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Part Number:

0781090001

Status:

Active

Overview:

micro_sata

Description:

1.27mm (.050") Pitch Micro Serial ATA Device Receptacle for 1.8" HDD/SSD, Right Angle, SMT, Mid-Mount, 16 Circuits, Lead free

Documents:

3D Model

Drawing (PDF)

Product Specification PS-78109-001 (PDF)

RoHS Certificate of Compliance (PDF)

General

Product Family

Series

Application

Overview

Product Name

PCB Receptacles

78109

Board-to-Board

micro_sata

Micro Serial ATA, Serial ATA

Physical

Circuits (Loaded)

Circuits (maximum)

Circuits Detail

Color - Resin

Durability (mating cycles max)

Glow-Wire Compliant

Guide to Mating Part

Keying to Mating Part

Lock to Mating Part

Material - Metal

Material - Plating Mating

Material - Plating Termination

Material - Resin

Number of Rows

Orientation

PCB Locator

PCB Retention

Packaging Type

Pitch - Mating Interface (in)

Pitch - Mating Interface (mm)

Plating min: Mating (µin)

Plating min: Mating (µm)

Plating min: Termination (µin)

Plating min: Termination (µm)

Polarized to Mating Part

Polarized to PCB

Stackable

Temperature Range - Operating

Termination Interface: Style

16

16

With Optional Manufacturing Pins (S1 to S7, P1 to P9)

Black

500

No

Yes

Yes

Yes

Copper Alloy

Gold

Tin

Nylon

1

Right Angle

Yes

Yes

Tray

0.050 In

1.27 mm

30

0.76

100

2.54

Yes

Yes

No

-40°C to +105°C

Surface Mount

Electrical

Current - Maximum per Contact

Grounding to PCB

Voltage - Maximum

1.5A

Yes

30V

Solder Process Data

Duration at Max. Process Temperature (seconds)

Lead-free Process Capability

10

Reflow Capable (SMT only)

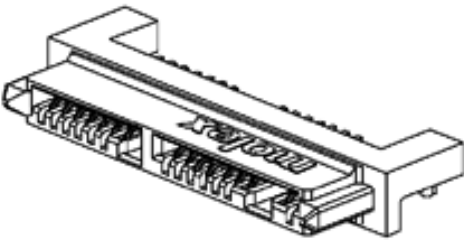


image - Reference only

Series

EU RoHS

ELV and RoHS
Compliant

REACH SVHC

Not Reviewed

Halogen-Free

Status

Not 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

78109Series

Mates With

78103 , 78283 and 78285 Micro SATA
Device Plugs

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

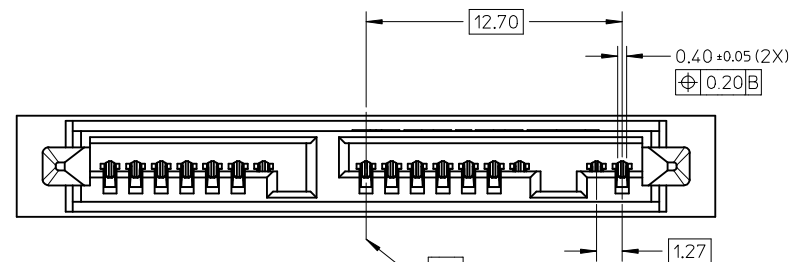
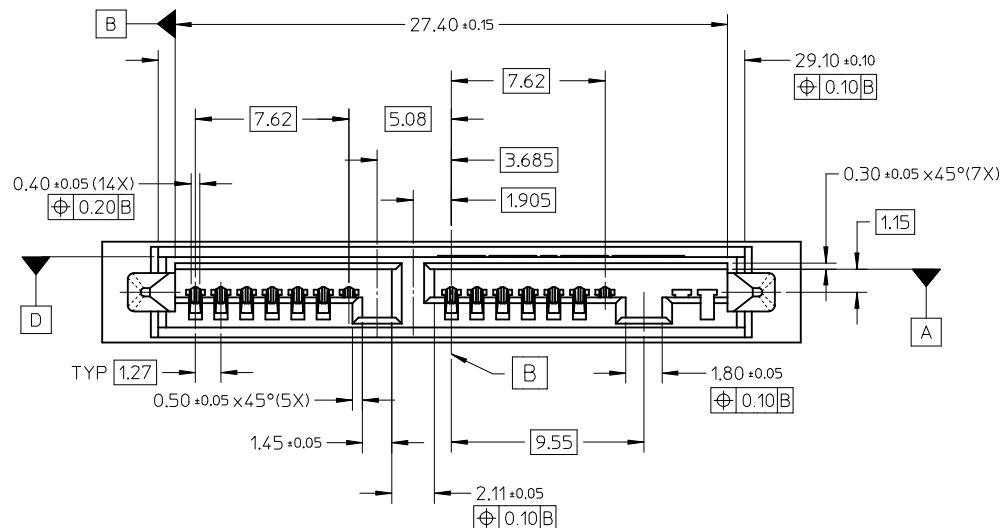
Material Info

Reference - Drawing Numbers

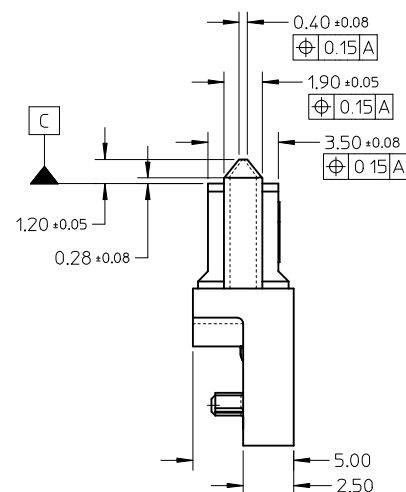
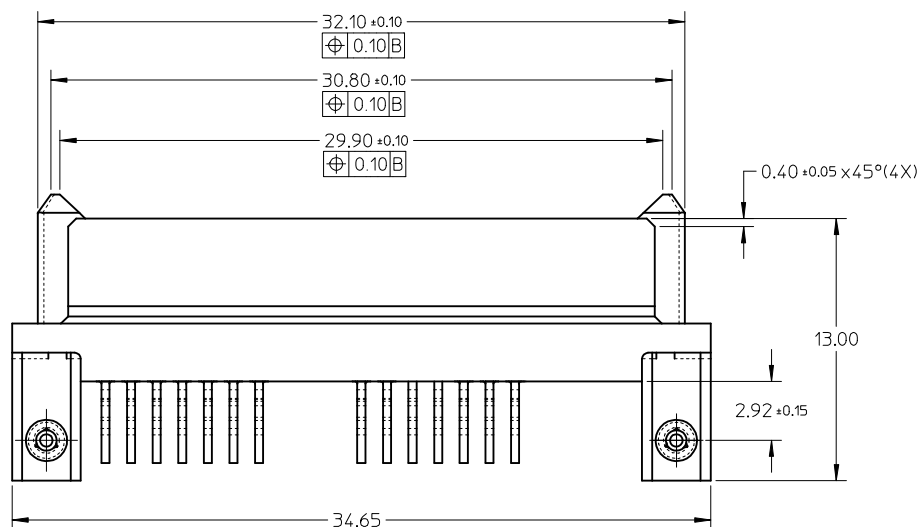
Product Specification	PS-78109-001
Sales Drawing	SD-78109-001

This document was generated on 05/21/2010

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78109-0001



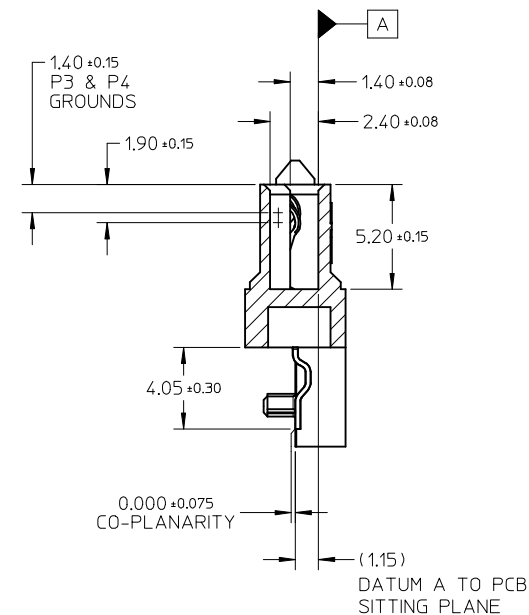
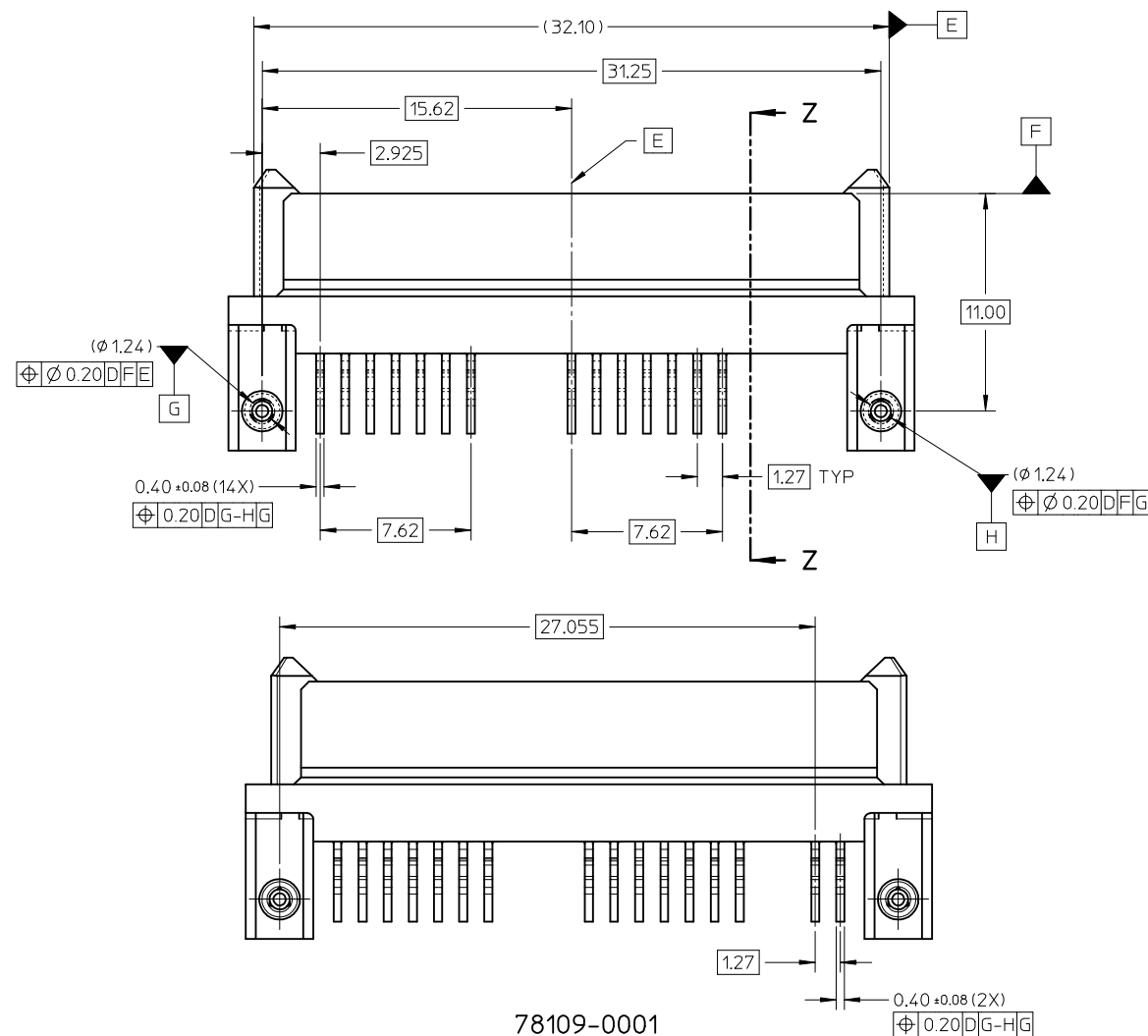
ADD P/NO. & NOTE	
EC NO: S2009-0789	2009/04/17
DRWN: JIAN02	2009/04/20
CHKD: KHLIM	2009/04/20
APPR: BOKOK	2009/04/20
REV	DESCRIPTION
A	

QUALITY SYMBOLS
$\nabla = 0$
$\nabla C = 0$

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	
DRAWN BY	DATE
YKOH	2006/06/27
CHECKED BY	DATE
SHONG	2006/07/28
APPROVED BY	DATE
KCLING	2006/07/28
MATERIAL NO.	
SEE TABLE	
SIZE	
A3	

SCALE NTS	DESIGN UNITS METRIC		THIRD ANGLE PROJECTION
TITLE SERIAL ATA RECEPTACLE 1.8 INCH HDD RIGHT-ANGLE, SMT			
	MOLEX INCORPORATED		
DOCUMENT NO. SD-78109-001			SHEET NO. 2 OF 6



ADD P/NO. & NOTE EC NO: S2009-0789 DRAWN: JIAN02 CHK'D: KHLIM APPR: BOK0K	2009/04/17 2009/04/20 2009/04/20	DESCRIPTION ▽=0 ▽=0	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	DRAWN BY DATE YKOH 2006/06/27				TITLE SERIAL ATA RECEPTACLE 1.8 INCH HDD RIGHT-ANGLE, SMT MOLEX INCORPORATED					
	CHECKED BY DATE SHONG 2006/07/28									
	APPROVED BY DATE KCLING 2006/07/28									
	MATERIAL NO.									
A	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		DOCUMENT NO. SD-78109-001			SHEET NO. 3 OF 6	
		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

F

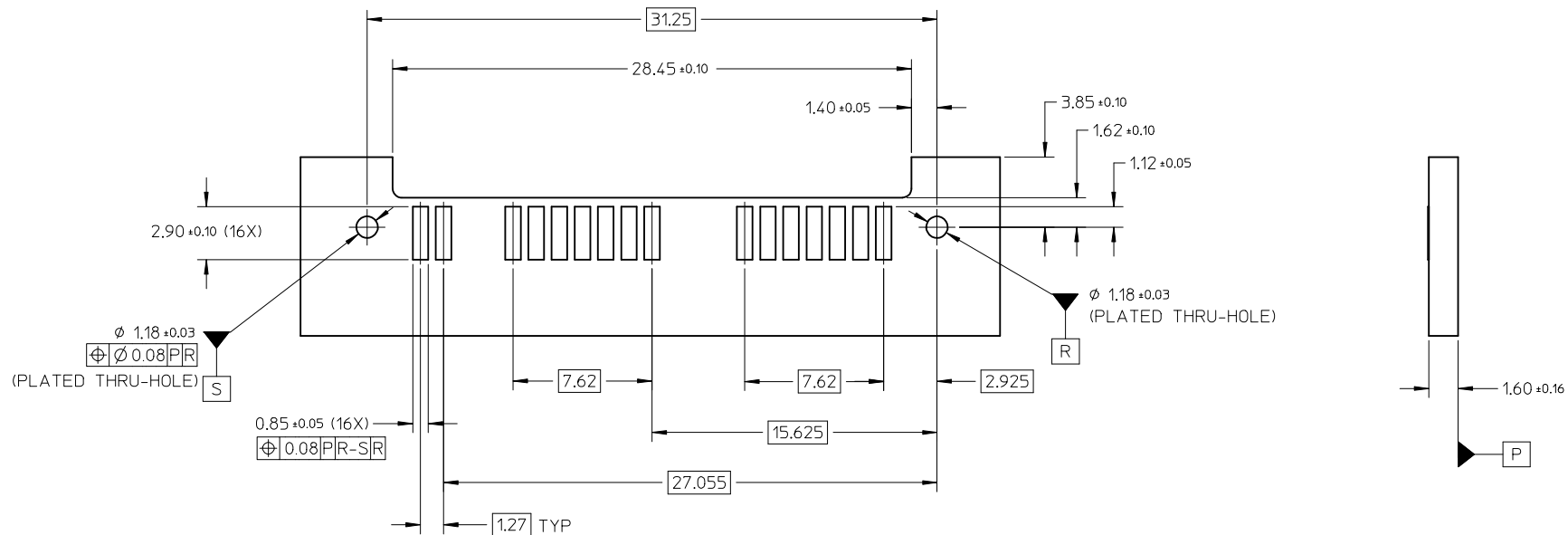
E

D

C

B

A

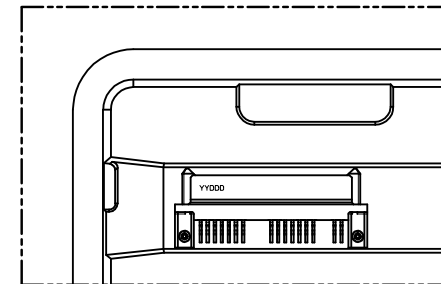
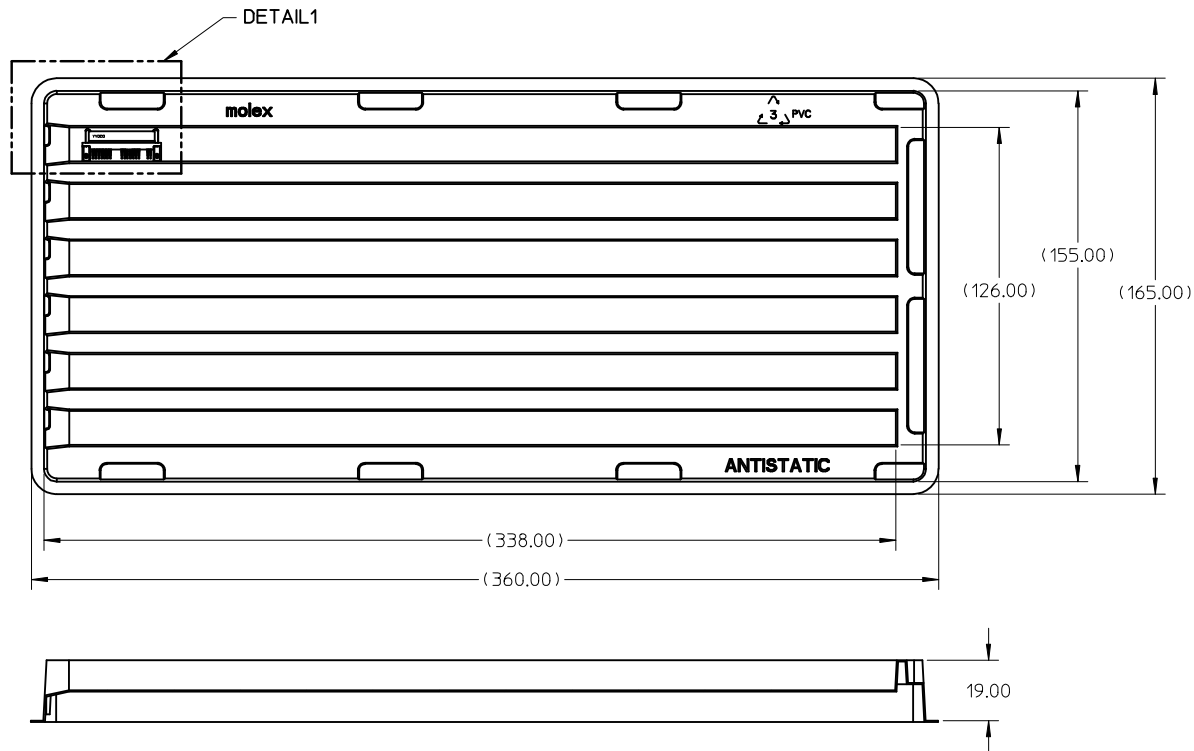


RECOMMENDED PCB LAYOUT

ADD P/NO. & NOTE EC NO: S2009-0789 DRWN: JIAN02 CHKD: KHLIM APPR: BOKOK A	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	TITLE SERIAL ATA RECEPTACLE 1.8 INCH HDD RIGHT-ANGLE, SMT MOLEX INCORPORATED SD-78109-001 4 OF 6
					MM ONLY					
				mm	INCH	DRAWN BY	DATE			
			4 PLACES	± ---	± ---	YKOH	2006/06/27			
			3 PLACES	± ---	± ---	CHECKED BY	DATE			
			2 PLACES	± 0.20	± ---	SHONG	2006/07/28			
			1 PLACE	± ---	± ---	APPROVED BY	DATE			
			ANGULAR ± 3 °		KCLING	2006/07/28	DOCUMENT NO.			
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		SHEET NO.			
					SEE TABLE		SD-78109-001 4 OF 6			
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										

9 8 7 6 5 4 3 2 1

PACKAGING INFORMATION : TRAY



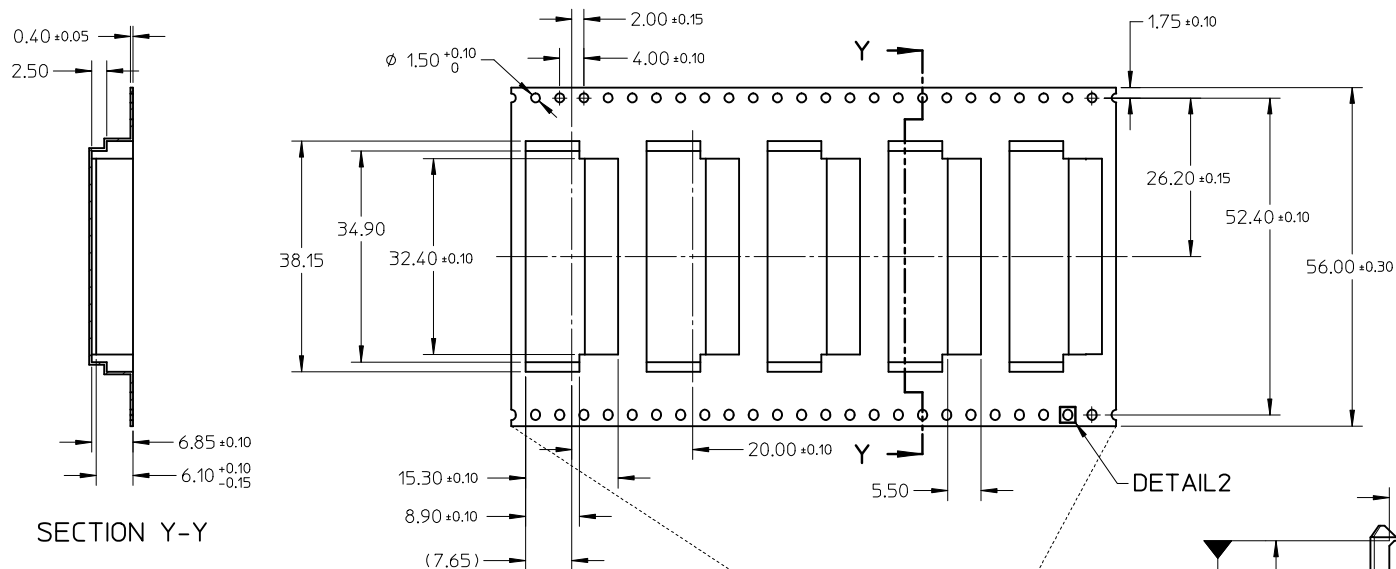
DETAIL1

NOTES:

1. PACKAGING QUANTITY : 54 PCS PER TRAY
2. MATERIAL : PVC - CLEAR, ANTISTATIC
0.70MM THICK (PRE-FORMED)

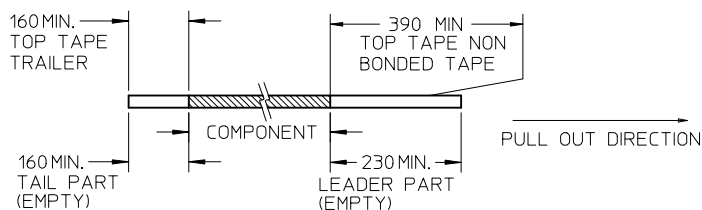
ADD P/NO. & NOTE EC NO: S2009-0789 DRWN: JIAN02 CHKD: KHLIM APPR: BOKOK			DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
							MM ONLY					
					4 PLACES		± ---	± ---	DRAWN BY DATE		TITLE SERIAL ATA RECEPTACLE 1.8 INCH HDD RIGHT-ANGLE, SMT  MOLEX INCORPORATED	
					3 PLACES		± ---	± ---	CHECKED BY DATE			
2 PLACES		± 0.20	± ---	SHONG 2006/07/28		DOCUMENT NO. SD-78109-001	SHEET NO. 5 OF 6					
1 PLACE		± ---	± ---	APPROVED BY DATE								
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		ANGULAR ± 3 °		KCLING 2006/07/28		MATERIAL NO.						
				SIZE A3		SEE TABLE						
				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								

PACKAGING INFORMATION : TAPE & REEL

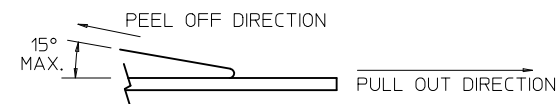


NOTES:

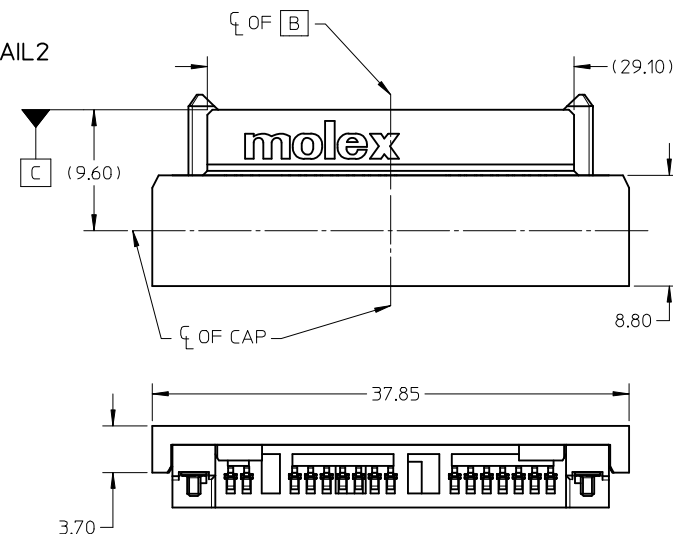
1. LEADER AND TRAILER TAPE



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 : 480 PCS/ REEL.
5. THE TAPE IS TREATED FOR ANTI-STATIC.



ADD P/NO. & NOTE EC NO: S2009-0789 DRWN: JIAN02 CHKD: KHLIM APPR: BOKOK 2009/04/17 2009/04/20 2009/04/20	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		
					CHECKED BY DATE		SERIAL ATA RECEPTACLE		
					APPROVED BY DATE		1.8 INCH HDD		
					MATERIAL NO.		RIGHT-ANGLE, SMT		
A	REV		DRAFT WHERE APPLICABLE		SEE TABLE		SD-78109-001		SHEET NO.
			MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		6 OF 6		

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- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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