

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

**Part Number:** [0879450001](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Signal Pitch, 0.80mm (.031") SCSI Pitch, 1.27mm (.050") Power Pitch SAS Receptacle, Right Angle, Surface Mount, "Z" Height of 7.07mm (.278"), with Beveled Metal Pins, PCB Thickness 1.60mm (.063"), 29 Circuits, Lead free

**Documents:**

[3D Model](#) [Product Specification PS-87945-034 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

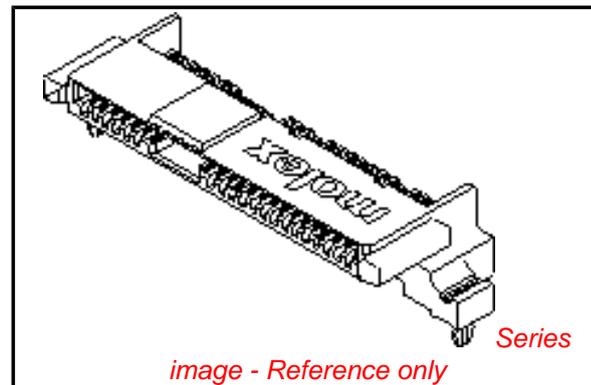
CSA LR19980  
 UL E29179

**General**

Product Family I/O Connectors  
 Series [87945](#)  
 Application Board-to-Board  
 Comments No pick and place cap|"Z" Height - 7.07mm (.278")  
 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 Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Number of Rows 2  
 Orientation Right Angle  
 PCB Locator Yes  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.062 In  
 PCB Thickness Recommended (mm) 1.60 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



**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**

[87945Series](#)

**Mates With**

[87679](#) , [87799](#) , [87703](#) , SFF 8482 Hard Disk Drive and Backplane Plug

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**

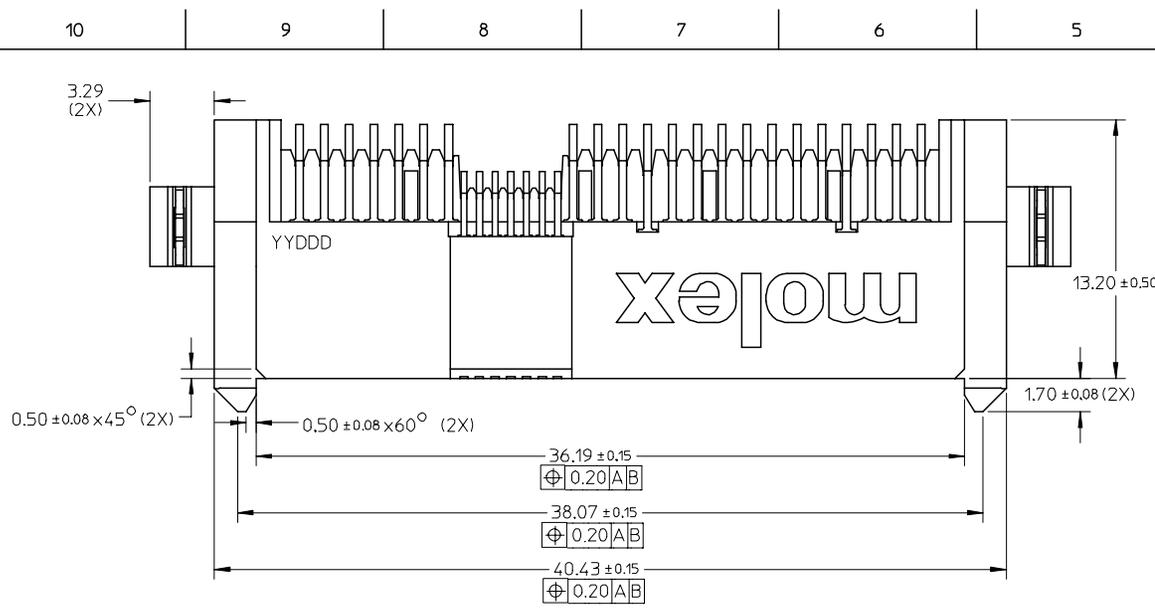
Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

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

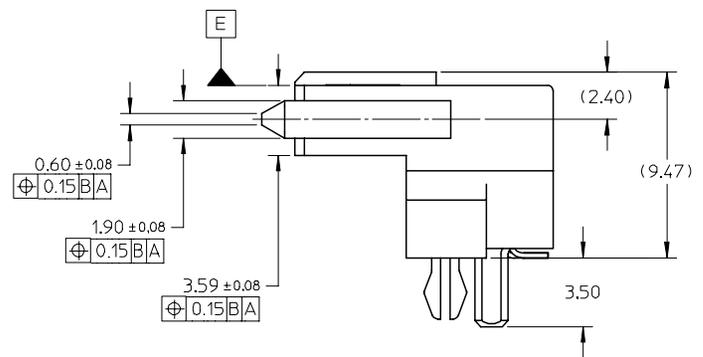
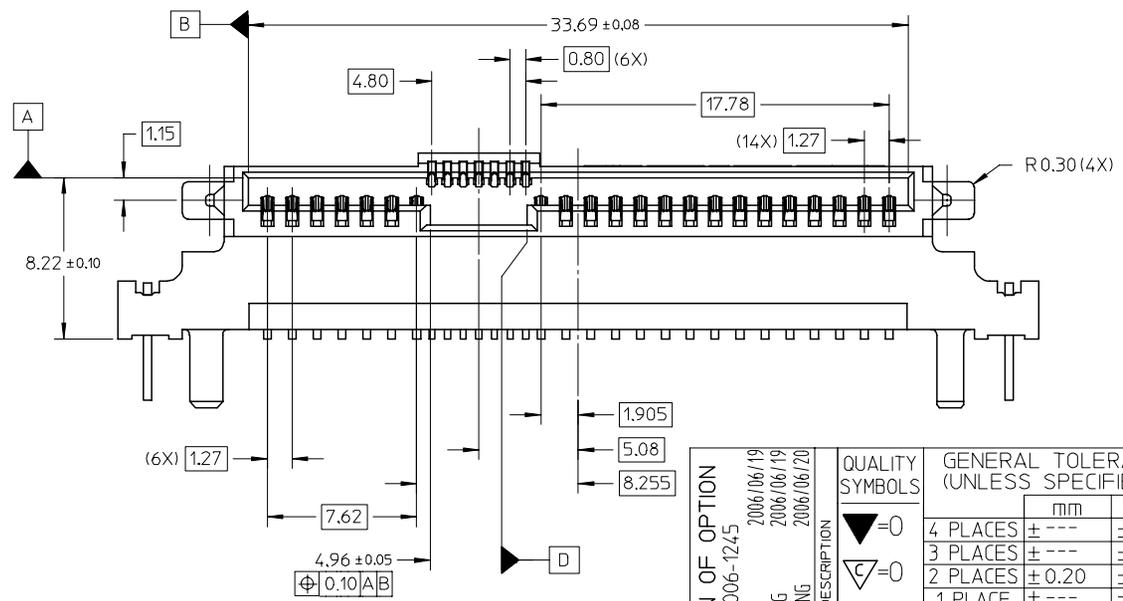
Product Specification	PS-87945-034
Sales Drawing	SD-87945-001

This document was generated on 04/09/2010

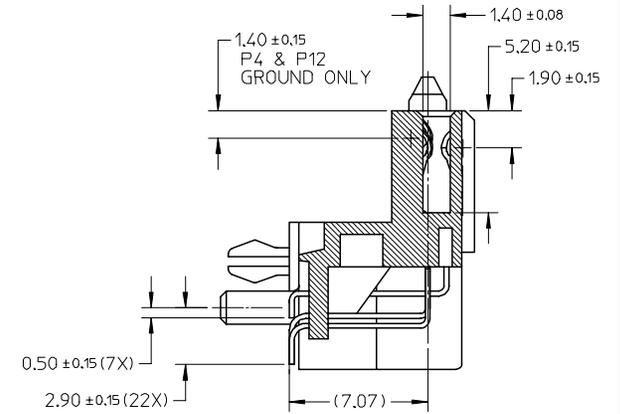
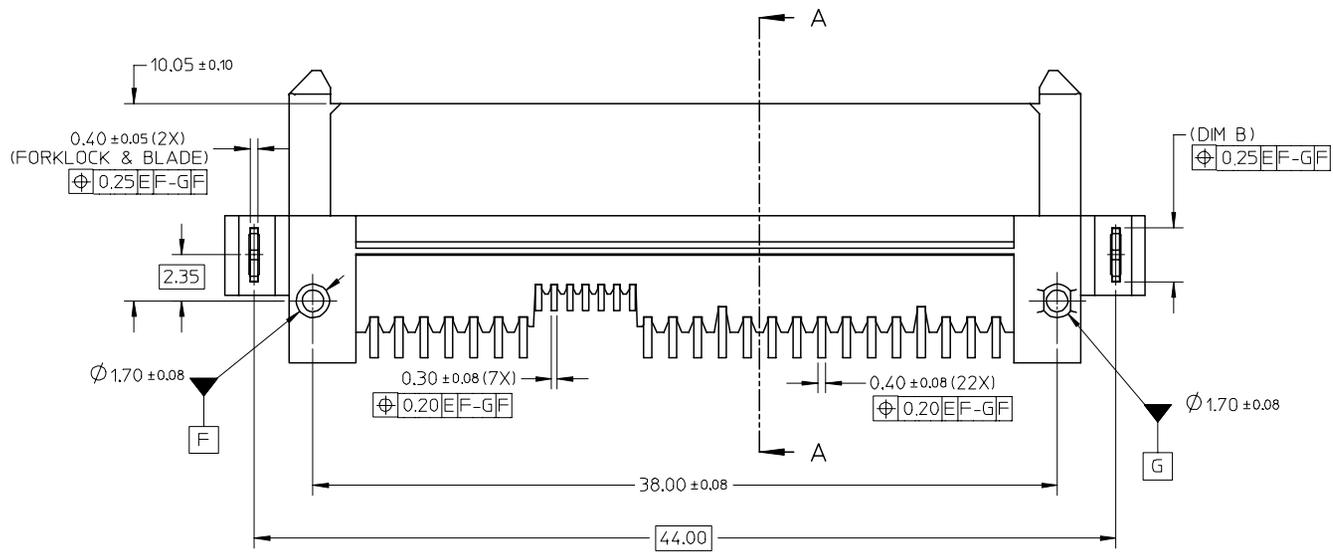
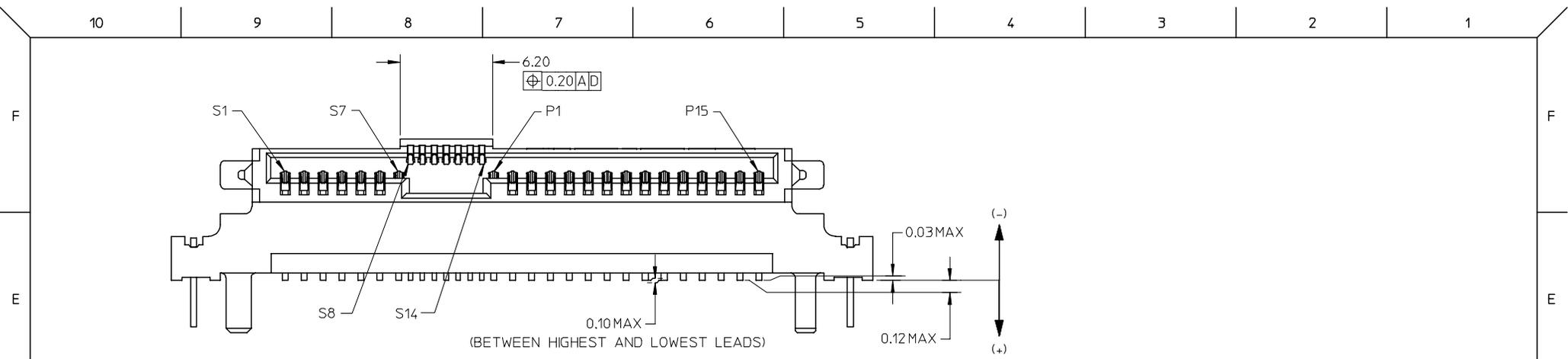
**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**



- NOTES:
- MATERIAL  
HOUSING: NYLON 9T, GLASS FILLED, UL 94V-0, BLACK  
TERMINAL: COPPER ALLOY  
FORK LOCK/BLADE: COPPER ALLOY
  - PLATING:  
TERMINAL:  
CONTACT: 0.76µm MIN. SELECTIVE GOLD OVER 1.27µm MIN. NICKEL UNDERPLATE  
SOLDERTAIL: 2.54µm MIN. TIN OVER 1.27µm MIN. NICKEL UNDERPLATE  
FORK LOCK/BLADE:  
2.54µm MIN. TIN OVER 1.27µm MIN. NICKEL UNDERPLATE
  - MOLEX LOGO LOCATED APPROXIMATELY AS SHOWN
  - NON FUNCTIONAL CORE HOLE MAY VARY
  - THIS PRODUCT IS COMPLIANT TO RoHS DIRECTIVE WITH THE FOLLOWING BANNED SUBSTANCES - LEAD, MERCURY, CADMIUM, HEXAVALENT CHROMIUM, POLYBROMINATED BIPHENYLS AND POLYBROMINATED DIPHENYL ETHERS.
  - PRODUCT SPECIFICATION PS-87945-034 APPLIES.
  - MATES WITH : SFF-8482 PLUG  
SATA PLUG SERIES 87679, 87703 AND 87799
  - PACKAGING : TRAY

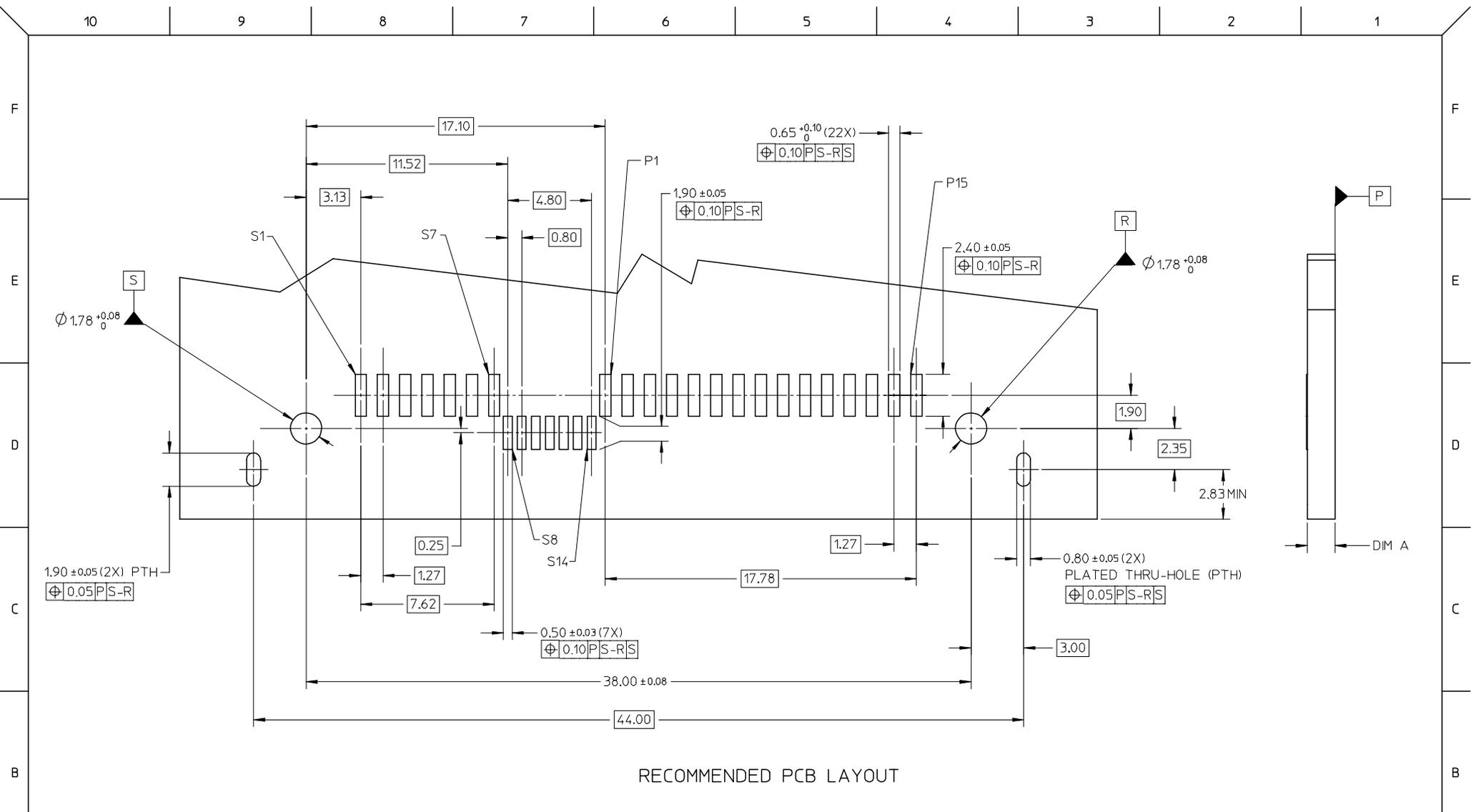


ADDITION OF OPTION EC NO: S2006-1245 DRWN:YKH CHKD:SHH APPR:KCL 2006/06/19 2006/06/19 2006/06/20	QUALITY SYMBOLS ▽=0 ◁=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY KCHO	DATE 2005/02/22	SERIAL ATTACH SCSI RECEPTACLE, RIGHT-ANGLE SMT, 7.07MM HEIGHT MOLEX INCORPORATED			
		4 PLACES	± ---	± ---	CHECKED BY DKOH	DATE 2005/03/23				
		3 PLACES	± ---	± ---	APPROVED BY SKTOH	DATE 2005/03/23	MATERIAL NO.	DOCUMENT NO. SD-87945-001	SHEET NO. 1 OF 4	
2 PLACES	± 0.20	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE					
1 PLACE	± ---	± ---								
		ANGULAR ± 3 °								



SECTION A-A

ADDITION OF OPTION EC NO: S2006-1245 DRWN:YKOH CHKD:SHONG APPR:KCLING	2006/06/19 2006/06/19 2006/06/20	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
	DESCRIPTION REV		4 PLACES ± --- 3 PLACES ± --- 2 PLACES ± 0.20 1 PLACE ± ---	± --- ± --- ± --- ± ---	DRAWN BY KCHO	DATE 2005/02/22	TITLE SERIAL ATTACH SCSI RECEPTACLE, RIGHT-ANGLE SMT, 7.07MM HEIGHT		MOLEX INCORPORATED		SHEET NO. 2 OF 4
			ANGULAR ± 3 °		CHECKED BY DKOH	DATE 2005/03/23	MOLEX INCORPORATED		DOCUMENT NO. SD-87945-001		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY SKTOH	DATE 2005/03/23	SEE TABLE		MATERIAL NO.		



RECOMMENDED PCB LAYOUT

ADDITION OF OPTION EC NO: S2006-1245 DRWN:YKH CHKD:SHH APPR:KCL 2006/06/19 2006/06/19 2006/06/20	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION																		
		<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	±---	±---	DRAWN BY KCHO 2005/02/22		DATE 2005/02/22		SERIAL ATTACH SCSI RECEPTACLE, RIGHT-ANGLE SMT, 7.07MM HEIGHT			
			mm	INCH																						
		4 PLACES	±---	±---																						
3 PLACES	±---	±---																								
2 PLACES	±0.20	±---																								
1 PLACE	±---	±---																								
ANGULAR ± 3 °		CHECKED BY DKOH 2005/03/23		DATE 2005/03/23																						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		APPROVED BY SKTOH 2005/03/23		MOLEX INCORPORATED		SHEET NO. 3 OF 4																		
MATERIAL NO.		DOCUMENT NO.		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																				

