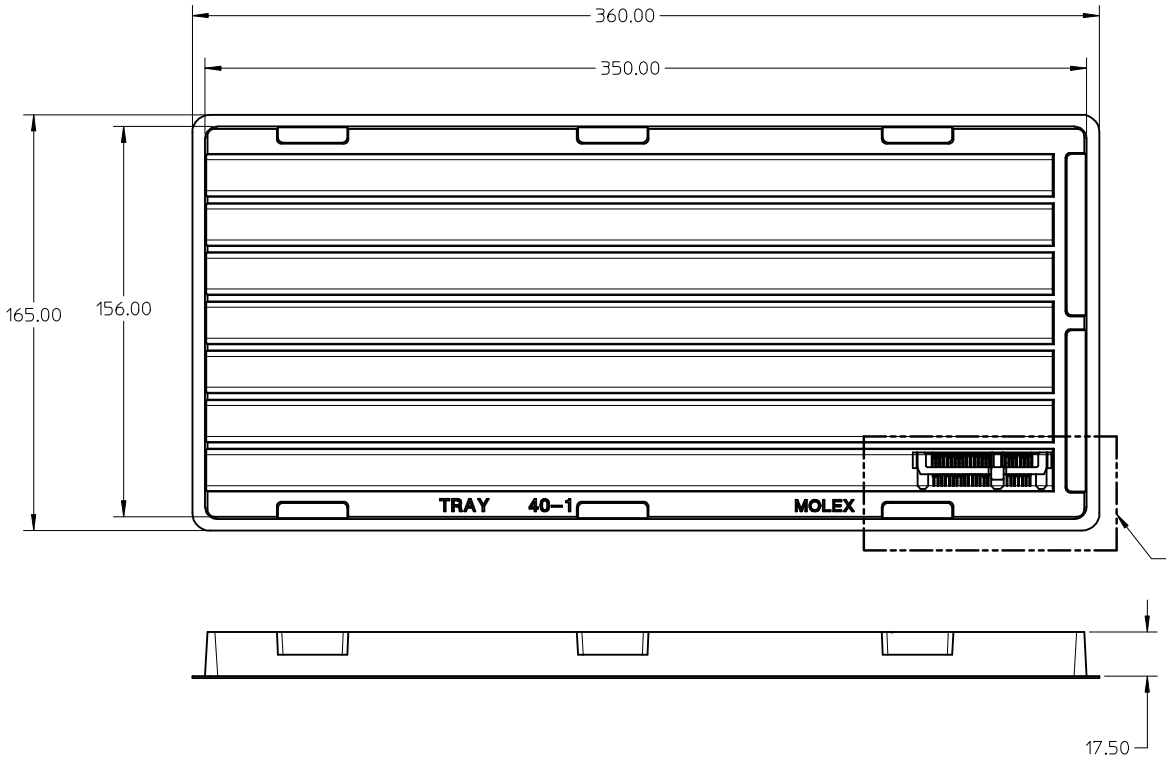
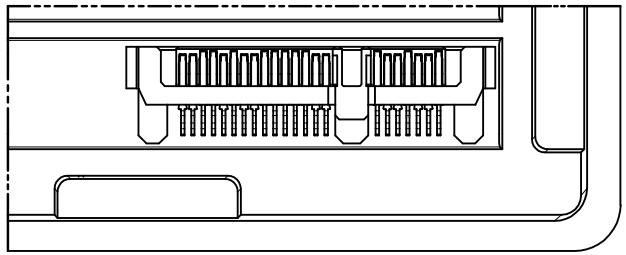


PART ORIENTATION IN TRAY



DETAIL2

NOTES:

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

SEE SHEET 3	EC NO: S2009-0651	2009/03/13
	DRWN:GMENARLY	2009/03/13
	CH'KD:CGOH	2009/03/14
	APPR:BOKOK	
A2	DESCRIPTION	REV

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: MM ONLY	SCALE: NTS	DESIGN UNITS: METRIC	THIRD ANGLE PROJECTION
DRAWN BY: GMENARLY	DATE: 2008/07/15	TITLE: SERIAL ATA PLUG WITH LATCHING STRADDLE MOUNT	
CHECKED BY: YKOH	DATE: 2008/08/01		
APPROVED BY: BOKOK	DATE: 2008/08/01	MOLEX INCORPORATED	
MATERIAL NO.: SEE TABLE		DOCUMENT NO.: SD-78448-001	SHEET NO.: 6 OF 6
SIZE: A3			

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