

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

**Part Number:** [0878630025](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Signal Pitch, 0.80mm (.031") SCSI Pitch, 1.27mm (.050") Power Pitch  
 SAS Receptacle, Vertical, Press fit, 3.50mm (.138") 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) 0.118 In, 0.138 In  
 PC Tail Length (mm) 3.00 mm, 3.50 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

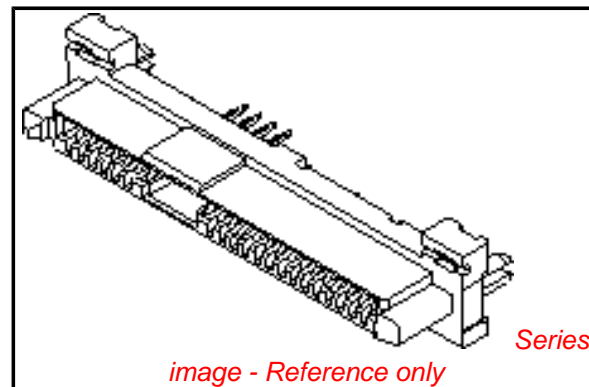


image - Reference only

**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](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**

[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

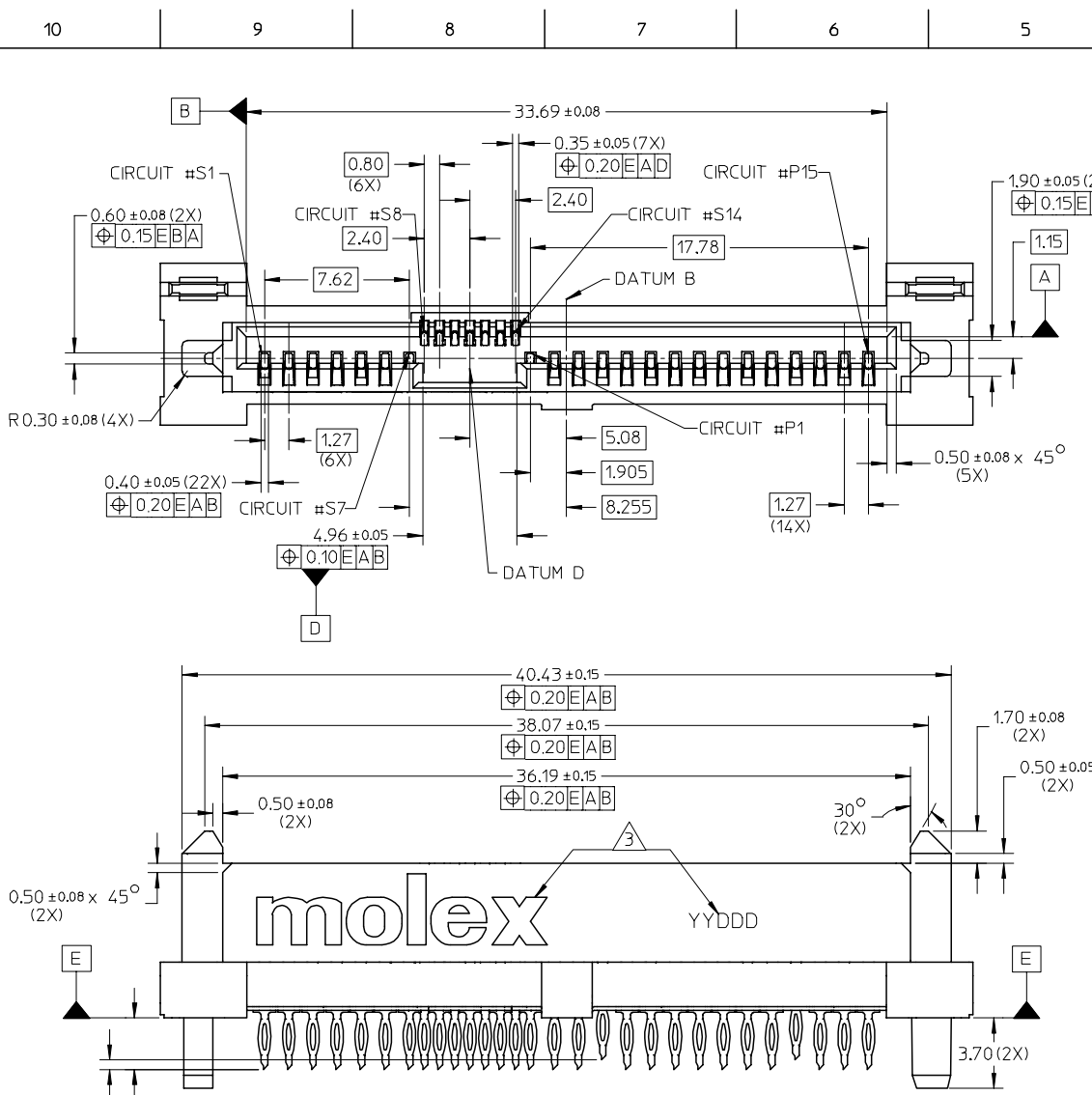
### **Material Info**

### **Reference - Drawing Numbers**

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

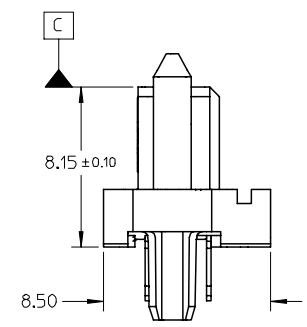
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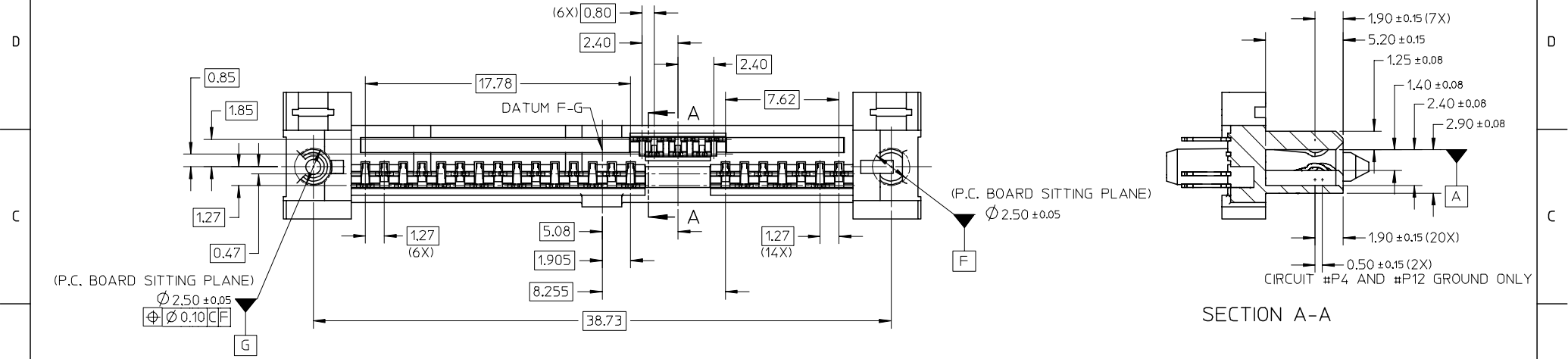
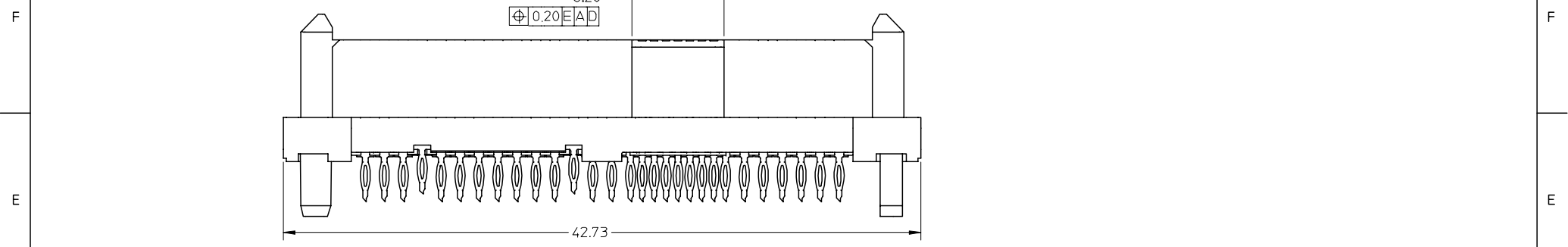
PART NUMBER	DIMENSION 'L'	DIMENSION 'M'	PLATING OPTION
87863-0015	2.70	1.60	TIN
87863-0025	3.50	2.36 TO 3.18	TIN
87863-2025			TIN/LEAD

- 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		
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.20 ± ---	1 PLACE ± --- ± ---	DRAWN BY DKOH	DATE 2004/10/16	SERIAL ATTACH SCSI PRESS-FIT RECEPTACLE STANDARD HEIGHT MOLEX INCORPORATED		
		ANGULAR ± 3°				CHECKED BY KCLING	DATE 2004/11/15			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				APPROVED BY SKTOH	DATE 2004/11/17	MATERIAL NO.	DOCUMENT NO. SD-87863-059	SHEET NO. 1 OF 4

10 9 8 7 6 5 4 3 2 1



B B

REVISED EC NO: S2007-1057 2007/06/14 DRWN:YKOH CHKD:CGTAN 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		
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		3 PLACES	± ---	± ---	CHECKED BY KCLING	DATE 2004/11/15				
		2 PLACES	± 0.20	± ---	APPROVED BY SKTOH	DATE 2004/11/17	MOLEX INCORPORATED			
1 PLACE	± ---	± ---	MATERIAL NO.		DOCUMENT NO.		SHEET NO.			
C5	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-87863-059		2 OF 4		
SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										

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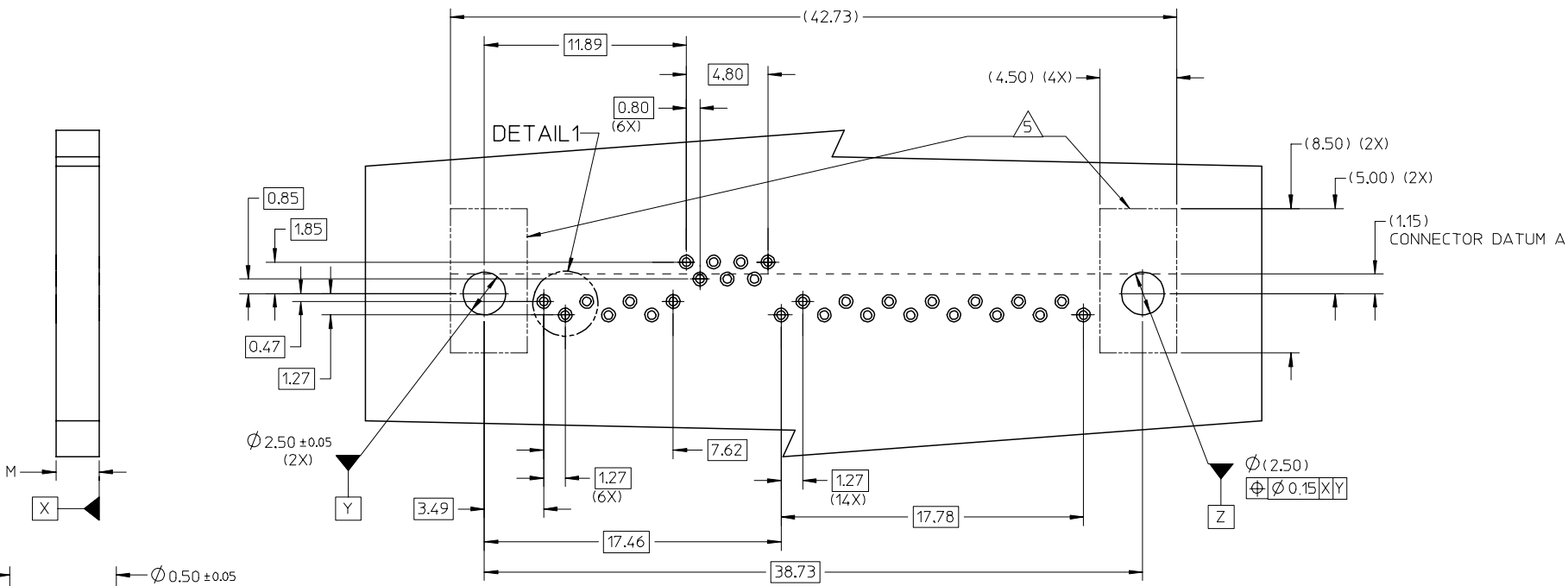
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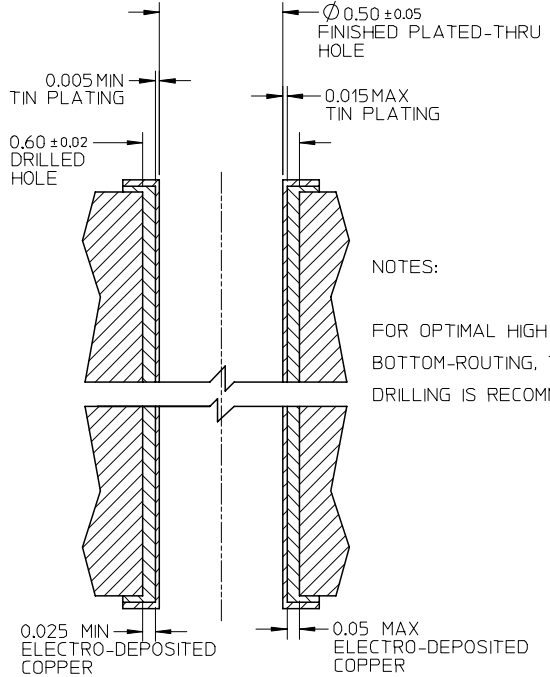
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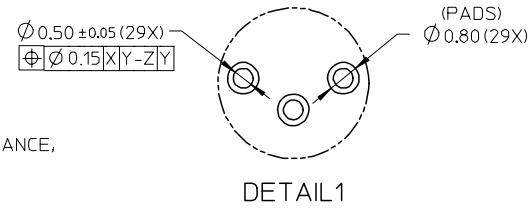
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RECOMMENDED PCB LAYOUT



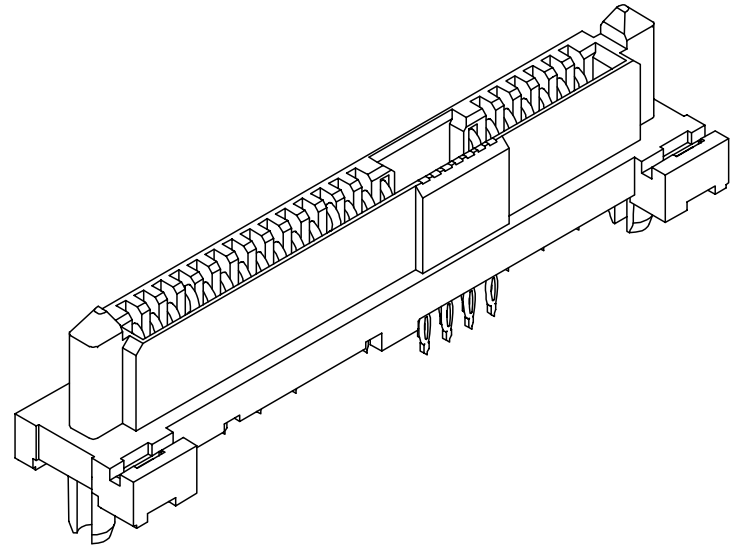
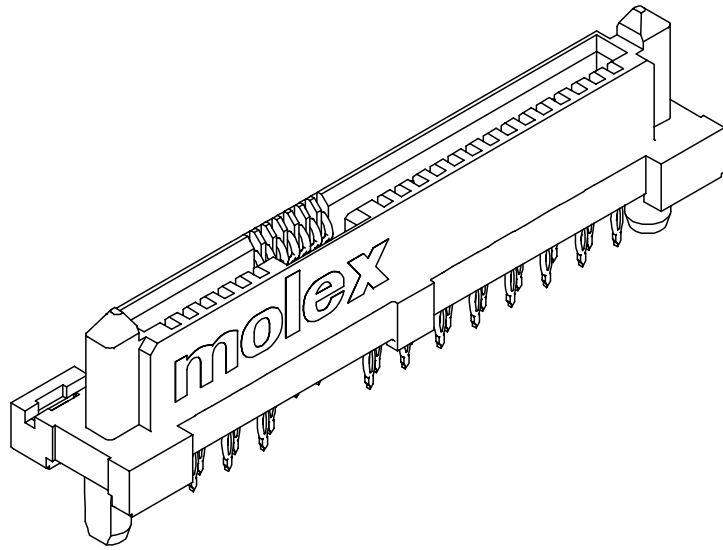
NOTES:  
FOR OPTIMAL HIGH SPEED ELECTRICAL PERFORMANCE,  
BOTTOM-ROUTING, THINNER PCBs AND/OR BACK  
DRILLING IS RECOMMENDED.



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				CHECKED BY KCLING		DATE 2004/11/15			
				APPROVED BY SKTOH		DATE 2004/11/17		MOLEX INCORPORATED	
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