

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0783960001](#)  
**Status:** **Active**  
**Description:** 0.80mm(.031"), 1.27mm(.050") Micro SAS Receptacle, Vertical, SMT, 0.76µm(30µ") Gold (Au) Plating, 25 Circuits, for 1.00mm (.039") PCB Thickness, Halogen free, Lead free

**Documents:**

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-78396-001 \(PDF\)](#)

**Agency Certification**

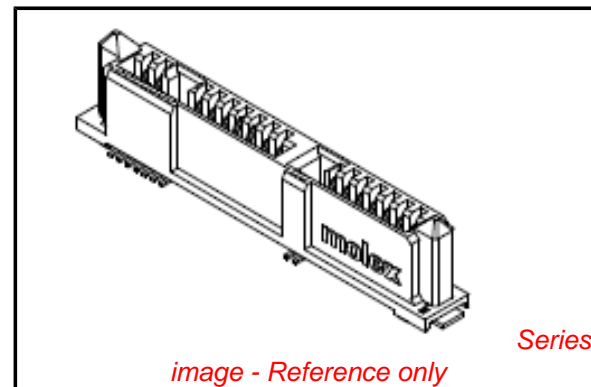
CSA LR19980  
 UL E29179

**General**

Product Family I/O Connectors  
 Series [78396](#)  
 Application Board-to-Board  
 Component Type Receptacle  
 Product Name Micro SAS  
 Type N/A

**Physical**

Boot Color N/A  
 Circuits (Loaded) 25  
 Circuits (maximum) 25  
 Circuits Detail Signal 14, Power 9, Sideband 2  
 Color - Resin Black  
 Durability (mating cycles max) 500  
 Flammability 94V-0  
 Gender Female  
 Keying to Mating Part Yes  
 Lock to Mating Part None  
 Material - Metal Copper Alloy  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 2  
 Orientation Vertical  
 PCB Locator Yes  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.039 In  
 PCB Thickness Recommended (mm) 1.00 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  
 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  
 Ports 2  
 Temperature Range - Operating 0°C to +55°C  
 Termination Interface: Style Surface Mount



*image - Reference 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](mailto: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**

[78396Series](#)

**Mates With**

[78394](#) , [78528](#) Micro SAS Plugs

Waterproof / Dustproof	No
Wire Size AWG	N/A

**Electrical**

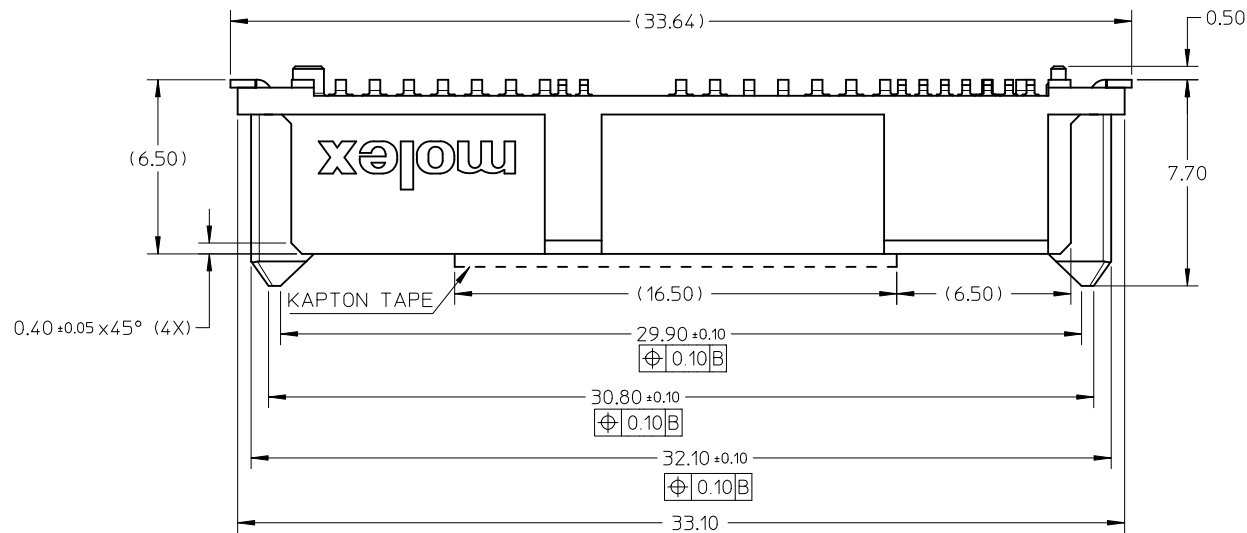
Current - Maximum per Contact	1.5A
Voltage - Maximum	30V

**Material Info****Reference - Drawing Numbers**

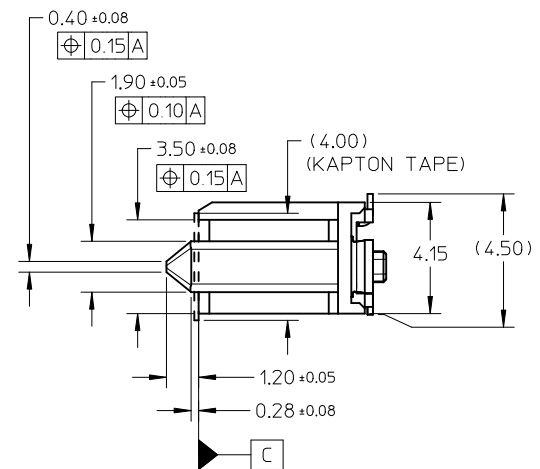
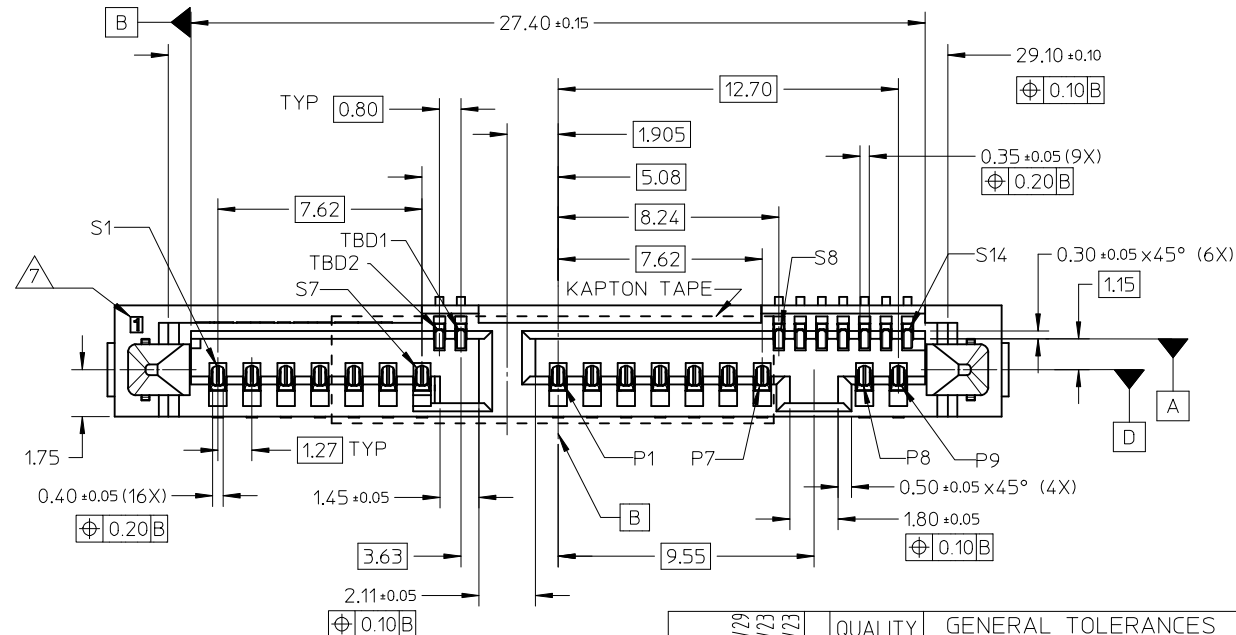
Packaging Specification	PK-78396-001
Product Specification	PS-78396-001
Sales Drawing	SD-78396-001

This document was generated on 05/17/2010

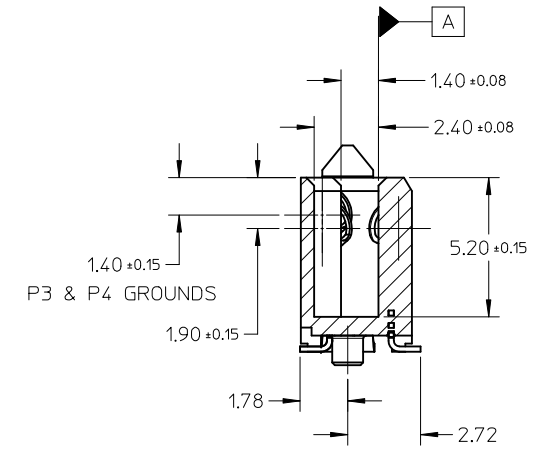
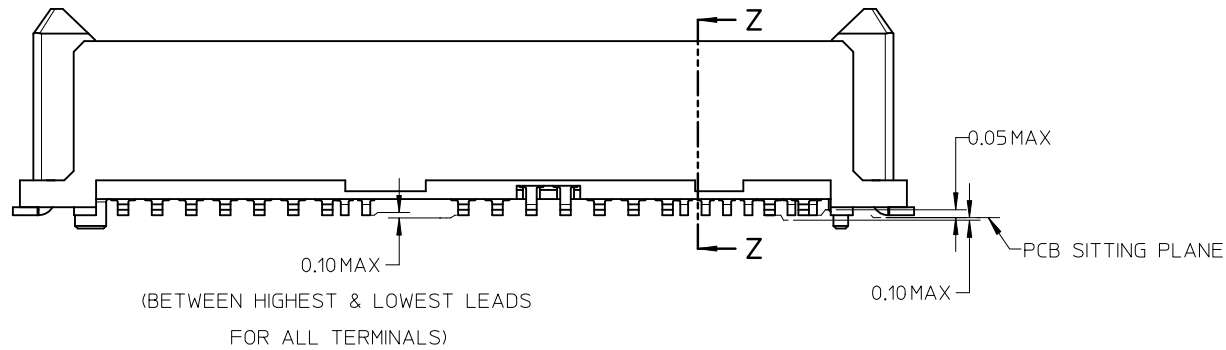
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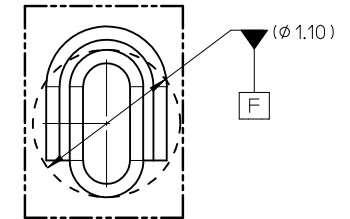
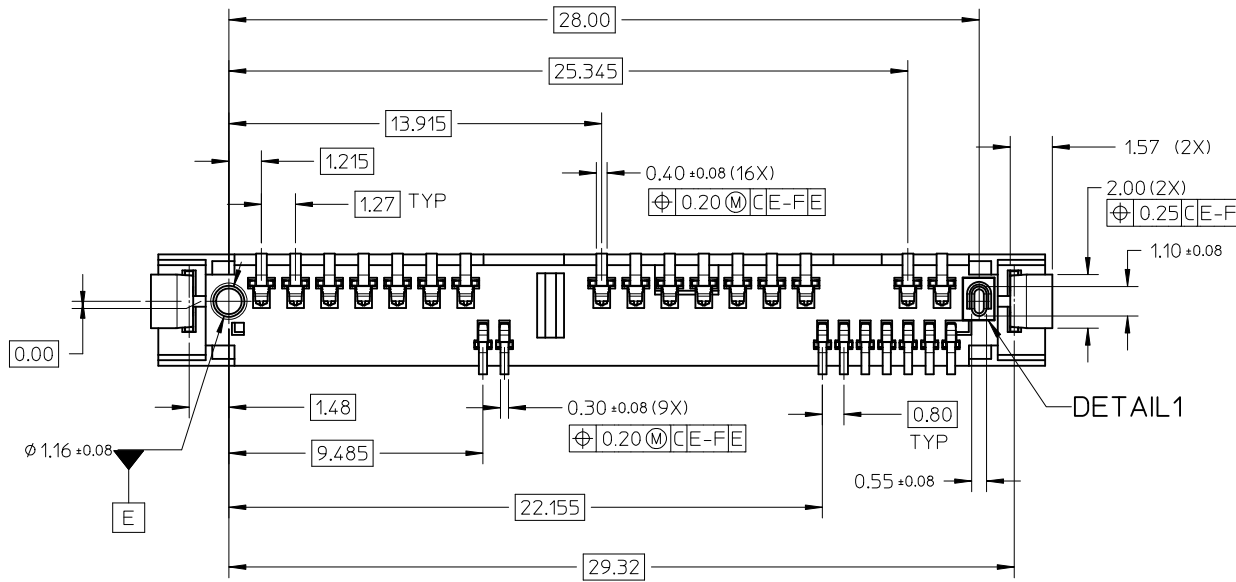
- NOTES:
- MATERIAL : HIGH TEMP THERMOPLASTIC, GLASS FILLED, UL 94V-0, BLACK  
 TERMINAL/SOLDER TAB : COPPER ALLOY
  - PLATING :  
 TERMINAL :  
 - CONTACT :0.76µm MIN. SELECTIVE GOLD OVER  
 1.27µm MIN. NICKEL UNDERPLATE  
 - SOLDER TAIL :2.54µm MIN. TIN OVER  
 1.27µm MIN. NICKEL UNDERPLATE  
 SOLDER TAB : 2.54µm MIN. TIN OVER  
 1.91µm MIN. NICKEL UNDERPLATE
  - PRODUCT SPECIFICATION : PS-78396-001
  - PACKAGING SPECIFICATION : PK-78396-001
  - MATES WITH : MOLEX MICRO SAS PLUG
  - THIS PRODUCT IS COMPLIANT TO RoHS DIRECTIVE WITH THE FOLLOWING BANNED SUBSTANCES - LEAD, MERCURY, CADMIUM, HEXAVALENT CHROMIUM, POLYBROMINATED BIPHENYLS AND POLYBROMINATED DIPHENYLS ETHERS.
  - MOLEX LOGO AND CAVITY NUMBER LOCATED APPROXIMATELY AS SHOWN
  - NON FUNCTIONAL CORING MAY VARY



CHANGED PIN ID. EC NO: S2010-0406 DRWN:GEMENARLY 2009/10/29 CHKD:CGOH 2009/11/23 APPR:BOKOK 2009/11/23	QUALITY SYMBOLS FA=0 FE=0 FF=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		mm	INCH	DRAWN BY YKOH	DATE 2008/05/12	TITLE MICRO SAS RECEPTACLE VERTICAL SMT 1.8 INCH SSD/HDD	MOLEX INCORPORATED		
A1	DESCRIPTION REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY BOKOK		DATE 2008/06/12	DOCUMENT NO. SD-78396-001		SHEET NO. 1 OF 4
		ANGULAR ± 3 °		MATERIAL NO. 78396-0001		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

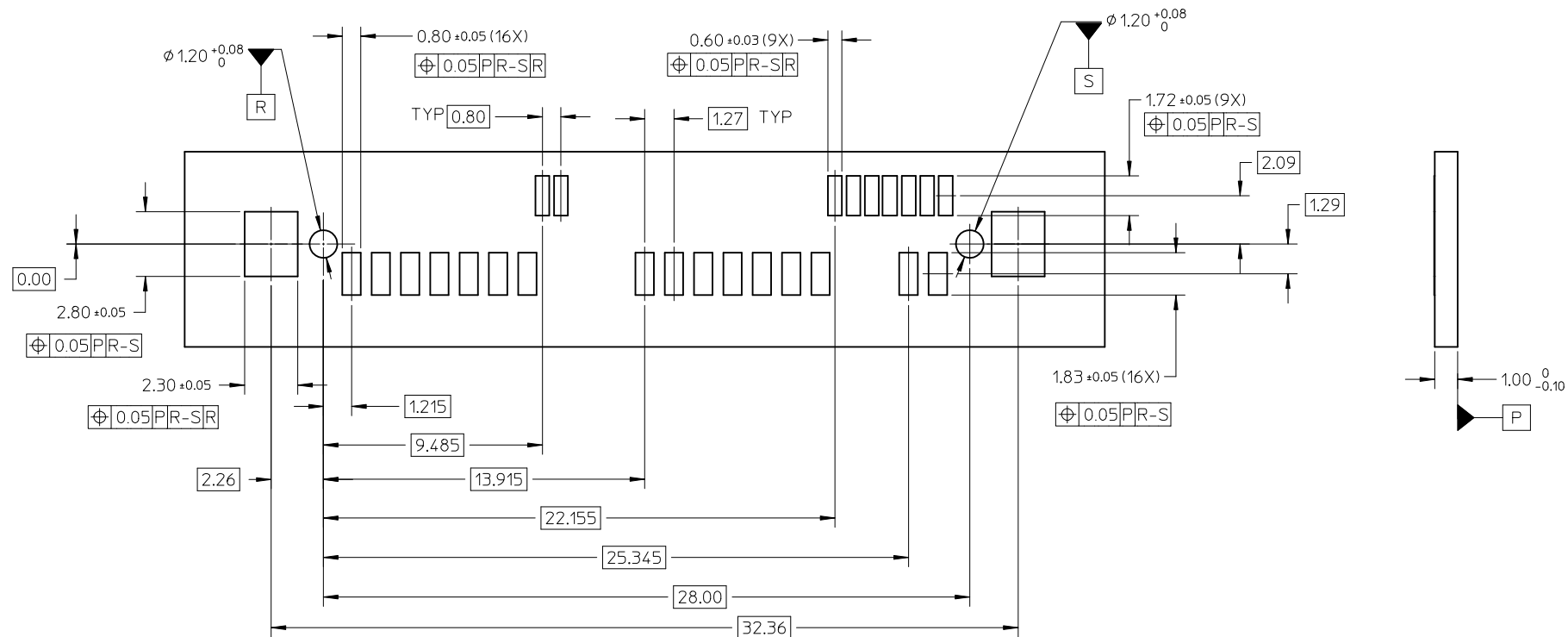


SECTION Z-Z



DETAIL 1

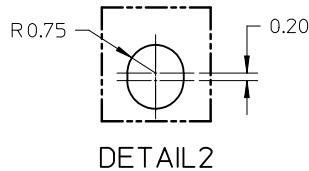
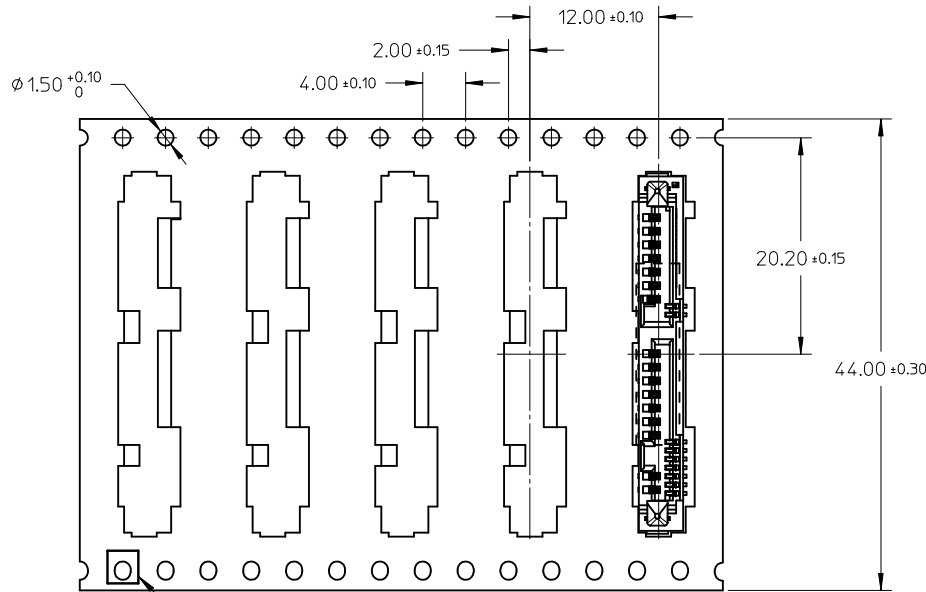
SEE SHEET 1 EC NO: S2010-0406 DRWN: GMEARLY 2009/10/29 CHKD: CGOH 2009/11/23 APPR: BOKOK 2009/11/23	DESCRIPTION REV	QUALITY SYMBOLS FA=0 FE=0 FF=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY YKOH	DATE 2008/05/12	TITLE MICRO SAS RECEPTACLE VERTICAL SMT 1.8 INCH SSD/HDD			
A1	REV	QUALITY SYMBOLS	4 PLACES ± ---	± ---	CHECKED BY JTAN02	DATE 2008/06/11	MOLEX	MOLEX INCORPORATED	MATERIAL NO. 78396-0001	DOCUMENT NO. SD-78396-001
			3 PLACES ± ---	± ---	APPROVED BY BOKOK	DATE 2008/06/12				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			ANGULAR ± 3 °		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					



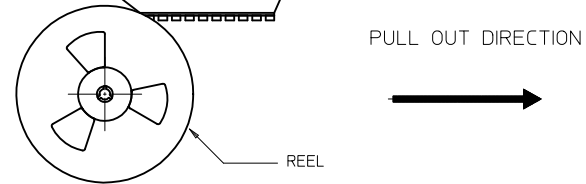
RECOMMENDED PCB LAYOUT

SEE SHEET 1 EC NO: S2010-0406 DRWN: GEMENARLY 2009/10/29 CHKD: CGOH 2009/11/23 APPR: BOKOK 2009/11/23	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION																										
		$\nabla_A = 0$ $\nabla_C = 0$ $\nabla_F = 0$	<table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.20</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.20	± ---	1 PLACE	± ---	± ---	<table border="1"> <thead> <tr> <th>DRAWN BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>YKOH</td> <td>2008/05/12</td> </tr> <tr> <th>CHECKED BY</th> <th>DATE</th> </tr> <tr> <td>JTAN02</td> <td>2008/06/11</td> </tr> <tr> <th>APPROVED BY</th> <th>DATE</th> </tr> <tr> <td>BOKOK</td> <td>2008/06/12</td> </tr> </tbody> </table>	DRAWN BY	DATE	YKOH	2008/05/12	CHECKED BY	DATE	JTAN02	2008/06/11	APPROVED BY	DATE	BOKOK	2008/06/12	TITLE		<b>MOLEX INCORPORATED</b>	MICRO SAS RECEPTACLE VERTICAL SMT 1.8 INCH SSD/HDD
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DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		78396-0001		SD-78396-001		3 OF 4																													
		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																															

# PACKAGING INFORMATION

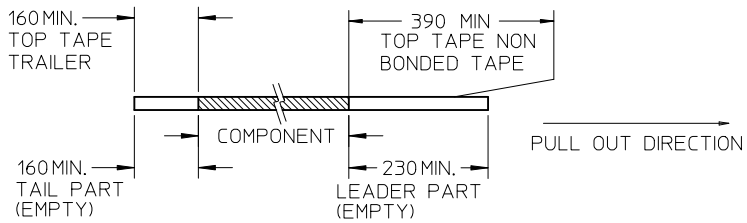


DETAIL 2

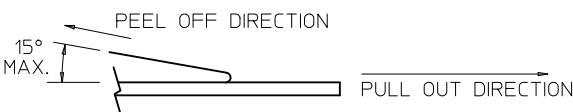


**NOTES:**

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

SEE SHEET 1 EC NO: S2010-0406 DRWN: GEMARLY 2009/10/29 CHKD: CGOH 2009/11/23 APPR: BOKOK 2009/11/23	DESCRIPTION
	REV
	A1

QUALITY SYMBOLS	$\nabla_A = 0$ $\nabla_C = 0$ $\nabla_F = 0$
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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		
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CHECKED BY	DATE			
JTAN02	2008/06/11	MOLEX INCORPORATED		
APPROVED BY	DATE			
BOKOK	2008/06/12	MATERIAL NO.	DOCUMENT NO.	SHEET NO.
		78396-0001	SD-78396-001	4 OF 4
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A3				