

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0785000001

Status:

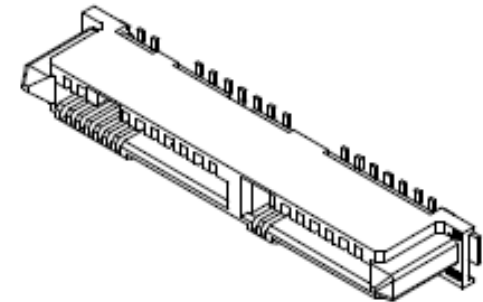
Active

Overview:

micro_sata

Description:

1.27mm (.050") Pitch Micro Serial ATA Device Receptacle for 1.8" SSD/HDD, SMT, Vertical, with Pegs and Kapton Tape, 16 Circuits, EmbossedTape on Reel, Lead free



Series

image - Reference only

Documents:

- [Drawing \(PDF\)](#)
- [RoHS Certificate of Compliance \(PDF\)](#)
- [Product Specification PS-78500-001 \(PDF\)](#)

Agency Certification

CSA

LR19980

UL

E29179

General

Product Family

PCB Receptacles

Series

78500

Application

Board-to-Board

Comments

Straight connector base; connector width: 4.15mm (.172")

Overview

micro_sata

Product Name

Micro Serial ATA, Serial ATA

Physical

Circuits (Loaded)

16

Circuits (maximum)

16

Color - Resin

Black

Durability (mating cycles max)

500

Flammability

94V-0

Glow-Wire Compliant

No

Guide to Mating Part

Yes

Keying to Mating Part

Yes

Lock to Mating Part

No

Material - Metal

Copper Alloy

Material - Plating Mating

Gold

Material - Plating Termination

Tin

Material - Resin

High Temperature Thermoplastic

Number of Rows

1

Orientation

Vertical

PCB Locator

Yes

PCB Retention

Yes

Packaging Type

Embossed Tape on Reel

Pitch - Mating Interface (in)

0.050 In

Pitch - Mating Interface (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)

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

Termination Interface: Style

Surface Mount

EU RoHS

ELV and RoHS
Compliant
REACH SVHC
Not Reviewed
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
78500Series

Mates With
78103 , 78283 and 78285 Micro SATA
Device Plugs

Electrical

Current - Maximum per Contact	1.5A
Grounding to PCB	Yes
Voltage - Maximum	30V

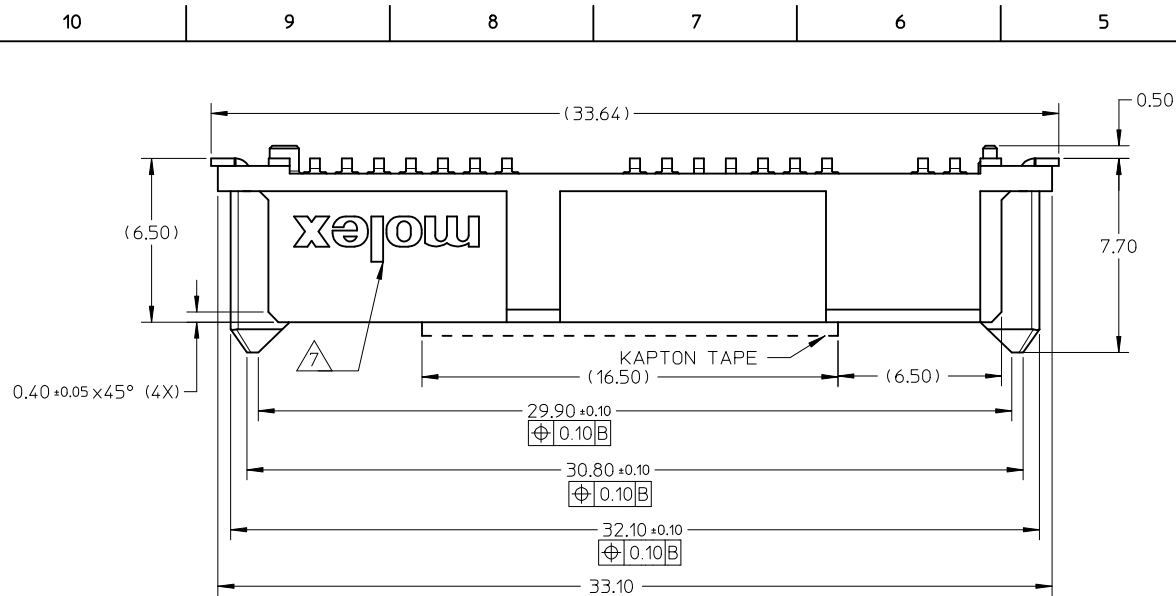
Material Info

Reference - Drawing Numbers

Packaging Specification	PK-78500-001
Product Specification	PS-78500-001
Sales Drawing	SD-78500-001

This document was generated on 05/21/2010

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NOTES:

1. MATERIAL :

HOUSING: LCP, GLASS FILLED, UL 94V-0, BLACK
 TERMINAL/SOLDER TAB : COPPER ALLOY

2. PLATING :

TERMINAL :

- CONTACT :0.76 μ m MIN. SELECTIVE GOLD OVER
 1.27 μ m MIN. NICKEL UNDERPLATE
- SOLDER TAIL :2.54 μ m MIN. TIN OVER
 1.27 μ m MIN. NICKEL UNDERPLATE

SOLDER TAB : 2.54 μ m MIN. TIN OVER

1.91 μ m MIN. NICKEL UNDERPLATE

3. PRODUCT SPECIFICATION : PS-78500-001

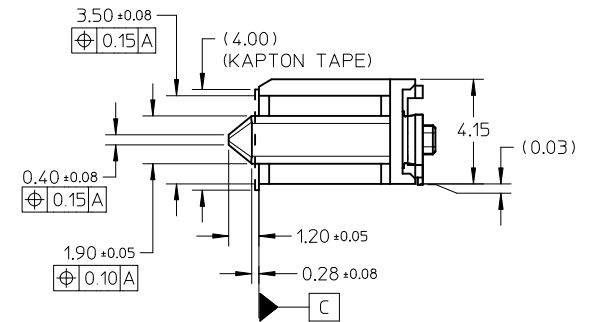
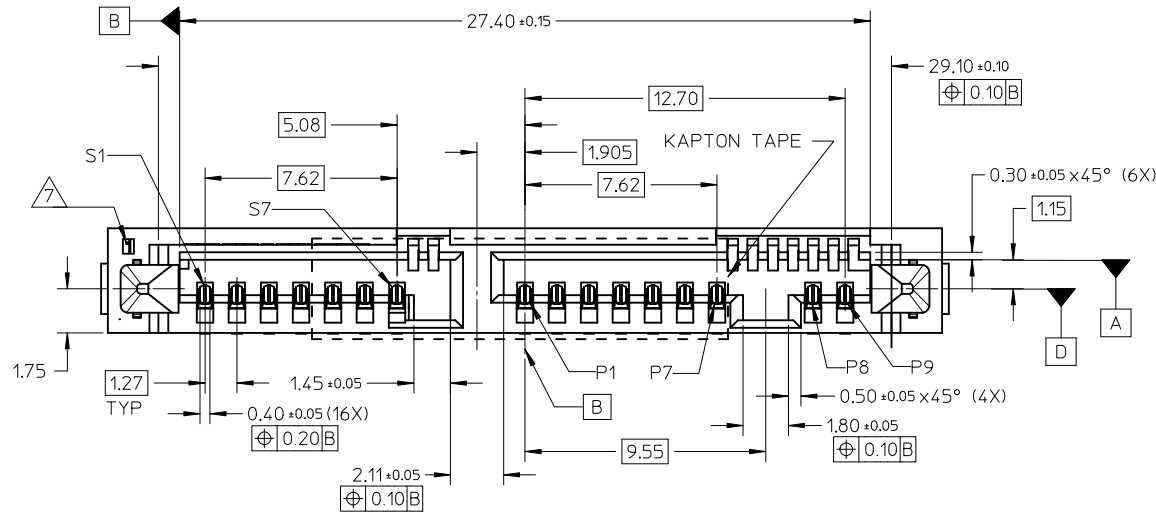
4. PACKAGING SPECIFICATION : PK-78500-001

5. MATES WITH : MOLEX MICRO SATA PLUG

6. THIS PRODUCT IS COMPLIANT TO RoHS DIRECTIVE WITH THE FOLLOWING BANNED SUBSTANCES - LEAD, MERCURY, CADMIUM, HEXAVALENT CHROMIUM, POLYBROMINATED BIPHENYLS AND POLYBROMINATED DIPHENYLS ETHERS.

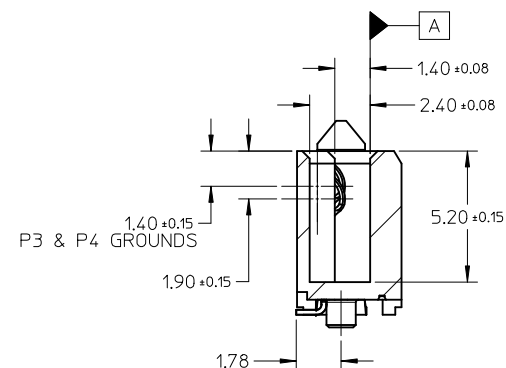
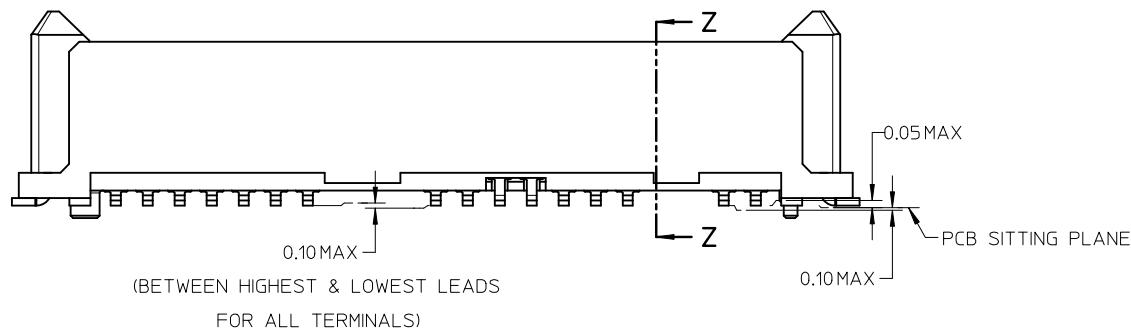
7. MOLEX LOGO AND CAVITY NUMBER LOCATED APPROXIMATELY AS SHOWN

8. NON FUNCTIONAL CORING MAY VARY

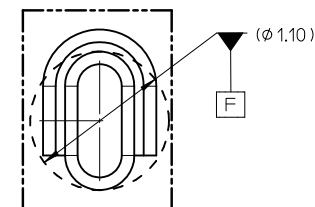
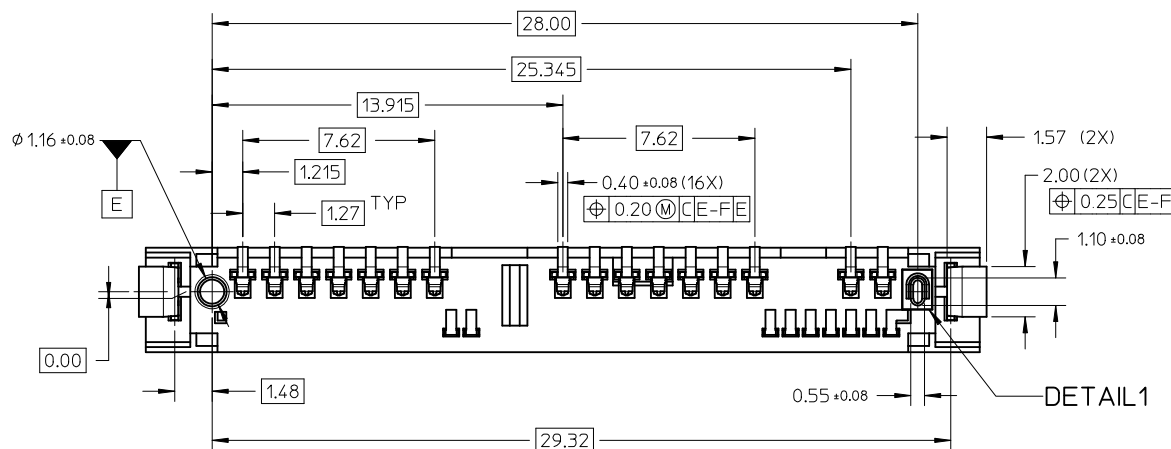


CHANGE PCS/REEL EC NO: S2010-0549 DRWN:WJAP CHKD:GMENARLY APPR:BOKOK A1	2010/01/08 2010/01/08 2010/01/08	DESCRIPTION	QUALITY SYMBOLS F_A=0 F_C=0 F_P=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
					mm	INCH	DRAWN BY GMENARLY	DATE 2009/04/06	TITLE MICRO SATA RECEPTACLE VERTICAL SMT 1.8 INCH SSD/HDD				
				4 PLACES	± ---	± ---	CHECKED BY	DATE					
				3 PLACES	± ---	± ---	CGOH	2009/04/16					
				2 PLACES	± 0.20	± ---	APPROVED BY	DATE	MOLEX INCORPORATED				
				1 PLACE	± ---	± ---	BOKOK	2009/04/16					
				ANGULAR ± 3 °		MATERIAL NO. 78500-0001		DOCUMENT NO. SD-78500-001		SHEET NO. 1 OF 4			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3	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



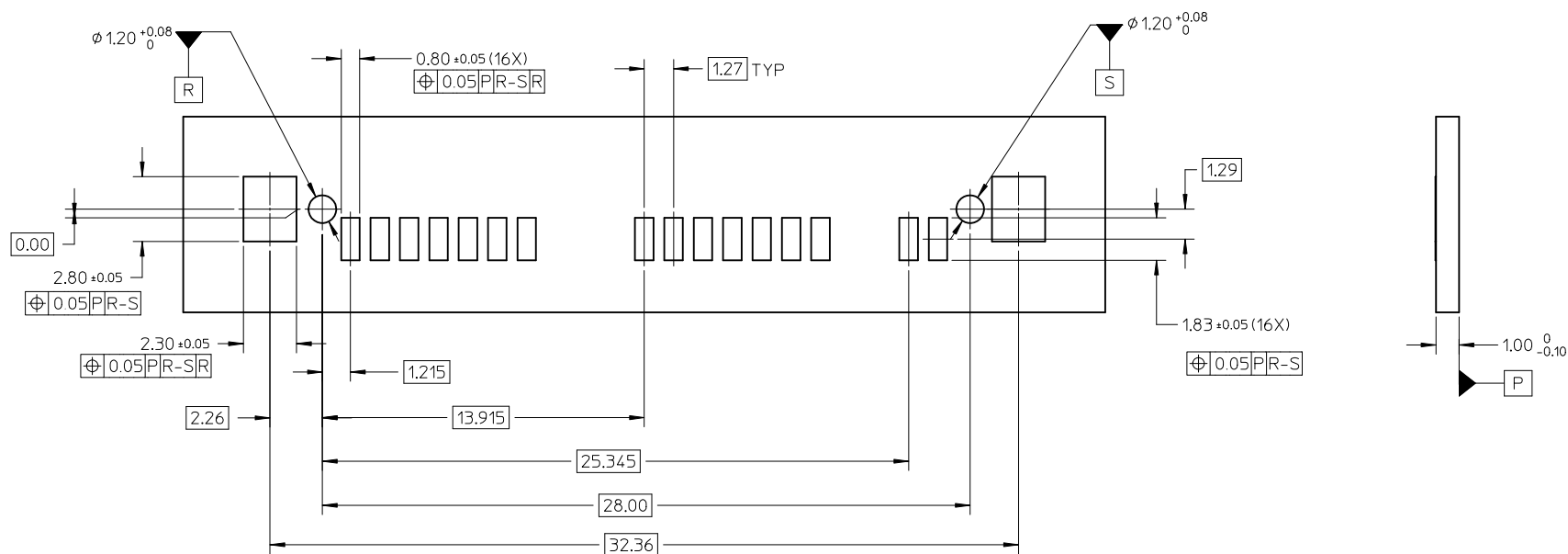
SECTION Z-Z



DETAIL 1

CHANGE PCS/REEL EC NO: S2010-0549 DRWN:WJAP CHKD:GMENARLY APPR:BOKOK A1	2010/01/08 2010/01/08 2010/01/08	DESCRIPTION REV	QUALITY SYMBOLS FA=0 FC=0 FP=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION					
						DRAWN BY	DATE	TITLE MICRO SATA RECEPTACLE VERTICAL SMT 1.8 INCH SSD/HDD MOLEX INCORPORATED							
						CHECKED BY	DATE								
						APPROVED BY	DATE								
						4 PLACES	± ---				± ---	GMENARLY	2009/04/06		
						3 PLACES	± ---	± ---	CGOH		2009/04/16	DOCUMENT NO. SD-78500-001		SHEET NO. 2 OF 4	
						2 PLACES	± 0.20	± ---	BOKOK		2009/04/16				
						1 PLACE	± ---	± ---							
						ANGULAR ± 3 °									
						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3			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



RECOMMENDED PCB LAYOUT

CHANGE PCS/REEL EC NO: S2010-0549 DRWN:WJAP CHKD:GMENARLY APPR:BOKOK				DESCRIPTION REV	QUALITY SYMBOLS FA=0 FC=0 FP=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
A1		mm INCH	DRAWN BY DATE			TITLE MICRO SATA RECEPTACLE VERTICAL SMT 1.8 INCH SSD/HDD MOLEX INCORPORATED						
		4 PLACES ± --- ± ---	GMENARLY 2009/04/06									
		3 PLACES ± --- ± ---	CHECKED BY DATE									
		2 PLACES ± 0.20 ± ---	CGOH 2009/04/16									
A1		1 PLACE ± --- ± ---	APPROVED BY DATE	MOLEX INCORPORATED								
		ANGULAR ± 3 °	BOKOK 2009/04/16									
A1		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. 78500-0001	DOCUMENT NO. SD-78500-001		SHEET NO. 3 OF 4					
				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

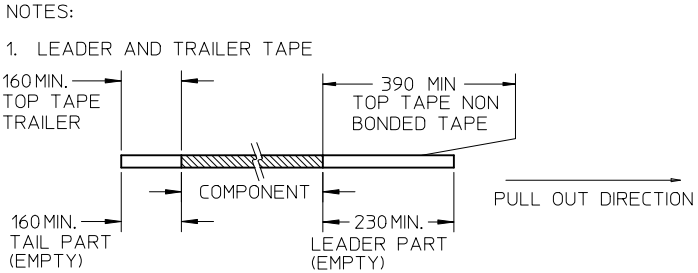
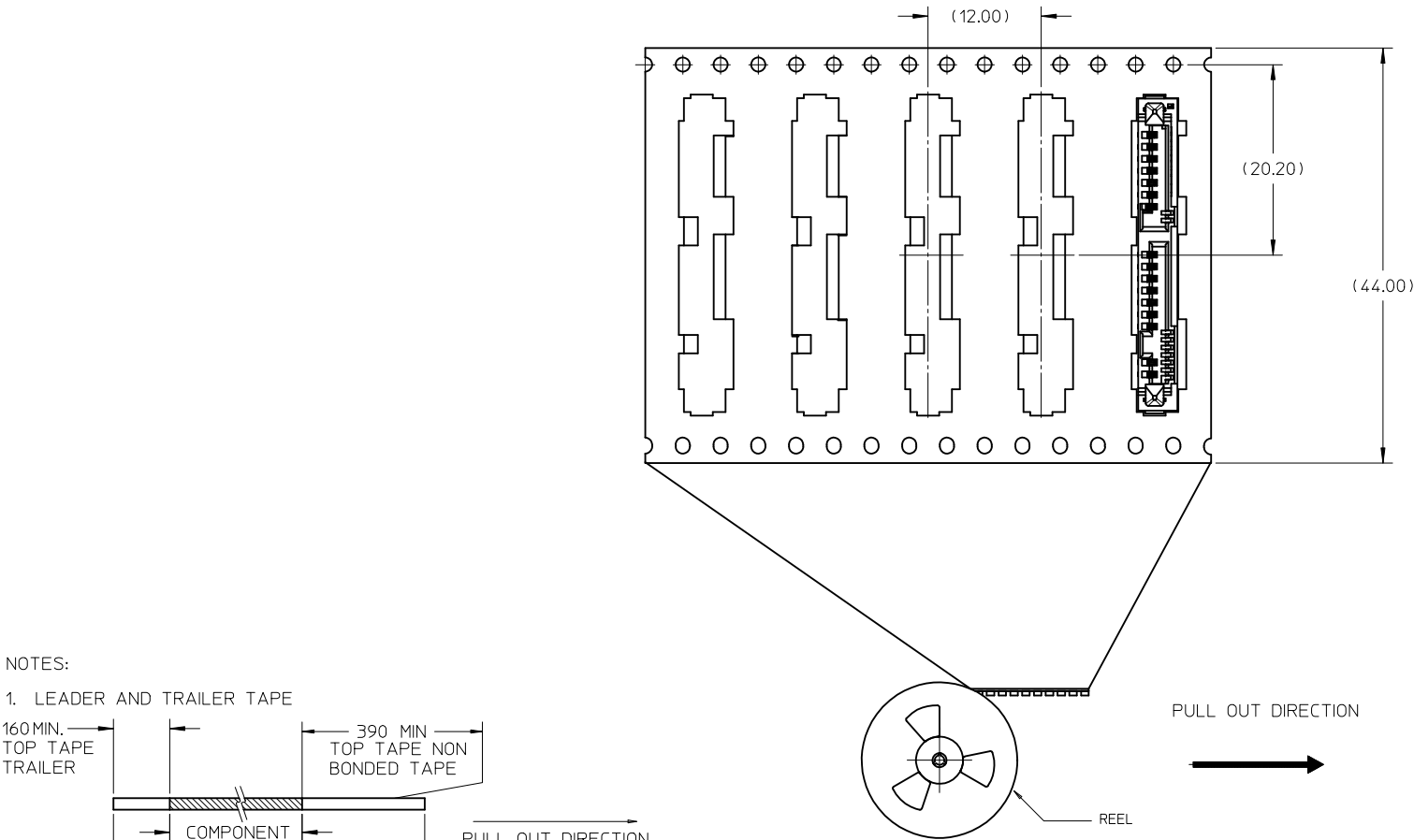
E

D

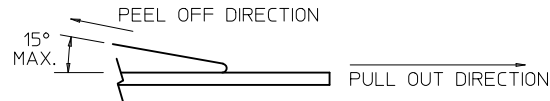
C

B

A



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



- TAPE AND REEL SPECIFICATION IS AS PER EIA-481.
- TAPE AND REEL QUANTITY : 450 PCS/ REEL.
- THE TAPE IS TREATED FOR ANTI-STATIC.

CHANGE PCS/REEL EC NO: S2010-0549 DRWN:WJAP CHKD:GMENARLY APPR:BOKOK A1	DESCRIPTION 2010/01/08 2010/01/08 2010/01/08	QUALITY SYMBOLS $F_A=0$ $F_C=0$ $F_P=0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION				
				mm	INCH	DRAWN BY GMENARLY	DATE 2009/04/06	TITLE MICRO SATA RECEPTACLE VERTICAL SMT 1.8 INCH SSD/HDD					
			4 PLACES	± ---	± ---	CHECKED BY CGOH	DATE 2009/04/16						
			3 PLACES	± ---	± ---	APPROVED BY BOKOK		DATE 2009/04/16	MOLEX INCORPORATED				
			2 PLACES	± 0.20	± ---								
			1 PLACE	± ---	± ---	MATERIAL NO. 78500-0001		DOCUMENT NO. SD-78500-001	SHEET NO. 4 OF 4				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SIZE A3		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