

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

**Part Number:** [0879590006](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Pitch SAS Multi-Lane Plug, Vertical, Through Hole, with Beveled Metal Pins and Plastic Locating Pegs, 32 Circuits, 3.50mm (.138") Tail Length, Lead-free

**Documents:**

[3D Model](#) [Product Specification PS-87959-028 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR 19980  
 UL E29179

**General**

Product Family I/O Connectors  
 Series [87959](#)  
 Application Wire-to-Board  
 Component Type Plug  
 Product Name SAS  
 Type N/A

**Physical**

Boot Color N/A  
 Circuits (Loaded) 32  
 Circuits (maximum) 32  
 Durability (mating cycles max) 50  
 Flammability 94V-0  
 Gender Plug  
 Lock to Mating Part None  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Number of Rows 1  
 Orientation Vertical  
 PC Tail Length (in) 0.138 In  
 PC Tail Length (mm) 3.50 mm  
 PCB Locator Yes  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.093 In  
 PCB Thickness Recommended (mm) 2.36 mm  
 Packaging Type Tray  
 Panel Mount Yes  
 Pitch - Mating Interface (in) 0.042 In, 0.064 In, 0.100 In  
 Pitch - Mating Interface (mm) 1.08 mm, 1.65 mm, 2.54 mm  
 Pitch - Term. Interface (in) 0.042 In, 0.064 In, 0.100 In  
 Pitch - Term. Interface (mm) 1.08 mm, 1.65 mm, 2.54 mm  
 Plating min: Mating (µin) 30  
 Plating min: Mating (µm) 0.76  
 Plating min: Termination (µin) 101.6  
 Plating min: Termination (µm) 2.54  
 Polarized to Mating Part Yes  
 Polarized to PCB Yes  
 Ports 1  
 Surface Mount Compatible (SMC) Yes  
 Temperature Range - Operating 0°C to +55°C  
 Termination Interface: Style Through Hole

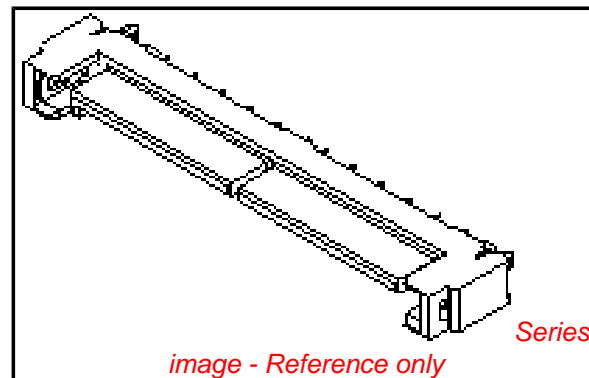


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**EU RoHS**

**ELV and RoHS Compliant**

**REACH SVHC**

**Contains SVHC: No**

**Halogen-Free**

**Status**

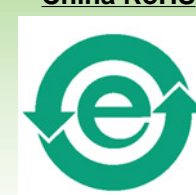
**Halogen-Free**

**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.

**China RoHS**



**Search Parts in this Series**

[87959Series](#)

**Mates With**

SFF-8484 HBA to Backplane Multi-Lane Internal Connectors and Cable

Waterproof / Dustproof No

**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 SMC & Wave Capable (TH only)

Max. Cycles at Max. Process Temperature 1

Process Temperature max. C 265

**Material Info**

**Reference - Drawing Numbers**

Product Specification PS-87959-028

Sales Drawing SD-87959-001

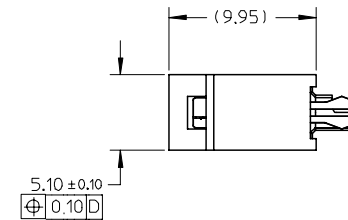
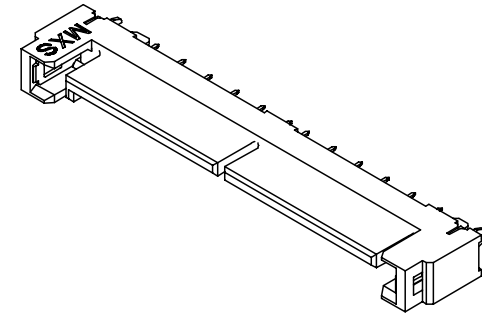
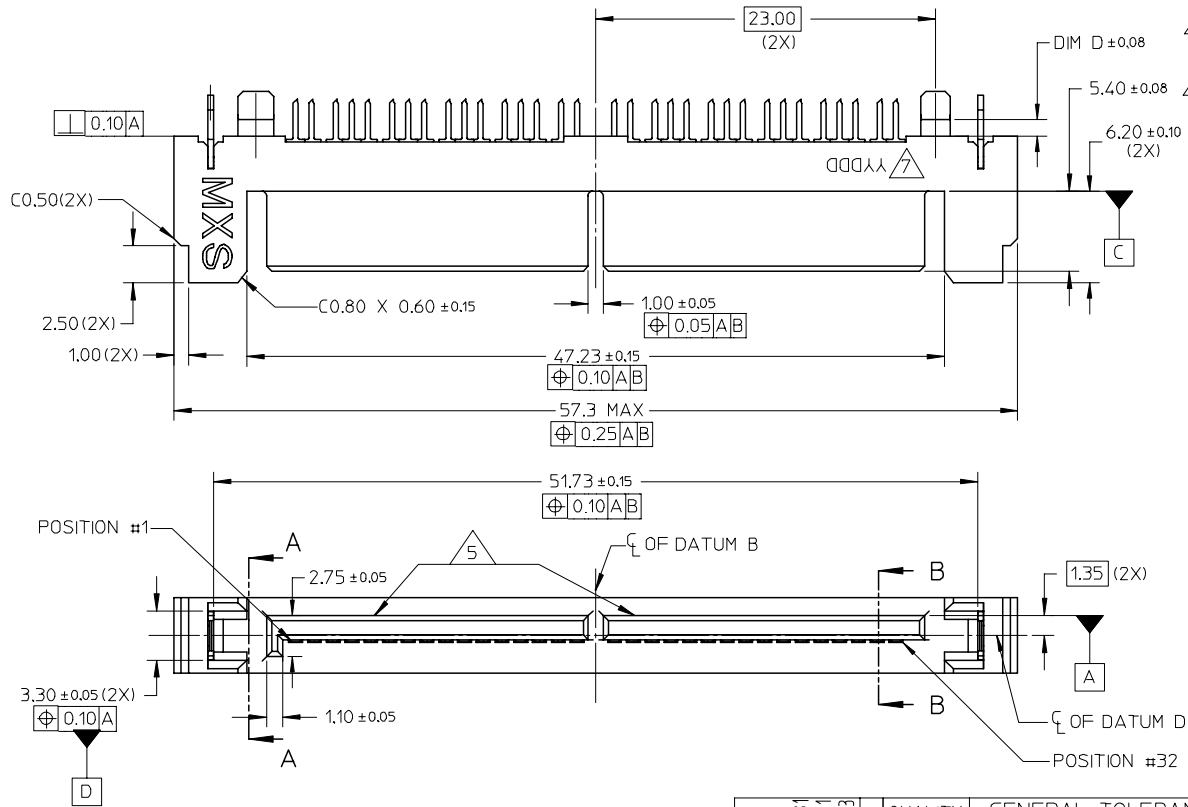
This document was generated on 04/02/2010

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PART NO	RECOMMENDED PCB THICKNESS (MM)	TAIL LENGTH DIM A	FORK LOCK LENGTH DIM B	HOUSING PEG DIM C	HOUSING PEG STEP DIM D
87959-0001	1.60	2.50	2.75	3.00	1.10
87959-0006	2.36	3.50	3.50	4.00	1.57
87959-0007	2.67	3.75	3.82	4.55	1.88

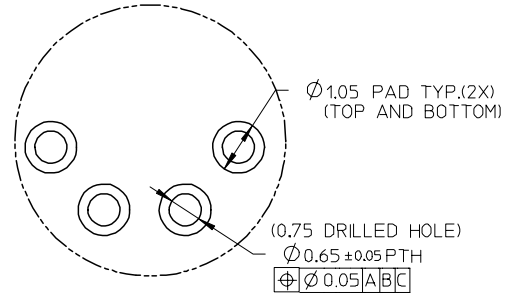
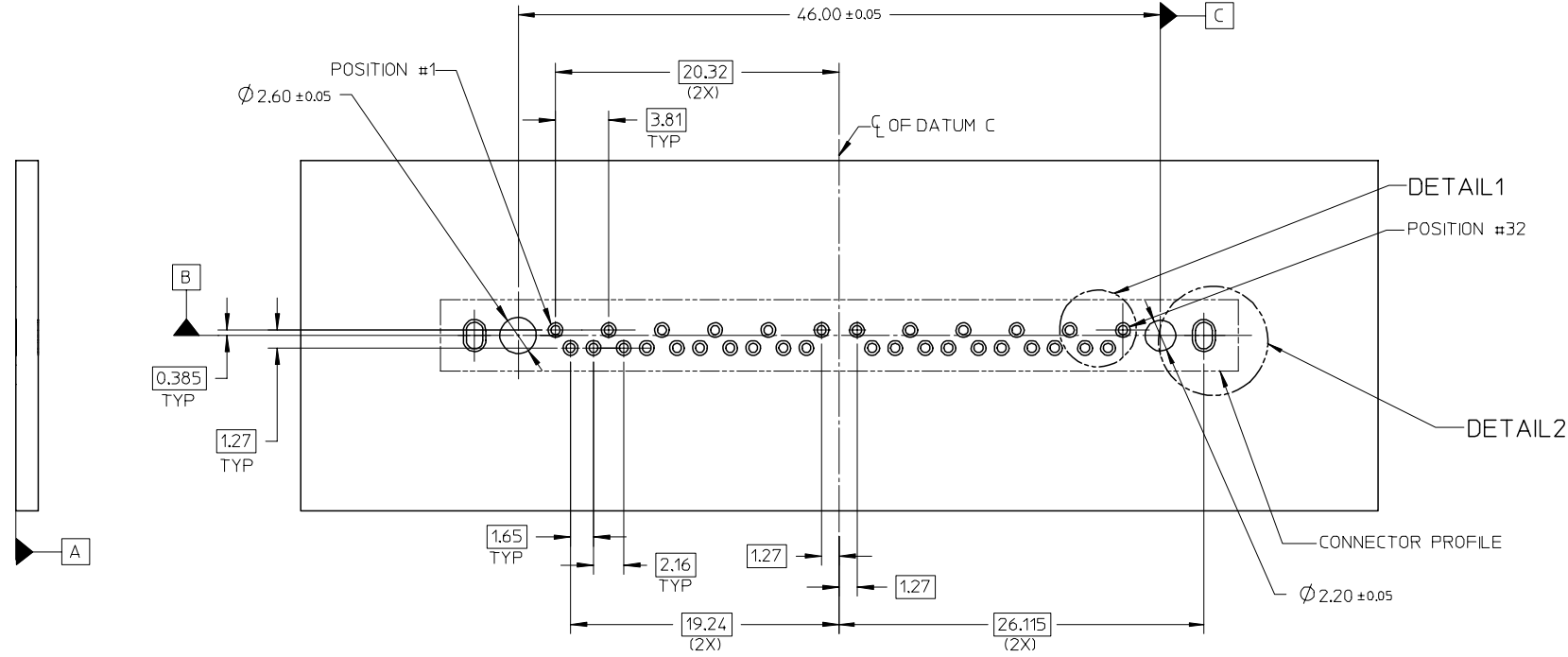
NOTES:

- MATERIAL: LIQUID CRYSTALLINE POLYMER(LCP), GLASS FILLED, UL 94V-0, COLOR: BLACK  
TERMINAL: COPPER ALLOY
- PLATING:  
CONTACT: 0.76 $\mu$ m MIN. GOLD OVER 1.27 $\mu$ m MIN. NICKEL UNDERPLATE.  
SOLDER TAIL: 2.54 $\mu$ m MIN. TIN(MATT) OVER 1.27 $\mu$ m MIN. NICKEL UNDERPLATE.
- MAXIMUM WARPAGE OF 0.15 mm OVER THE LENGTH OF THE CONNECTOR IN ANY DIRECTION BEFORE AND AFTER EXPOSURE TO MAX. 260°C FOR 10 SECONDS.
- PRODUCT CONFIRMS TO SFF-8484 SPECIFICATION FOOTPRINT.
- DATUM A IS DEFINE AS THE TOP PORTION OF THE NOTED BLADE SURFACE.
- PACKAGING: TRAY
- DATE CODE TO BE LOCATED APPROXIMATELY AS SHOWN.
- PRODUCT SPECIFICATION PS-87959-028 APPLIES.

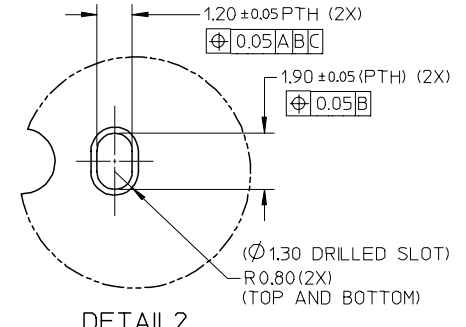


UPDATE NOTES ONLY EC NO: S2006-1001 DRWN:KHLIM CHKD:SHONG APPR:KCLING	2006/03/31 2006/03/31 2006/04/03	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
				mm	INCH	DRAWN BY KHLIM	DATE 2004/10/18	SERIAL INTERNAL MULTI-LANE PLUG, T/H  MOLEX INCORPORATED				
			4 PLACES	±---	±---	CHECKED BY DKOH	DATE 2004/10/20					
			3 PLACES	±---	±---	APPROVED BY SKTOH	DATE 2004/10/20	MATERIAL NO.	DOCUMENT NO. SD-87959-001	SHEET NO. 1 OF 3		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		ANGULAR ± 3°		SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						





DETAIL 1



DETAIL 2

RECOMMENDED PCB LAYOUT

UPDATE NOTES ONLY EC NO: S2006-1001 DRWN:KHLIM 2006/03/31 CHKD:SHONG 2006/03/31 APPR:KCLING 2006/04/03	DESCRIPTION REV	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 ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	MM ONLY	NTS	METRIC	DRAWN BY DATE KHLIM 2004/10/18 CHECKED BY DATE DKOH 2004/10/20 APPROVED BY DATE SKTOH 2004/10/20	TITLE SERIAL INTERNAL MULTI-LANE PLUG, T/H
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE		MOLEX INCORPORATED DOCUMENT NO. SD-87959-001	SHEET NO. 3 OF 3	
						THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		