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Part Number: [0879451001](#)
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 1.83mm (.072") to 2.20mm (.087"), 29 Circuits, Lead free

Documents:

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

Agency Certification

CSA LR19980

General

Product Family I/O Connectors
 Series [87945](#)
 Application Board-to-Board
 Comments PCB Forklock Must be Plated Through Hole regardless whether Forklock is soldered or not
 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) 0.083 In
 PCB Thickness Recommended (mm) 2.10 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

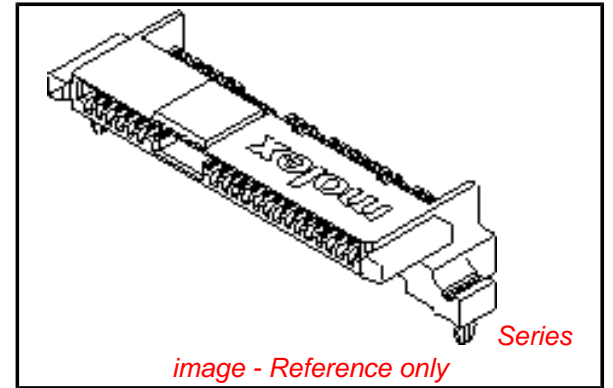


image - Reference only

EU RoHS

ELV and RoHS Compliant
REACH SVHC Contains SVHC: No
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

[87945Series](#)

Mates With

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

Surface Mount Compatible (SMC)	Yes
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

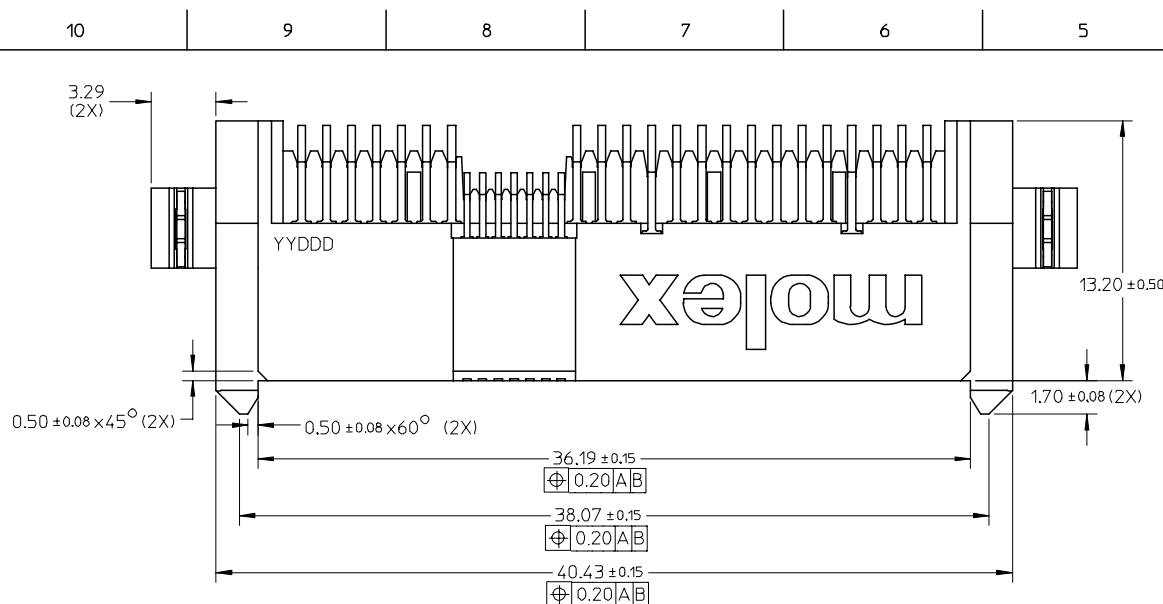
Material Info

Reference - Drawing Numbers

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

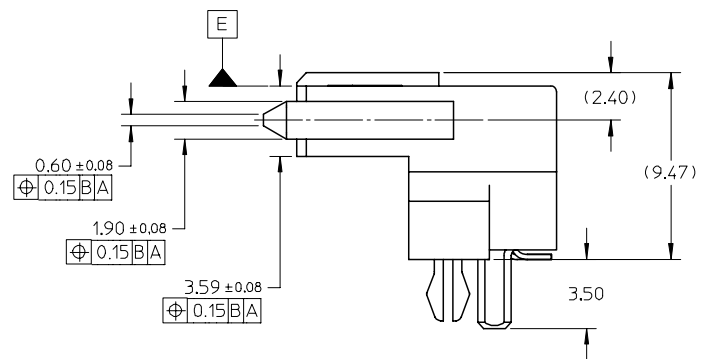
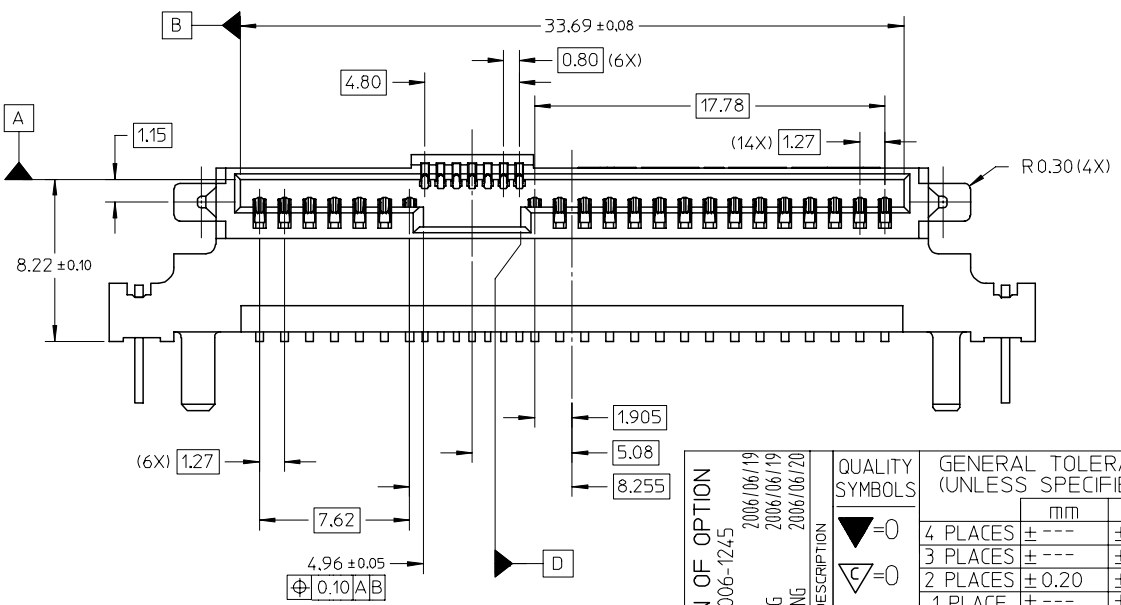
This document was generated on 05/20/2010

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NOTES:

1. MATERIAL
HOUSING: NYLON 9T, GLASS FILLED, UL 94V-0, BLACK
TERMINAL: COPPER ALLOY
FORK LOCK/BLADE: COPPER ALLOY
2. 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
3. MOLEX LOGO LOCATED APPROXIMATELY AS SHOWN
4. NON FUNCTIONAL CORE HOLE MAY VARY
5. THIS PRODUCT IS COMPLIANT TO RoHS DIRECTIVE WITH THE FOLLOWING BANNED SUBSTANCES - LEAD, MERCURY, CADMIUM, HEXAVALENT CHROMIUM, POLYBROMINATED BIPHENYLS AND POLYBROMINATED DIPHENYL ETHERS.
6. PRODUCT SPECIFICATION PS-87945-034 APPLIES.
7. MATES WITH : SFF-8482 PLUG
SATA PLUG SERIES 87679, 87703 AND 87799
8. PACKAGING : TRAY

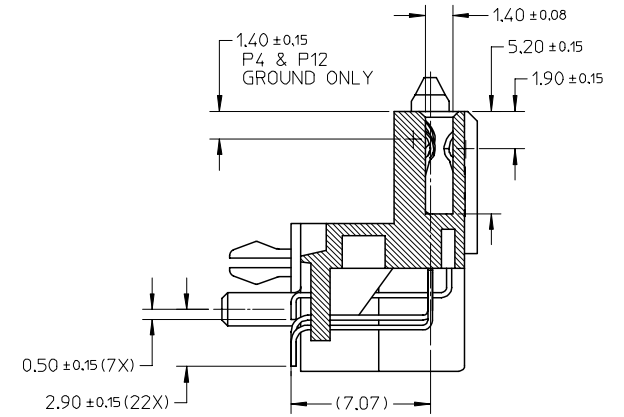
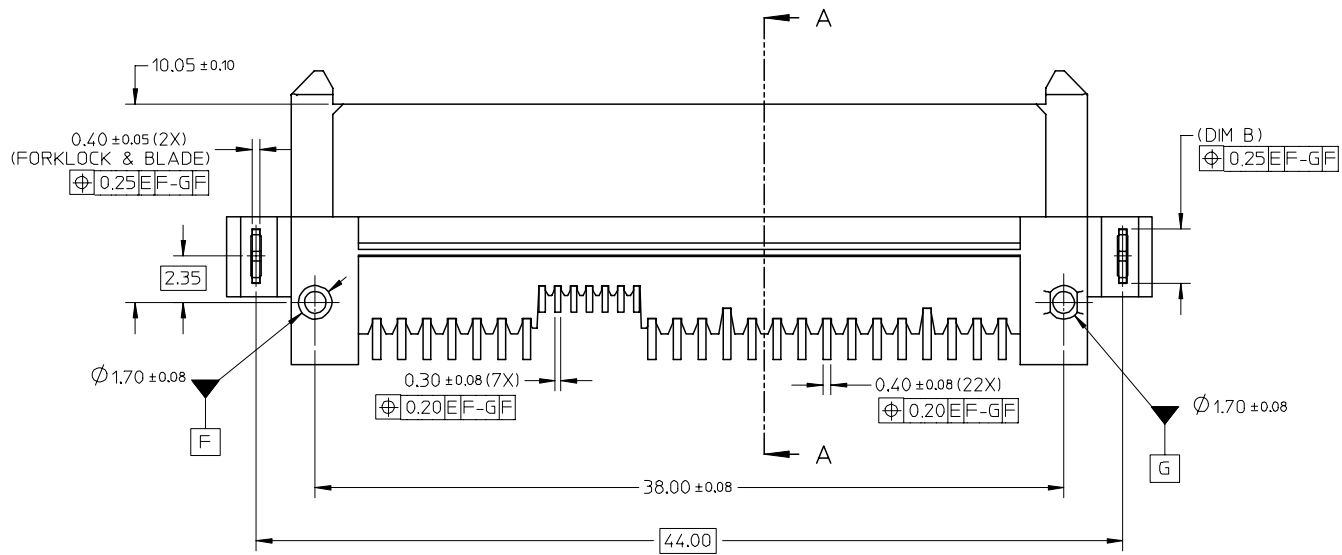
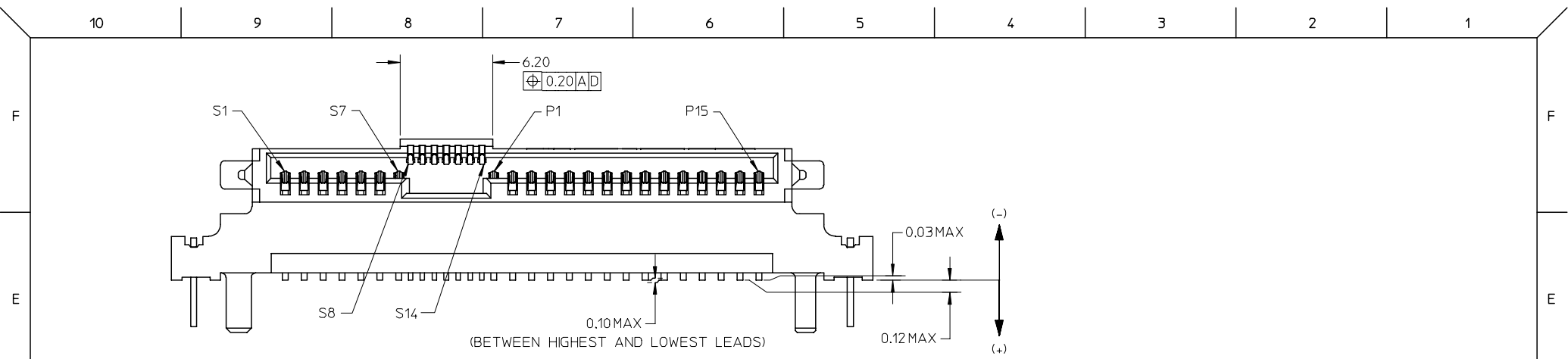


REV	DESCRIPTION
A	ADDITION OF OPTION
B	EC NO: S2006-1245 DRWN:YKH CHKD:SHH APPR:KCL
	2006/06/19 2006/06/19 2006/06/20

QUALITY SYMBOLS	
	=0
	<=0

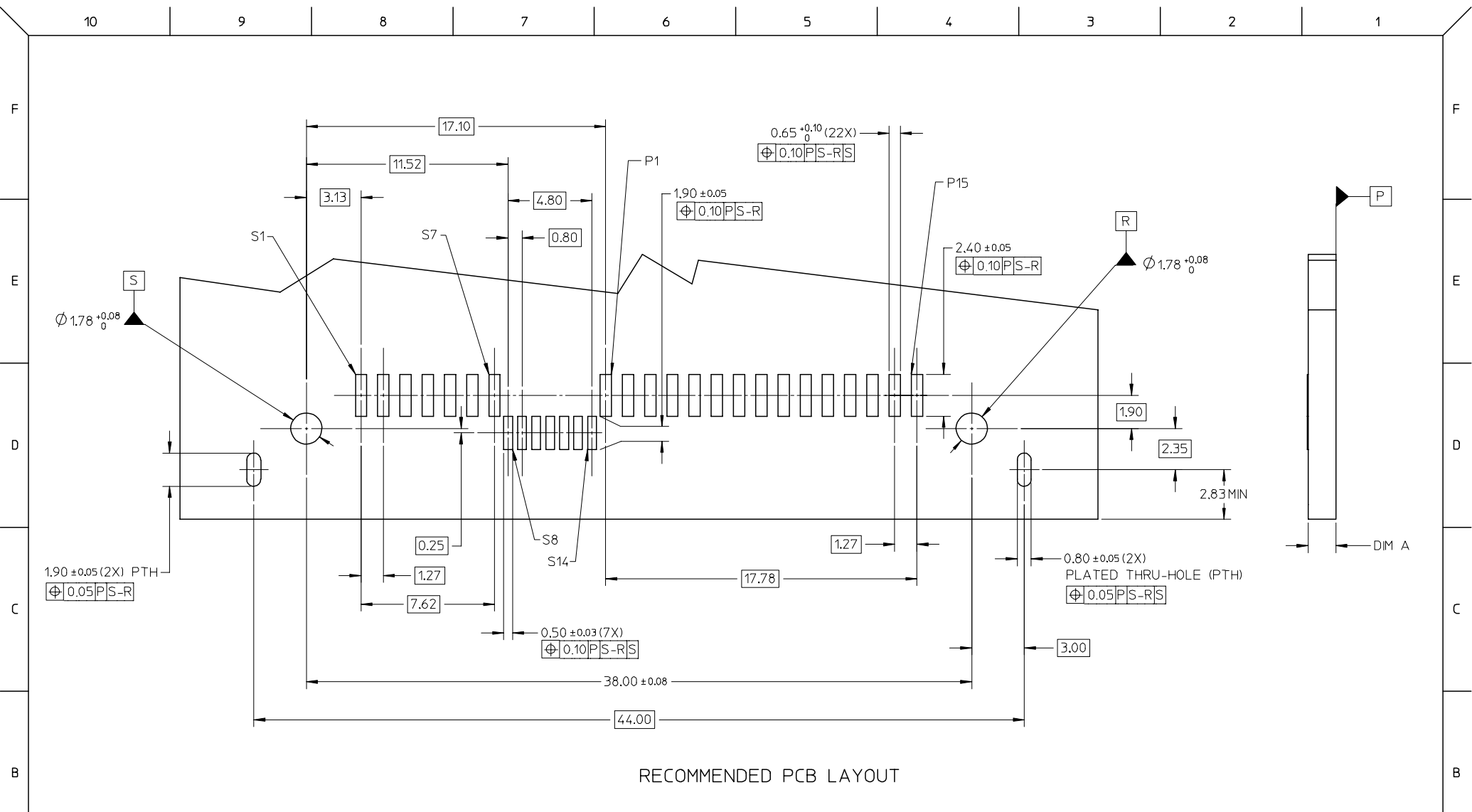
GENERAL TOLERANCES (UNLESS SPECIFIED)	
mm	INCH
4 PLACES ± ---	± ---
3 PLACES ± ---	± ---
2 PLACES ± 0.20	± ---
1 PLACE ± ---	± ---
ANGULAR ± 3 °	

DIMENSION STYLE		SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION	
MM ONLY		NTS		METRIC			
DRAWN BY	DATE	TITLE	SERIAL ATTACH SCSI RECEPTACLE, RIGHT-ANGLE SMT, 7.07MM HEIGHT MOLEX INCORPORATED				
CHKD BY	DATE						
APPROVED BY	DATE						
MATERIAL NO.	DOCUMENT NO.	SHEET NO.					
SEE TABLE	SD-87945-001	1 OF 4					



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	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
			$\nabla = 0$ $\triangle = 0$	(UNLESS SPECIFIED) mm INCH	MM ONLY	NTS	METRIC	
			4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3°	DRAWN BY: KCHO CHECKED BY: DKOH APPROVED BY: SKTOH DATE: 2005/02/22 DATE: 2005/03/23 DATE: 2005/03/23	TITLE	SERIAL ATTACH SCSI RECEPTACLE, RIGHT-ANGLE SMT, 7.07MM HEIGHT		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87945-001	SHEET NO. 2 OF 4		



RECOMMENDED PCB LAYOUT

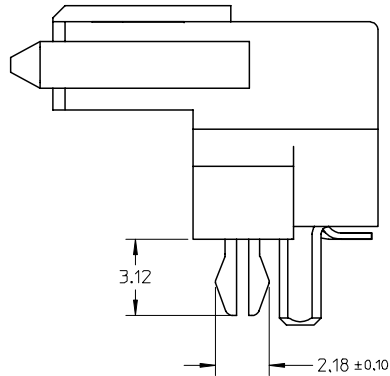
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SERIAL ATTACH SCSI
 RECEPTACLE, RIGHT-ANGLE
 SMT, 7.07MM HEIGHT
 MOLEX INCORPORATED

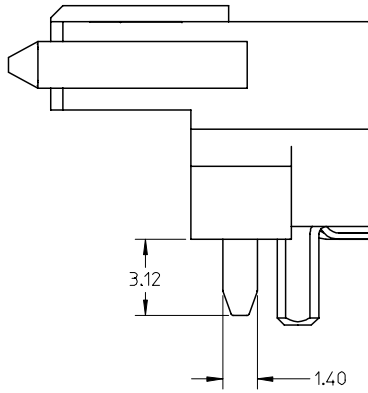
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 CHECKED BY: DKOH DATE: 2005/03/23
 APPROVED BY: SKTOH DATE: 2005/03/23
 MATERIAL NO. SEE TABLE
 DOCUMENT NO. SD-87945-001
 SHEET NO. 3 OF 4

DRAFT WHERE APPLICABLE
 MUST REMAIN
 WITHIN DIMENSIONS

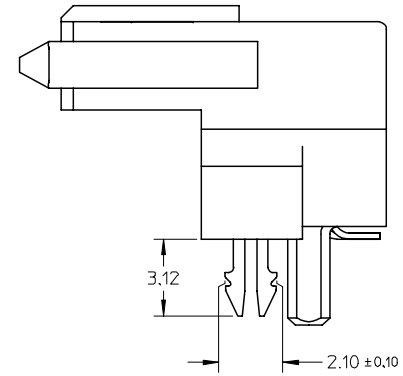
PART NUMBER	HOLD DOWN	DIM A (PCB THICKNESS)	DIM B
87945-0001	FORKLOCK	1.60±0.10	(2.18)
87945-0002	BLADE	-	(1.40)
87945-1001	FORKLOCK	1.834±0.183 TO 2.20±0.22 PCB FORKLOCK HOLE MUST BE PLATED THRU-HOLE (PTH) REGARDLESS WHETHER FORKLOCK IS SOLDERED OR NOT	(2.10)



87945-0001



87945-0002



87945-1001

ADDITION OF OPTION EC NO: S2006-1245 DRWN:YKH CHKD:SHONG APPR:KCLING	2006/06/19 2006/06/19 2006/06/20	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION																		
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