

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

**Part Number:** [0780530001](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Signal Pitch, 0.80mm (.031") SCSI Pitch, 1.27mm (.050") Power Pitch SAS Receptacle, Reverse, SMT, Right Angle, with Beveled Metal Pins and Pegs, 4.99mm (.196") Height, 29 Circuits, Tray, Leadfree

**Documents:**

[3D Model](#) [Product Specification PS-78053-002 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

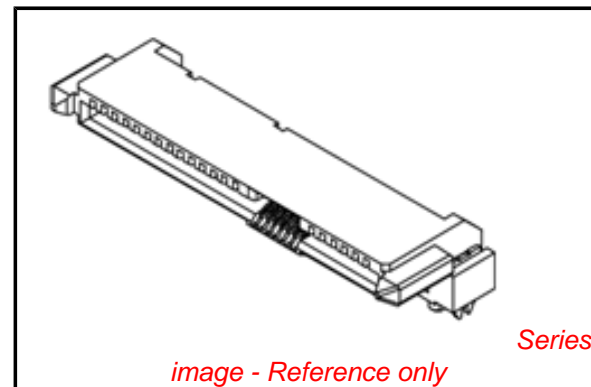
CSA LR19980  
 UL E29179

**General**

Product Family I/O Connectors  
 Series [78053](#)  
 Application Board-to-Board  
 Component Type Receptacle  
 Product Name SAS  
 Type N/A

**Physical**

Boot Color N/A  
 Circuits (Loaded) 29  
 Circuits (maximum) 29  
 Circuits Detail Signal 7, SCSI 7, Power 15  
 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 Nylon  
 Number of Rows 2  
 Orientation Right Angle  
 PCB Locator Yes  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.047 In  
 PCB Thickness Recommended (mm) 1.20 mm  
 Packaging Type Tray  
 Panel Mount Yes  
 Pitch - Mating Interface (in) 0.031 In, 0.050 In  
 Pitch - Mating Interface (mm) 0.80 mm, 1.27 mm  
 Pitch - Term. Interface (in) 0.031 In, 0.050 In  
 Pitch - Term. Interface (mm) 0.80 mm, 1.27 mm  
 Plating min: Mating (µin) 30  
 Plating min: Mating (µm) 0.76  
 Plating min: Termination (µin) 102  
 Plating min: Termination (µm) 2.54  
 Polarized to Mating Part Yes  
 Polarized to PCB Yes  
 Surface Mount Compatible (SMC) N/A



*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**

[78053Series](#)

**Mates With**

SFF-8482 Hard Disk Drive and Backplane Plug. [87679](#) Serial ATA Device Plug with Latch. [87703](#) Serial ATA Device Plug without Jumper. [87799](#) Serial ATA Device Plug with Jumper

Temperature Range - Operating	0°C to +55°C
Termination Interface: Style	Surface Mount
Waterproof / Dustproof	No
Wire Size AWG	N/A

### **Electrical**

Current - Maximum per Contact	1.5A
Shielded	No
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

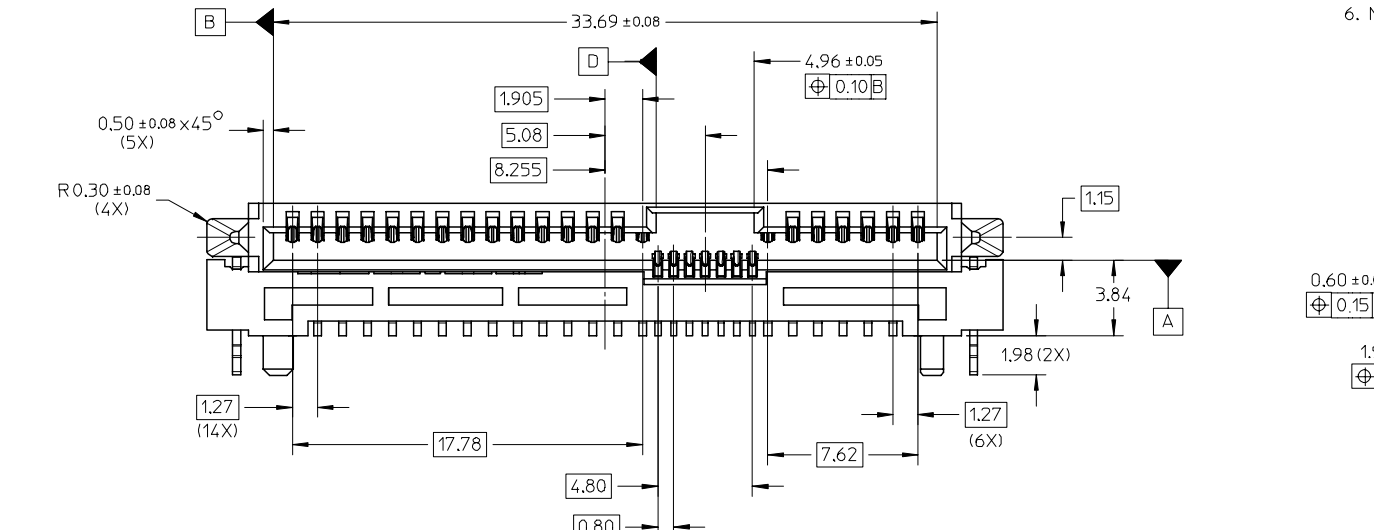
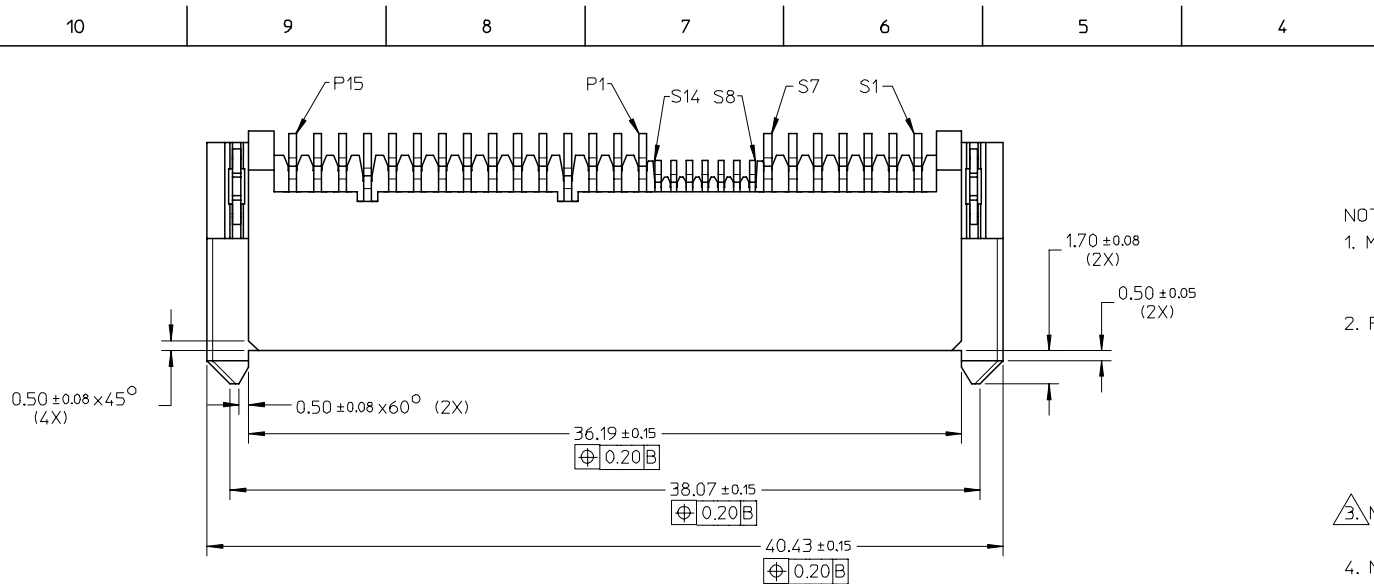
### **Material Info**

#### **Reference - Drawing Numbers**

Product Specification	PS-78053-002
Sales Drawing	SD-78053-001

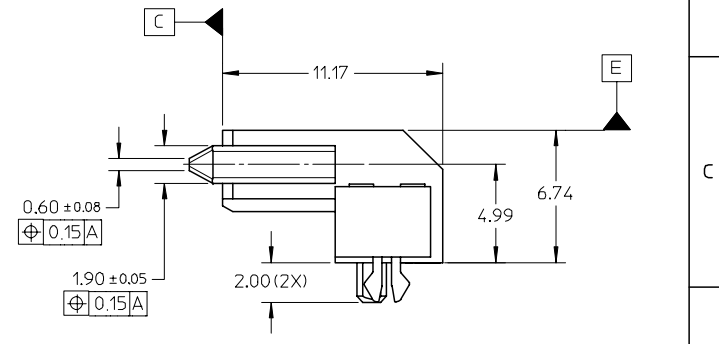
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PART NUMBER	PACKAGING OPTION
78053-0001	TRAY
78053-1001	TAPE & REEL

- NOTES:
- MATERIAL  
HOUSING: PA9T, GLASS-FILLED, UL 94V-0, BLACK  
TERMINALS/FORKLOCK: COPPER ALLOY
  - PLATING  
TERMINAL CONTACT: 0.76µm MIN. SELECTIVE GOLD OVER  
1.27µm MIN. NICKEL UNDERPLATE  
TERMINAL SOLDER TAIL: 2.54µm MIN. TIN OVER  
1.27µm MIN. NICKEL UNDERPLATE  
FORKLOCK: 2.54µm MIN. TIN OVER  
1.27µm MIN. NICKEL UNDERPLATE
  - MOLEX LOGO AND DATE CODE LOCATED APPROXIMATELY AS SHOWN
  - NON FUNCTIONAL CORE HOLE MAY VARY
  - PRODUCT SPECIFICATION PS-78053-002 APPLIES
  - MATES WITH : SFF-8482 PLUG  
: SATA PLUG SERIES 87679, 87703 AND 87799



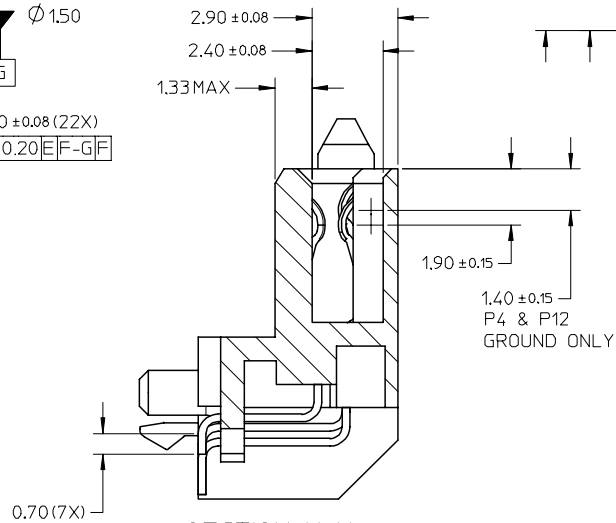
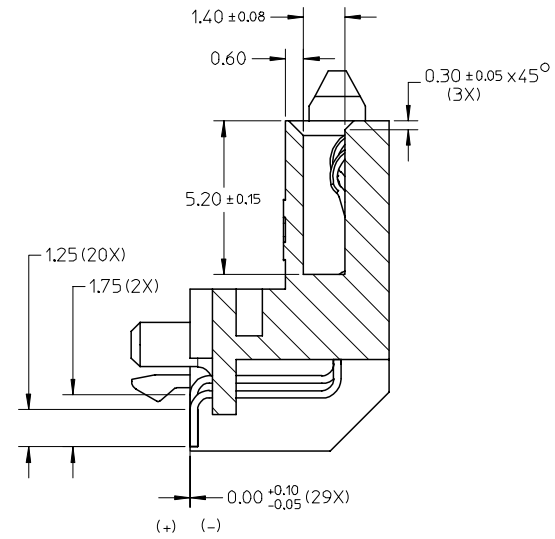
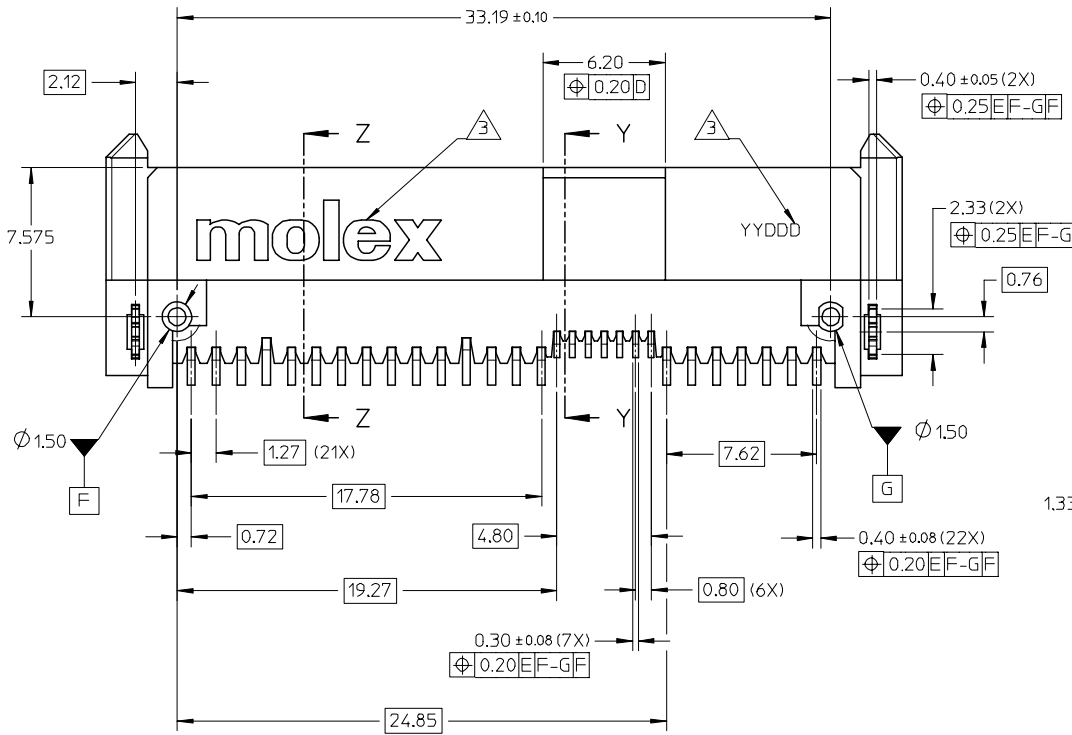
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ADD T&R OPTION	QUALITY SYMBOLS
EC NO: S2008-0321	▽=0
DRWN:YKOH	▽=0
CHKD:BOKOK	
APPR:KCLING	
REV	DESCRIPTION
4	

GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	
	MM ONLY	
	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± 0.15	± ---
2 PLACES	± 0.20	± ---
1 PLACE	± ---	± ---
ANGULAR ± 3 °		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

DRAWN BY	DATE
YKOH	2005/09/02
CHECKED BY	DATE
SHONG	2005/09/14
APPROVED BY	DATE
KCLING	2005/09/14
MATERIAL NO.	
SEE TABLE	
SIZE	
A3	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
NTS	METRIC		
TITLE			
SAS RECEPTACLE (REVERSE)			
R/A, SMT, 4.99MM HEIGHT			
MOLEX		MOLEX INCORPORATED	
DOCUMENT NO.		SHEET NO.	
SD-78053-001		1 OF 4	
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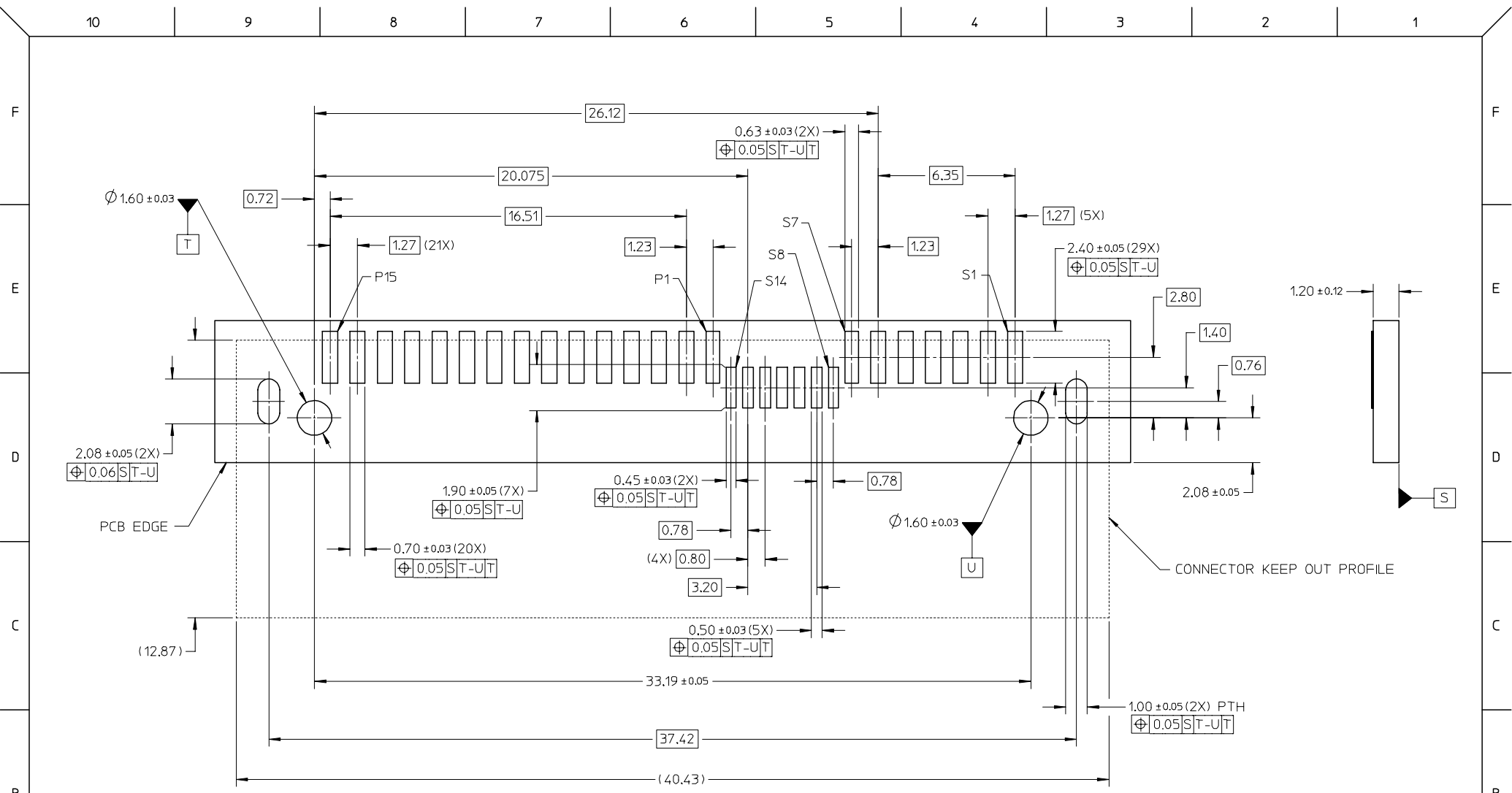


SECTION Z-Z

SECTION Y-Y

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ADD T&R OPTION EC NO: S2008-0321 DRWN:YKOH CHKD:BOKOK APPR:KCLING	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
				DRAWN BY YKOH		DATE 2005/09/02	TITLE SAS RECEPTACLE (REVERSE) R/A, SMT, 4.99MM HEIGHT			
				CHECKED BY SHONG		DATE 2005/09/14	APPROVED BY KCLING			
				APPROVED BY KCLING		DATE 2005/09/14	MATERIAL NO.		DOCUMENT NO. SD-78053-001	
4	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		MOLEX INCORPORATED		SHEET NO. 2 OF 4		



RECOMMENDED PCB LAYOUT

THIS DESIGN IS BASED ON DESIGN OBJECTIVES AND IS STRICTLY TENTATIVE. IT MAY CHANGE BASED ON RESULTS OF ADDITIONAL DESIGN REVIEWS & VERIFICATIONS.

ADD T&R OPTION	2007/10/25	2007/10/26
EC NO: S2008-0321	2007/10/25	2007/10/26
DRWN:YKOH	2007/10/25	2007/10/26
CHKD:BOKOK	2007/10/25	2007/10/26
APPR:KCLING	2007/10/26	2007/10/26
REV	DESCRIPTION	
4		

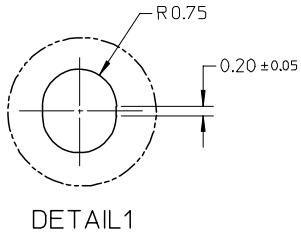
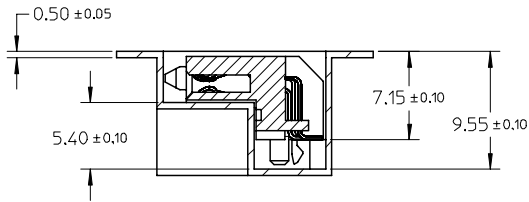
QUALITY SYMBOLS	▽=0
	▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)	mm	INCH
	4 PLACES ± ---	± ---
	3 PLACES ± 0.15	± ---
	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		
YKOH	2005/09/02	SAS RECEPTACLE (REVERSE)		
CHECKED BY	DATE	R/A, SMT, 4.99MM HEIGHT		
SHONG	2005/09/14			
APPROVED BY	DATE			
KCLING	2005/09/14			
MATERIAL NO.		DOCUMENT NO.		
		SD-78053-001		
SIZE	SEE TABLE			
A3				

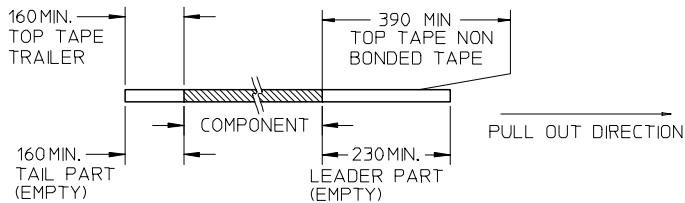
MOLEX INCORPORATED		SHEET NO.
		3 OF 4
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PARTIAL1  
SECTION Z-Z



NOTES:

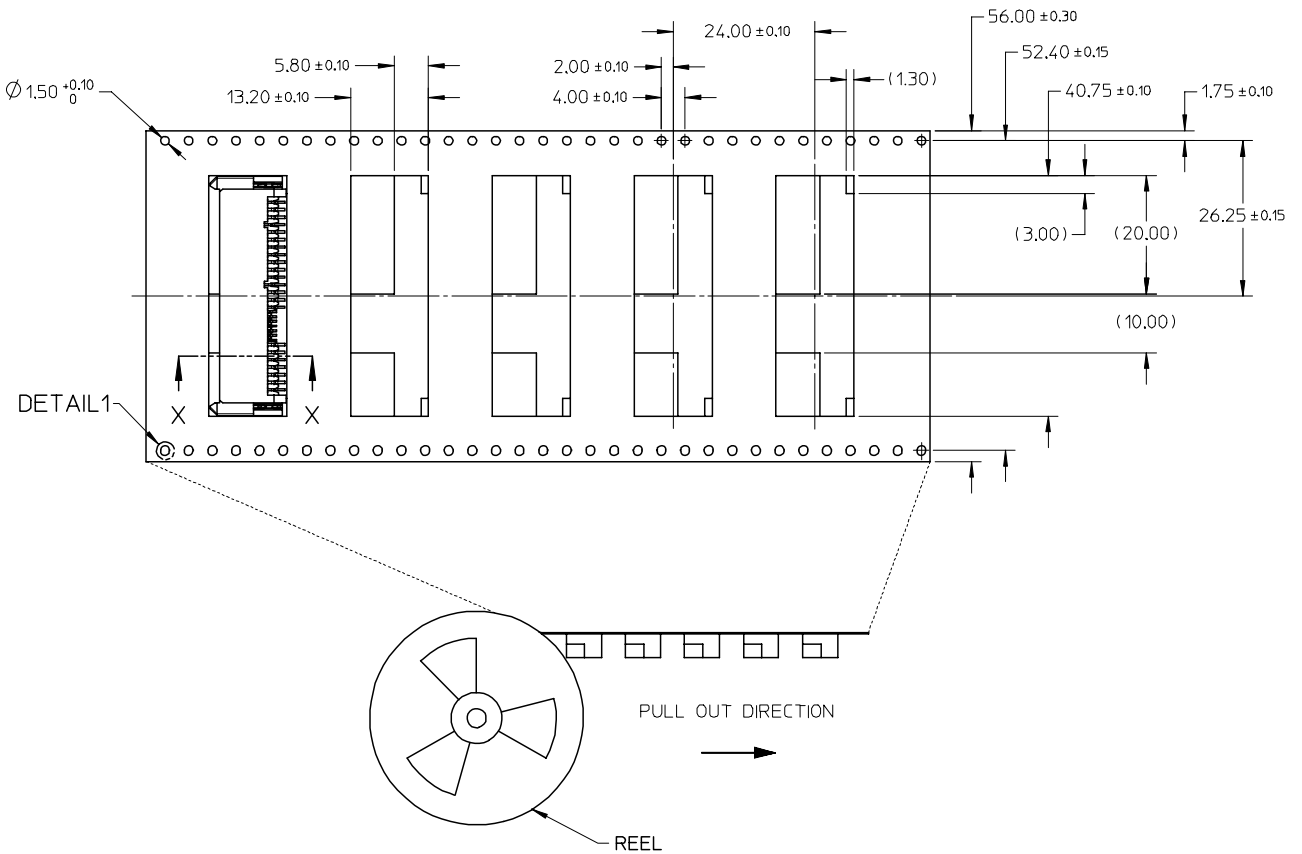
1. LEADER AND TRAILER TAPE



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



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				DRAWN BY YKOH	DATE 2005/09/02	TITLE SAS RECEPTACLE (REVERSE) R/A, SMT, 4.99MM HEIGHT		
				CHECKED BY SHONG	DATE 2005/09/14	APPROVED BY KCLING		
				DATE 2005/09/14	MATERIAL NO.			DOCUMENT NO. SD-78053-001
4	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3	SEE TABLE			SHEET NO. 4 OF 4