

**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

**Documents:**

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

**Agency Certification**

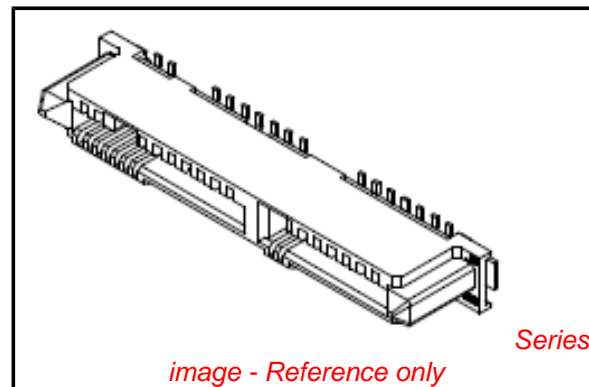
CSA LR19980  
 UL E29179

**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



*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**

[78500Series](#)

**Mates With**

[78103](#) , [78283](#) and [78285](#) Micro SATA Device Plugs

**Electrical**

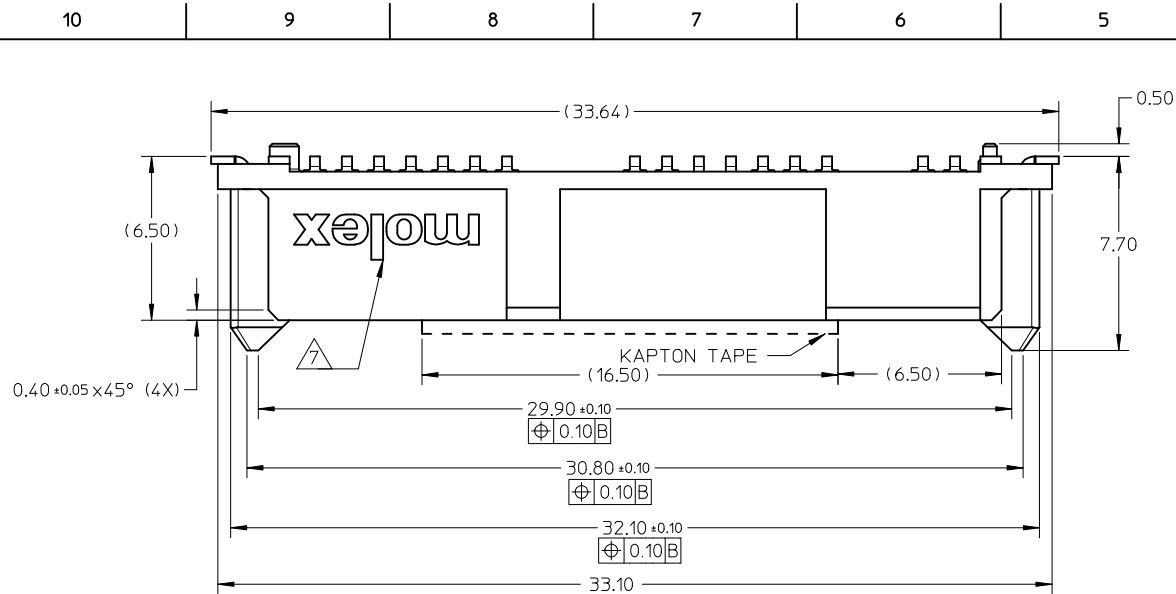
Current - Maximum per Contact	1.5A
Grounding to PCB	Yes
Voltage - Maximum	30V

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

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

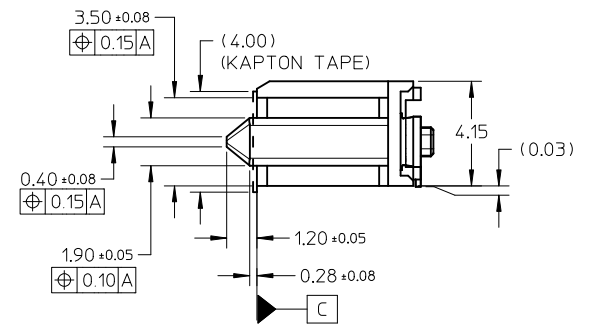
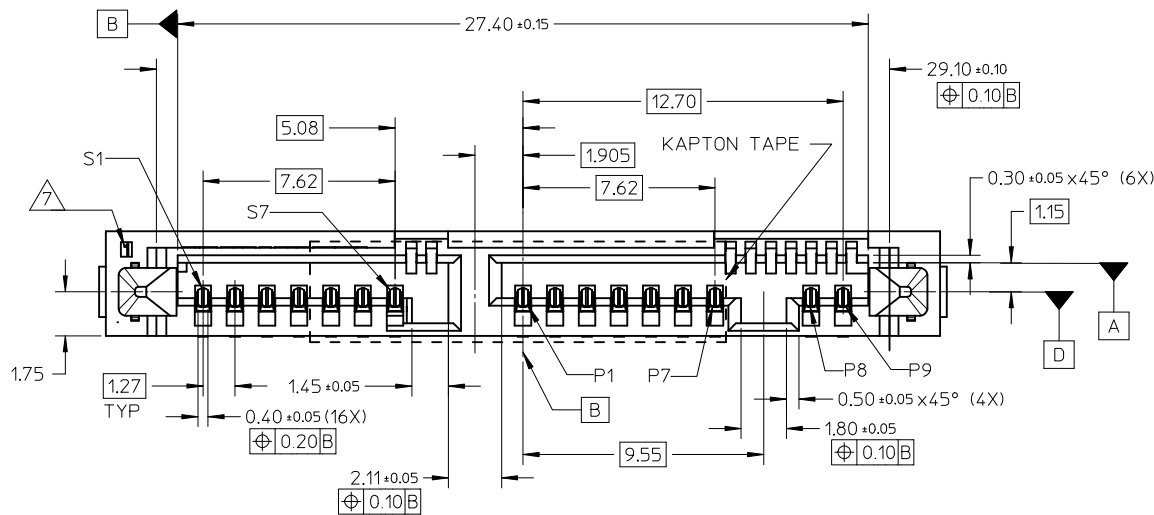
This document was generated on 05/21/2010

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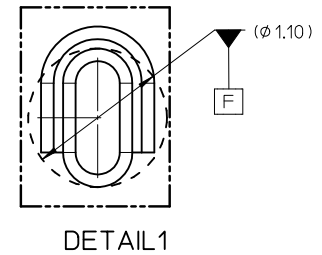
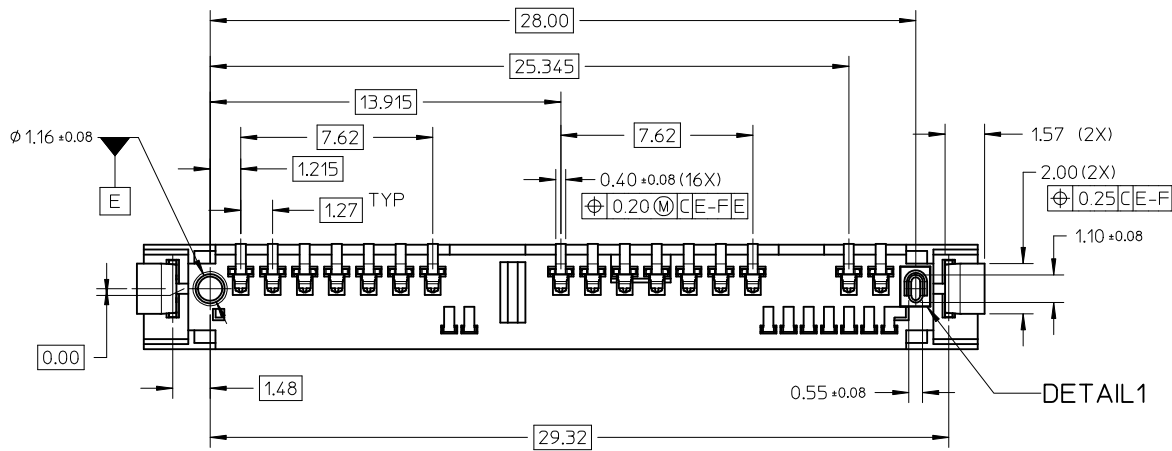
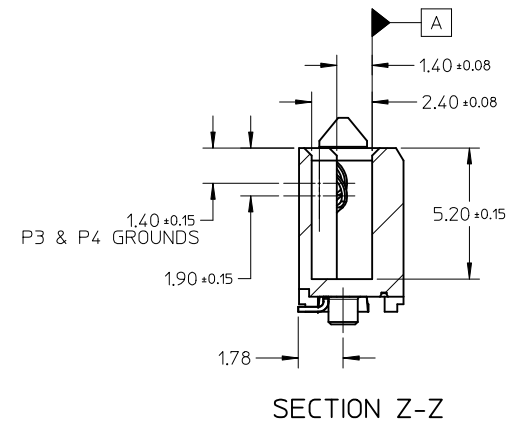
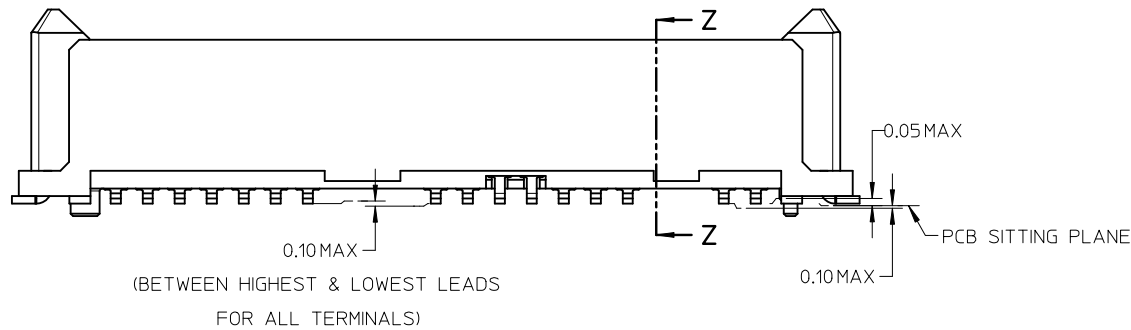
NOTES:

- MATERIAL :  
HOUSING: LCP, GLASS FILLED, UL 94V-0, BLACK  
TERMINAL/SOLDER TAB : COPPER ALLOY
- PLATING :  
TERMINAL :  
- CONTACT :0.764μm MIN. SELECTIVE GOLD OVER  
1.274μm MIN. NICKEL UNDERPLATE  
- SOLDER TAIL :2.544μm MIN. TIN OVER  
1.274μm MIN. NICKEL UNDERPLATE  
SOLDER TAB : 2.544μm MIN. TIN OVER  
1.914μm MIN. NICKEL UNDERPLATE
- PRODUCT SPECIFICATION : PS-78500-001
- PACKAGING SPECIFICATION : PK-78500-001
- MATES WITH : MOLEX MICRO SATA 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



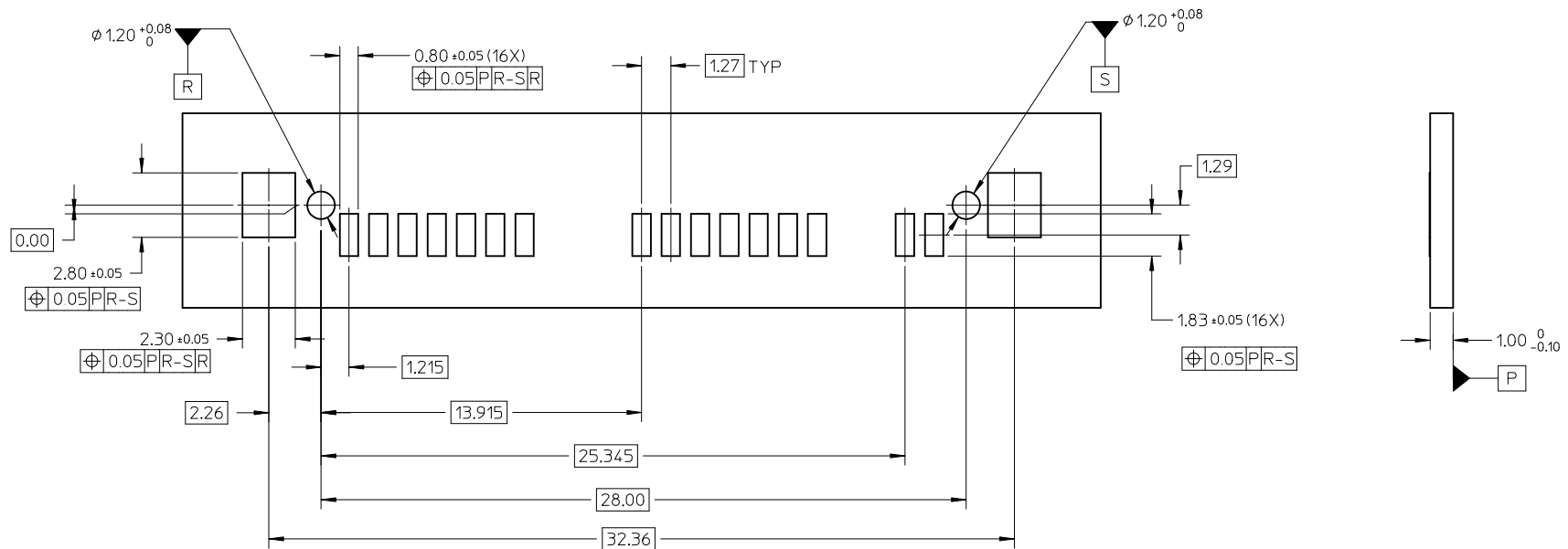
CHANGE PCS/REEL EC NO: S2010-0549 DRWN:WJAP 2010/01/08 CHKD:GMENARLY 2010/01/08 APPR:BOKOK 2010/01/08	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		
		▽ <sub>A</sub> =0	mm	INCH	MM ONLY		NTS	METRIC			
		▽ <sub>E</sub> =0	4 PLACES ± ---	± ---	DRAWN BY	DATE	TITLE				
		▽ <sub>P</sub> =0	3 PLACES ± ---	± ---	GMENARLY	2009/04/06	MICRO SATA RECEPTACLE VERTICAL SMT 1.8 INCH SSD/HDD MOLEX INCORPORATED				
	2 PLACES ± 0.20	± ---	CHECKED BY	DATE	MATERIAL NO.						
		1 PLACE ± ---	± ---	CGOH	2009/04/16	78500-0001		SD-78500-001	1 OF 4		
		ANGULAR ± 3 °		APPROVED BY	DATE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		BOKOK	2009/04/16						
A1	REV			SIZE							
				A3							

10 9 8 7 6 5 4 3 2 1



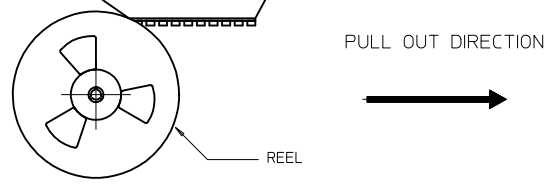
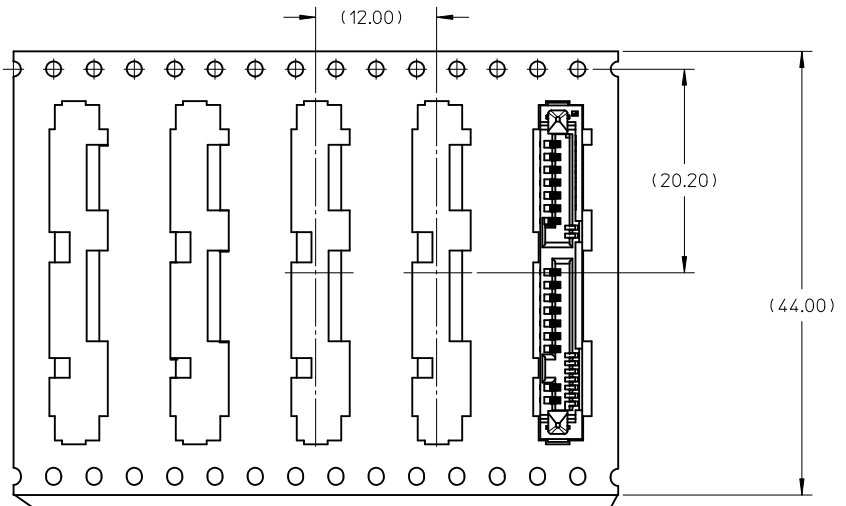
<b>CHANGE PCS/REEL</b> EC NO: S2010-0549 DRWN:WJYAP 2010/01/08 CHKD:GMENARLY 2010/01/08 APPR:BOKOK 2010/01/08	QUALITY SYMBOLS F <sub>A</sub> =0 F <sub>C</sub> =0 F <sub>P</sub> =0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION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

9 8 7 6 5 4 3 2 1

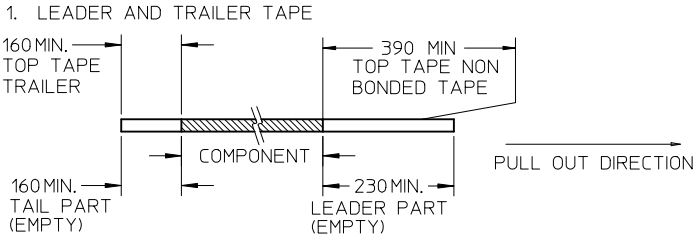


RECOMMENDED PCB LAYOUT

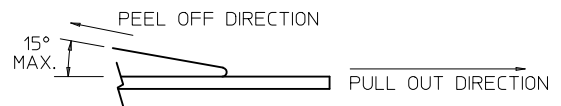
CHANGE PCS/REEL EC NO: S2010-0549 DRWN:WJAP 2010/01/08 CHKD:GMENARLY 2010/01/08 APPR:BOKOK 2010/01/08	QUALITY SYMBOLS $F_A=0$ $F_C=0$ $F_P=0$	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	DIMENSION STYLE MM ONLY DRAWN BY GMENARLY DATE 2009/04/06 CHECKED BY CGOH DATE 2009/04/16 APPROVED BY BOKOK DATE 2009/04/16	SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION	TITLE MICRO SATA RECEPTACLE VERTICAL SMT 1.8 INCH SSD/HDD
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. 78500-0001	MOLEX INCORPORATED DOCUMENT NO. SD-78500-001	SHEET NO. 3 OF 4	
	SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
	REV A1				



NOTES:



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

CHANGE PCS/REEL EC NO: S2010-0549 DRWN:WJAP 2010/01/08 CHKD:GMENARLY 2010/01/08 APPR:BOKOK 2010/01/08	QUALITY SYMBOLS ▽ <sub>A</sub> =0 ▽ <sub>C</sub> =0 ▽ <sub>P</sub> =0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		mm	INCH	MM ONLY	NTS	METRIC		
		4 PLACES	± ---	± ---	DRAWN BY	DATE		TITLE
		3 PLACES	± ---	± ---	GMENARLY	2009/04/06		MICRO SATA RECEPTACLE VERTICAL SMT 1.8 INCH SSD/HDD
		2 PLACES	± 0.20	± ---	CHECKED BY	DATE		
		1 PLACE	± ---	± ---	CGOH	2009/04/16		
		ANGULAR ± 3 °		APPROVED BY	DATE	MOLEX INCORPORATED		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		BOKOK	2009/04/16	DOCUMENT NO. SD-78500-001		
A1	REV	SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				