

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

**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

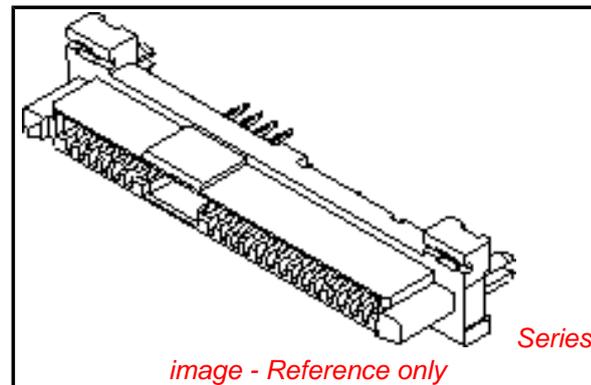


image - Reference only

**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](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

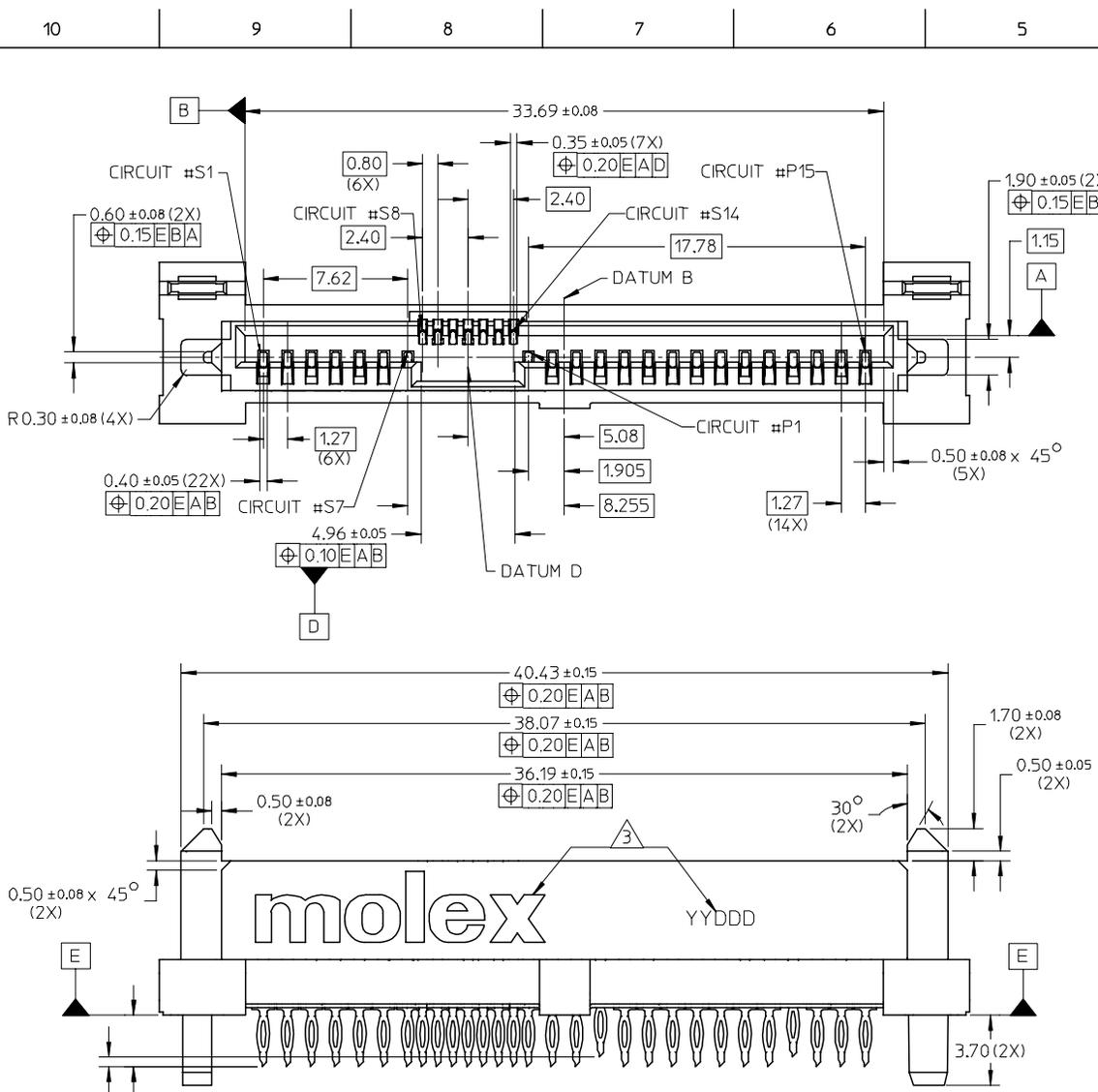
### **Material Info**

### **Reference - Drawing Numbers**

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

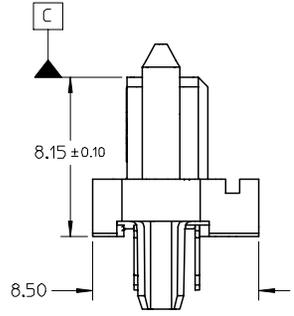
This document was generated on 04/02/2010

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



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/LEAD
87863-2025			

- 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	
				DRAWN BY DKOH		DATE 2004/10/16	SERIAL ATTACH SCSI PRESS-FIT RECEPTACLE STANDARD HEIGHT MOLEX INCORPORATED		
				CHECKED BY KCLING		DATE 2004/11/15			
				APPROVED BY SKTOH		DATE 2004/11/17	MOLEX INCORPORATED DOCUMENT NO. SD-87863-059 SHEET NO. 1 OF 4		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

10 9 8 7 6 5 4 3 2 1

F

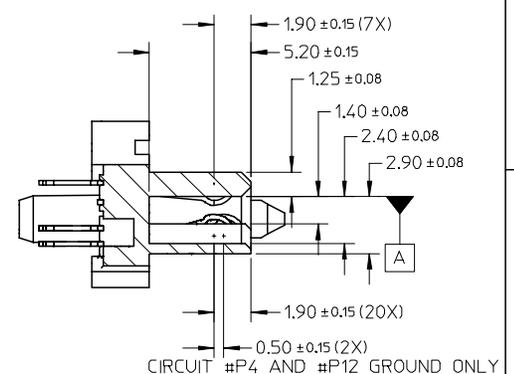
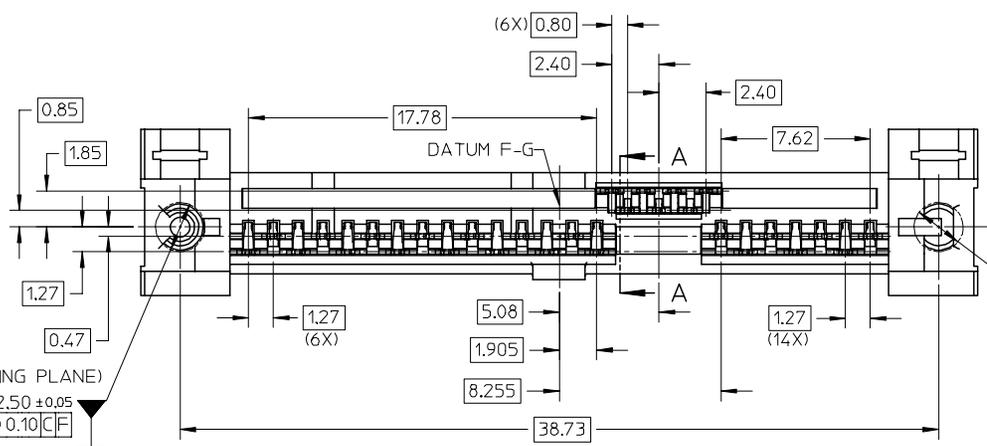
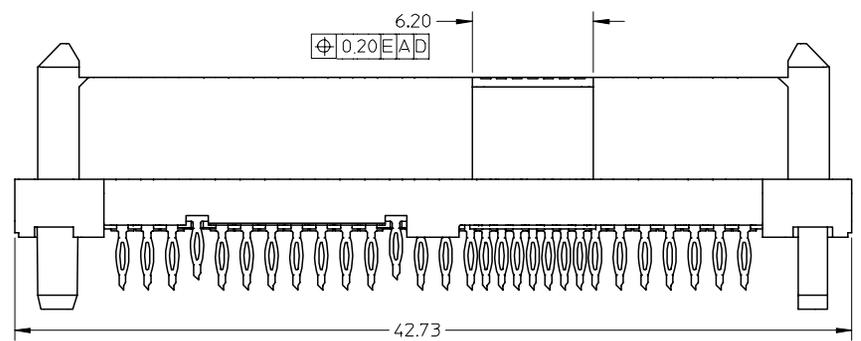
E

D

C

B

A



SECTION A-A

(P.C. BOARD SITTING PLANE)  
 $\varnothing 2.50 \pm 0.05$   
 $\varnothing \varnothing 0.10$  [CF]

(P.C. BOARD SITTING PLANE)  
 $\varnothing 2.50 \pm 0.05$

REVISED	EC NO: S2007-1057	2007/06/14
DRWN:YKH	CHKD:CGTAN	2007/06/14
APPR:KCLING		2007/06/14
C5	REV	DESCRIPTION

QUALITY SYMBOLS	$\nabla = 0$
	$\nabla C = 0$

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm INCH
4 PLACES	$\pm$ --- $\pm$ ---
3 PLACES	$\pm$ --- $\pm$ ---
2 PLACES	$\pm 0.20$ $\pm$ ---
1 PLACE	$\pm$ --- $\pm$ ---
ANGULAR $\pm 3^\circ$	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM ONLY		NTS	METRIC	
DRAWN BY	DATE	TITLE		
DKOH	2004/10/16	SERIAL ATTACH SCSI PRESS-FIT RECEPTACLE STANDARD HEIGHT		
CHECKED BY	DATE			
KCLING	2004/11/15			
APPROVED BY	DATE	MOLEX INCORPORATED		
SKTOH	2004/11/17	SD-87863-059		
MATERIAL NO.		DOCUMENT NO.	SHEET NO.	
SEE TABLE			2 OF 4	

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

10 9 8 7 6 5 4 3 2 1

F

E

D

C

B

A

F

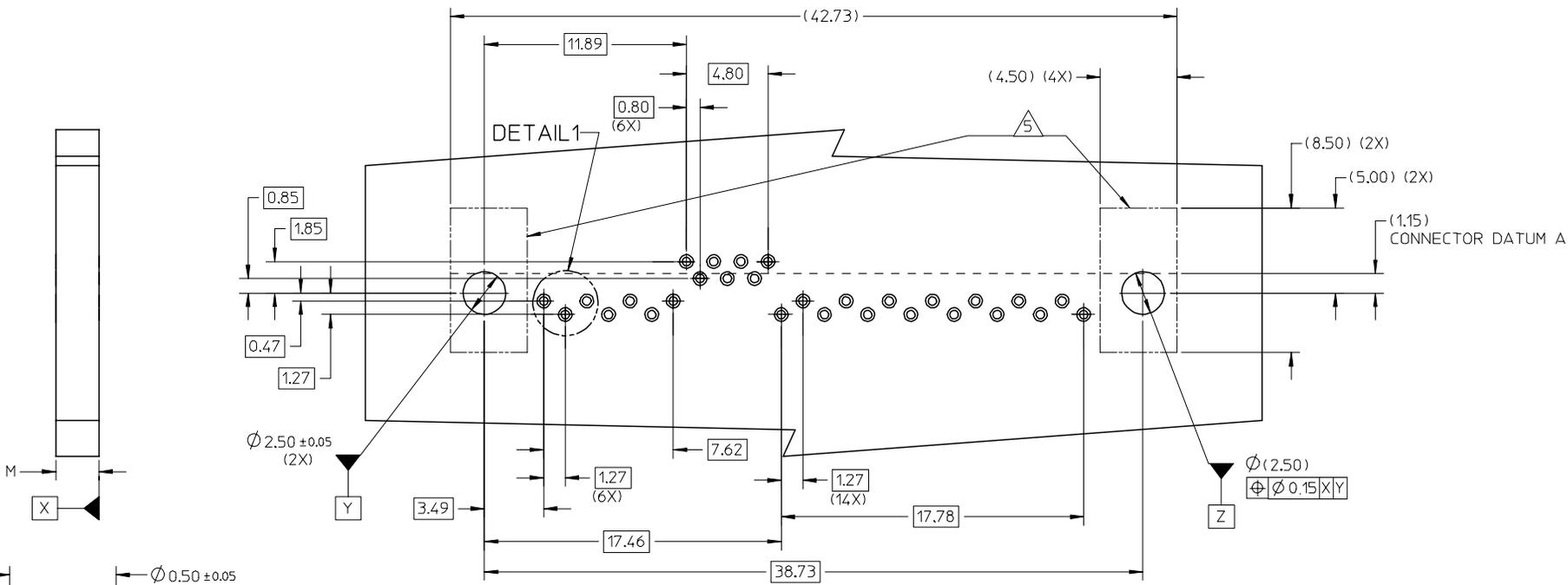
E

D

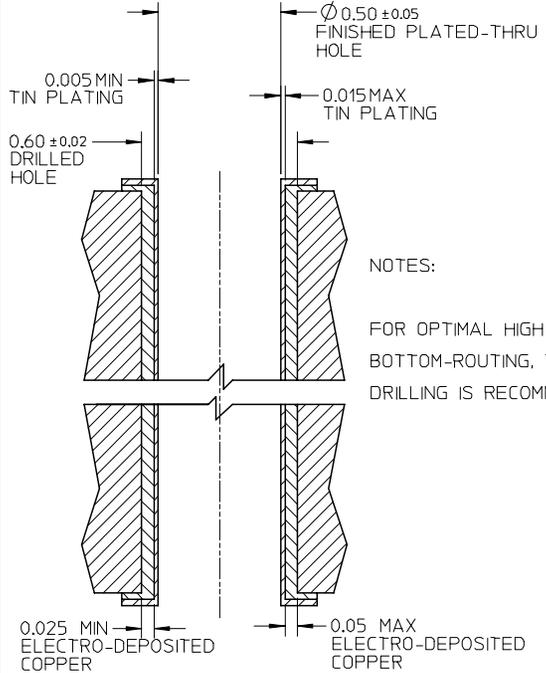
C

B

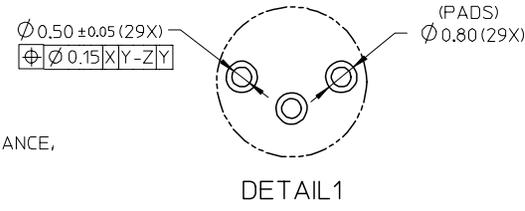
A



RECOMMENDED PCB LAYOUT



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

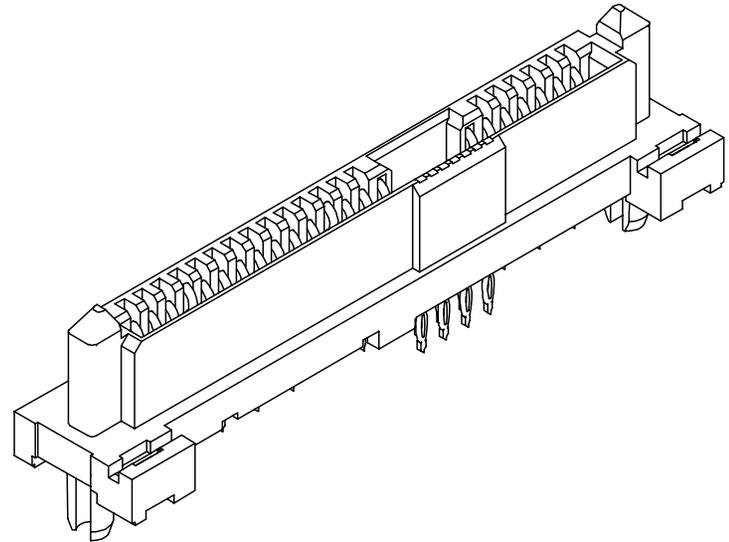
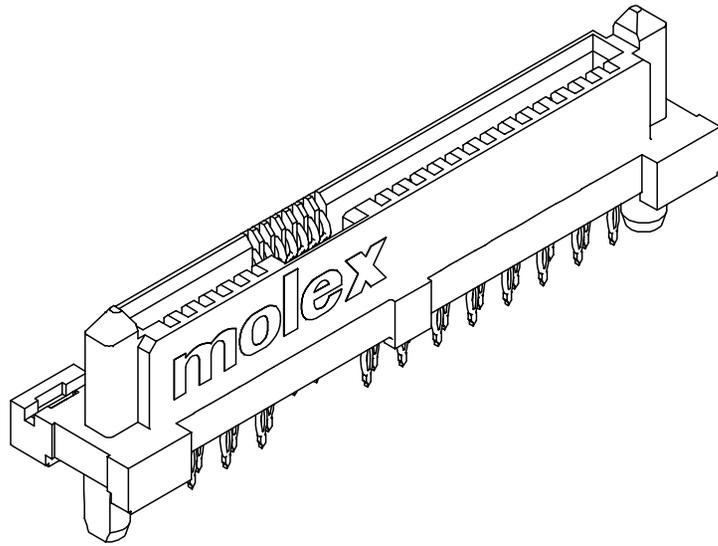


DETAIL 1

REVISED EC NO: S2007-1057 DRWN:YKH CHKD:CGTAN APPR:KCLING 2007/06/14 2007/06/14 2007/06/14	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	$\nabla = 0$ $\sphericalangle = 0$	mm      INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	MM ONLY	NTS	METRIC	
	DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: DKOH CHECKED BY: KCLING APPROVED BY: SKTOH DATE: 2004/10/16 DATE: 2004/11/15 DATE: 2004/11/17	TITLE	SERIAL ATTACH SCSI PRESS-FIT RECEPTACLE STANDARD HEIGHT MOLEX INCORPORATED	
	REV C5		MATERIAL NO. SEE TABLE SIZE A3	DOCUMENT NO.	SHEET NO.	SD-87863-059 3 OF 4

9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1



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	TITLE SERIAL ATTACH SCSI PRESS-FIT RECEPTACLE STANDARD HEIGHT				
			ANGULAR ± 3 °	APPROVED BY SKTOH	DATE 2004/11/17	MOLEX INCORPORATED					
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	MATERIAL NO. SKTOH	DATE 2004/11/17	DOCUMENT NO. SD-87863-059	SHEET NO. 4 OF 4			

9 8 7 6 5 4 3 2 1

## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9