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Part Number: **0878630015**
Status: **Active**
Description: 1.27mm (.050") Signal Pitch, 0.80mm (.031") SCSI Pitch, 1.27mm (.050") Power Pitch
 SAS Receptacle, Vertical, Press fit, 2.70mm (.106") Tail Length, 29 Circuits, Lead free

Documents:

[3D Model](#) [Product Specification PS-87863-060 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
 UL E29179

General

Product Family I/O Connectors
 Series 87863
 Application Board-to-Board
 Comments No pick and place cap
 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
 Material - Resin High Temperature Thermoplastic
 Number of Rows 2
 Orientation Vertical
 PC Tail Length (in) 0.087 In, 0.106 In
 PC Tail Length (mm) 2.20 mm, 2.70 mm
 PCB Locator Yes
 PCB Retention Yes
 PCB Thickness Recommended (in) 0.093 In, 0.125 In
 PCB Thickness Recommended (mm) 2.36 mm, 3.18 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

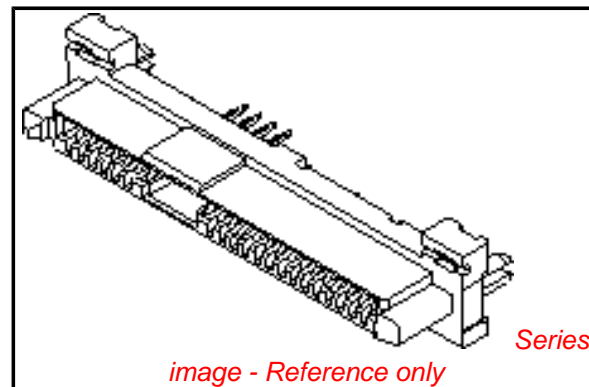


image - Reference only

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

87863Series

Mates With

87679 , 87799 , 87703 , SFF 8482 Hard
 Disk Drive and Backplane Plug

Polarized to PCB	Yes
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	0°C to +55°C
Termination Interface: Style	Through Hole - Compliant Pin
Waterproof / Dustproof	No
Wire Size AWG	N/A

Electrical

Current - Maximum per Contact	1.5A
Shielded	No
Voltage - Maximum	30V

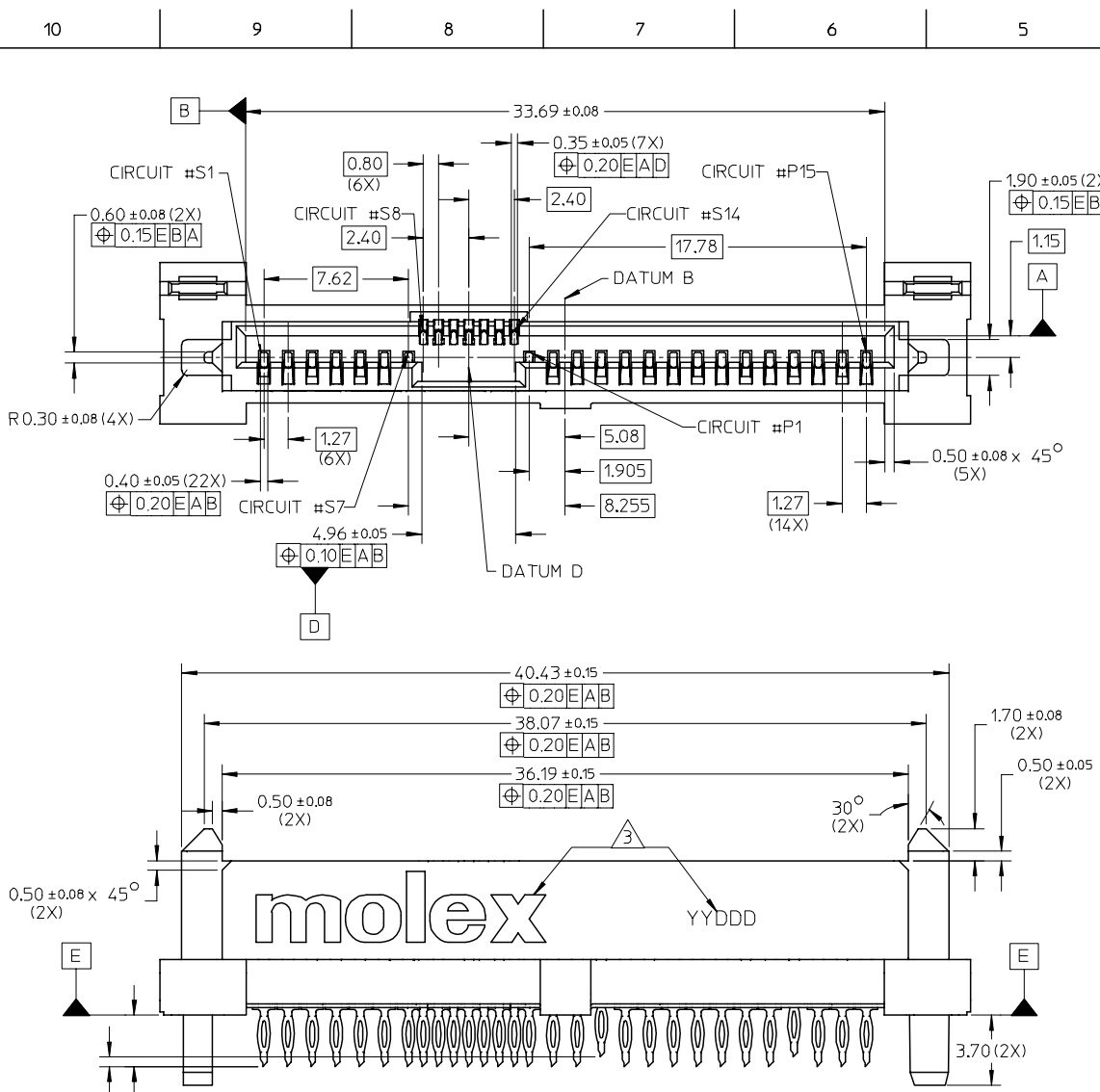
Material Info

Reference - Drawing Numbers

Product Specification	PS-87863-060
Sales Drawing	SD-87863-059

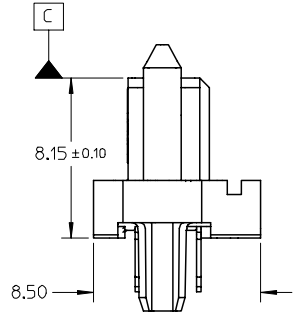
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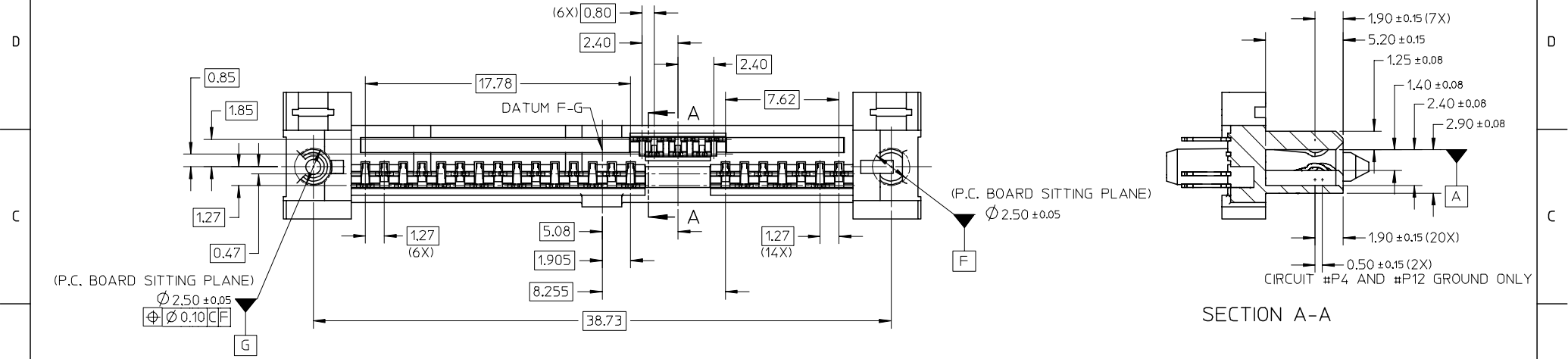
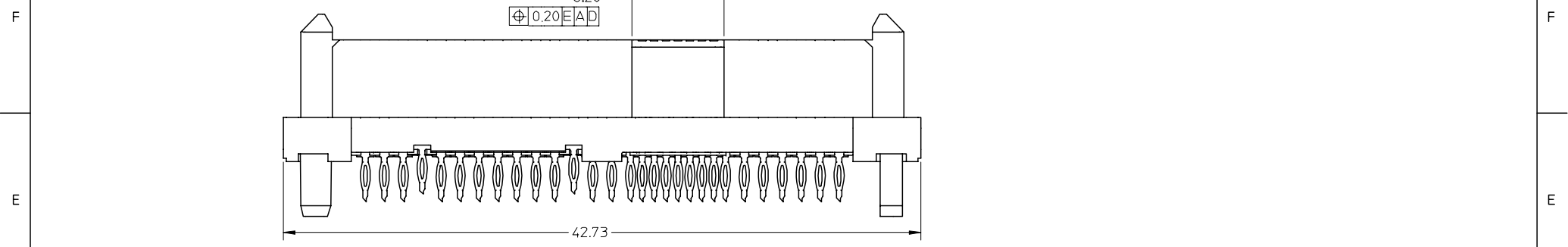
PART NUMBER	DIMENSION 'L'	DIMENSION 'M'	PLATING OPTION
87863-0015	2.70	1.60	TIN
87863-0025	3.50	2.36 TO 3.18	TIN
87863-2025			TIN/LEAD

- NOTES:
- MATERIAL:
HOUSING: LIQUID CRYSTAL POLYMER, GLASS FILLED, UL 94V-0, COLOR BLACK.
TERMINAL: COPPER ALLOY.
 - PLATING:
CONTACTS: 0.76µm MIN. SELECTIVE GOLD OVER 1.27µm MIN. NICKEL UNDERPLATE.
SOLDERTAILS: 2.54µm MIN. TIN OR 2.54µm MIN. TIN/LEAD OVER 1.27µm MIN. NICKEL UNDERPLATE.
 - MOLEX LOGO AND DATE CODE LOCATED APPROXIMATELY AS SHOWN.
 - PRODUCT CONFORMS TO SFF-8482 SPECIFICATION.
 - KEEP OUT ZONE ON BOTH SIDE OF THE PCB FOR CONNECTOR.
 - PACKAGING: TRAY.
 - PRODUCT SPECIFICATION:
87863-0015 AND 87863-0025 REFER TO PS-87863-060
87863-2025 REFER TO PS-87863-061
 - MATES WITH: SFF-8482 PLUG
SATA PLUG SERIES 87679, 87703 AND 87799
 - THIS PRODUCT IS COMPLIANT TO RoHS DIRECTIVE WITH THE FOLLOWING BANNED SUBSTANCES - LEAD, MERCURY, CADMIUM, HEXAVALENT CHROMIUM, POLYBROMINATED BIPHENYLS AND POLYBROMINATED DIPHENYLS ETHERS.



REVISED EC NO: S2007-1057 DRWN:YKOH CHKD:CGTAN APPR:KCLING 2007/06/14 2007/06/14 2007/06/14	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY DKOH	DATE 2004/10/16	SERIAL ATTACH SCSI PRESS-FIT RECEPTACLE STANDARD HEIGHT MOLEX INCORPORATED			
			4 PLACES ± ---	± ---	CHECKED BY KCLING	DATE 2004/11/15				
			3 PLACES ± ---	± ---	APPROVED BY SKTOH	DATE 2004/11/17	MOLEX INCORPORATED DOCUMENT NO. SD-87863-059 SHEET NO. 1 OF 4			
	2 PLACES ± 0.20	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE					
	1 PLACE ± ---	± ---								

10 9 8 7 6 5 4 3 2 1



B B

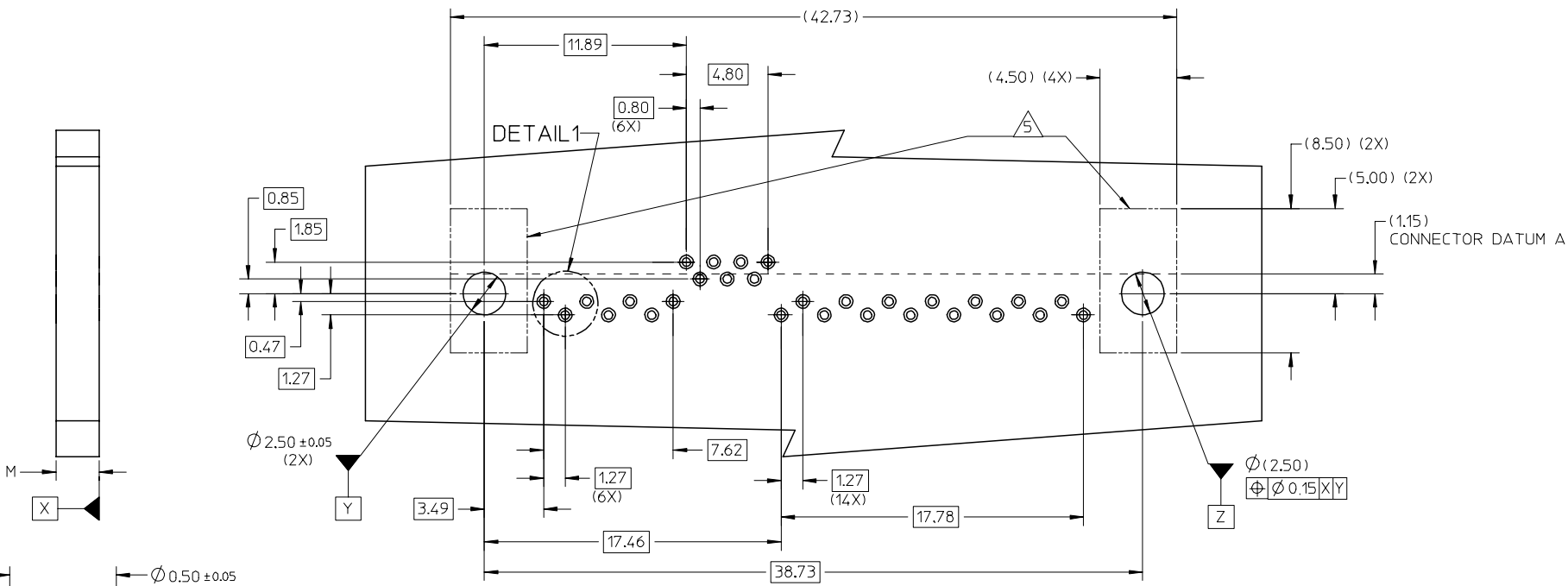
REVISED EC NO: S2007-1057 DRWN:YKH CHKD:CGTAN APPR:KCLING	2007/06/14 2007/06/14 2007/06/14	DESCRIPTION C5	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
			▽=0 ◻=0		MM ONLY	NTS	METRIC	
					DRAWN BY	DATE	TITLE	
					CHECKED BY	DATE	SERIAL ATTACH SCSI PRESS-FIT RECEPTACLE STANDARD HEIGHT	
				APPROVED BY	DATE	MOLEX INCORPORATED		
				SKT0H	2004/11/17	DOCUMENT NO.		SHEET NO.
				SEE TABLE		SD-87863-059		2 OF 4
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				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

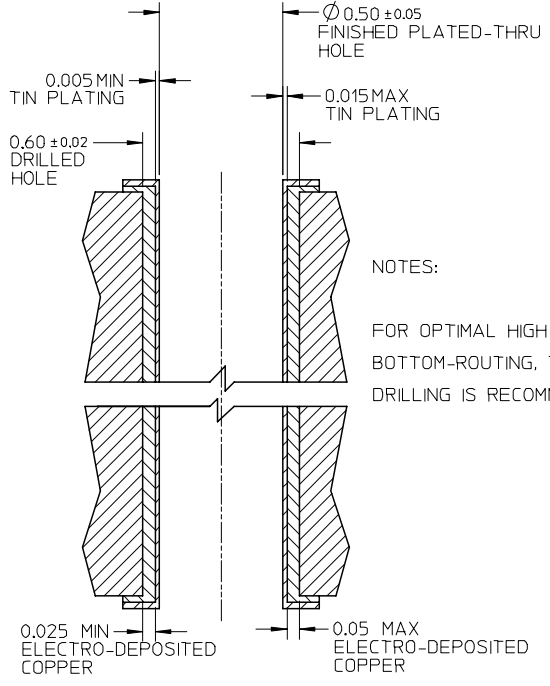
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F
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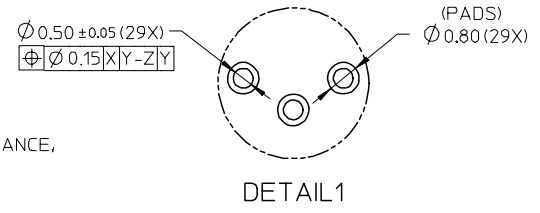
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RECOMMENDED PCB LAYOUT



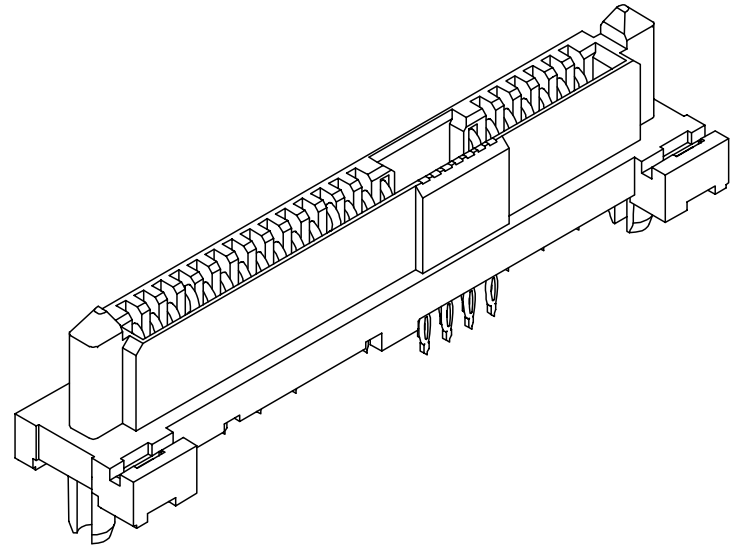
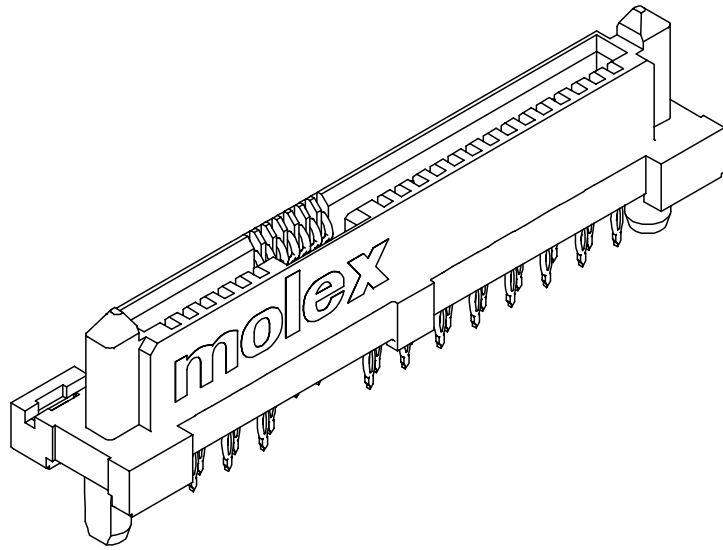
NOTES:
FOR OPTIMAL HIGH SPEED ELECTRICAL PERFORMANCE,
BOTTOM-ROUTING, THINNER PCBs AND/OR BACK
DRILLING IS RECOMMENDED.



REVISED EC NO: S2007-1057 2007/06/14 DRWN:YKOH CHKD:CGTAN 2007/06/14 APPR:KCLING 2007/06/14	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY DKOH	DATE 2004/10/16	TITLE SERIAL ATTACH SCSI PRESS-FIT RECEPTACLE STANDARD HEIGHT	
		4 PLACES	± ---	± ---	CHECKED BY KCLING	DATE 2004/11/15	MOLEX INCORPORATED	
		3 PLACES	± ---	± ---	APPROVED BY SKTOH	DATE 2004/11/17	DOCUMENT NO. SD-87863-059	SHEET NO. 3 OF 4
C5	DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE				

9 8 7 6 5 4 3 2 1

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REVISED EC NO: S2007-1057 DRWN:YKOH 2007/06/14 CHKD:CGTAN 2007/06/14 APPR:KCLING 2007/06/14 C5	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± ---	mm INCH	DRAWN BY DKOH	DATE 2004/10/16	SERIAL ATTACH SCSI PRESS-FIT RECEPTACLE STANDARD HEIGHT				
			ANGULAR ± 3 °	CHECKED BY KCLING	DATE 2004/11/15						
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	APPROVED BY SKTOH	DATE 2004/11/17	MOLEX INCORPORATED				
			MATERIAL NO.	DOCUMENT NO.	SD-87863-059						
			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							SHEET NO. 4 OF 4

9 8 7 6 5 4 3 2 1