

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0879590001](#)
Status: **Active**
Description: 1.27mm (.050") Pitch SAS Multi-Lane Plug, Vertical, Through Hole, with Beveled Metal Pins and Plastic Locating Pegs, 32 Circuits, 2.50mm (.098") Tail Length, Lead-free

Documents:

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

Agency Certification

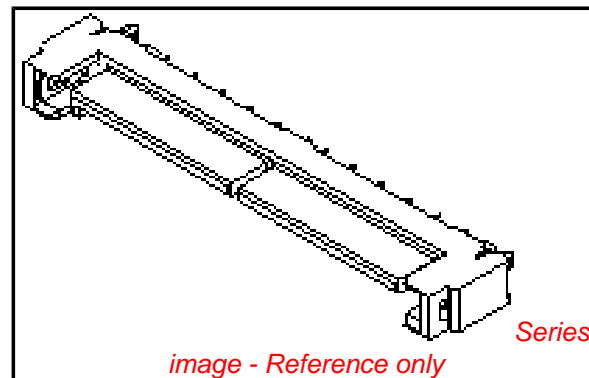
CSA LR 19980
 UL E29179

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
 Color - Resin Black
 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) 0.098 In
 PC Tail Length (mm) 2.50 mm
 PCB Locator Yes
 PCB Retention Yes
 PCB Thickness Recommended (in) 0.062 In
 PCB Thickness Recommended (mm) 1.60 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



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
 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

Termination Interface: Style	Through Hole
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

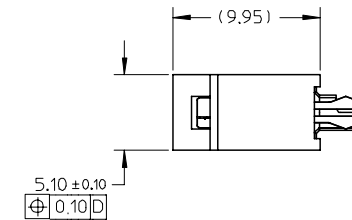
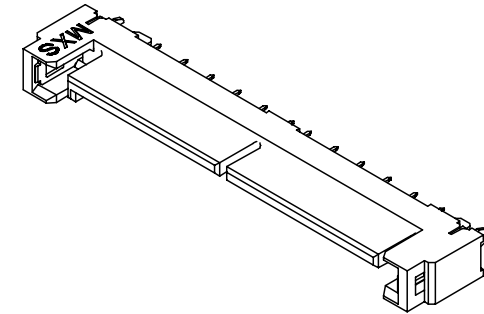
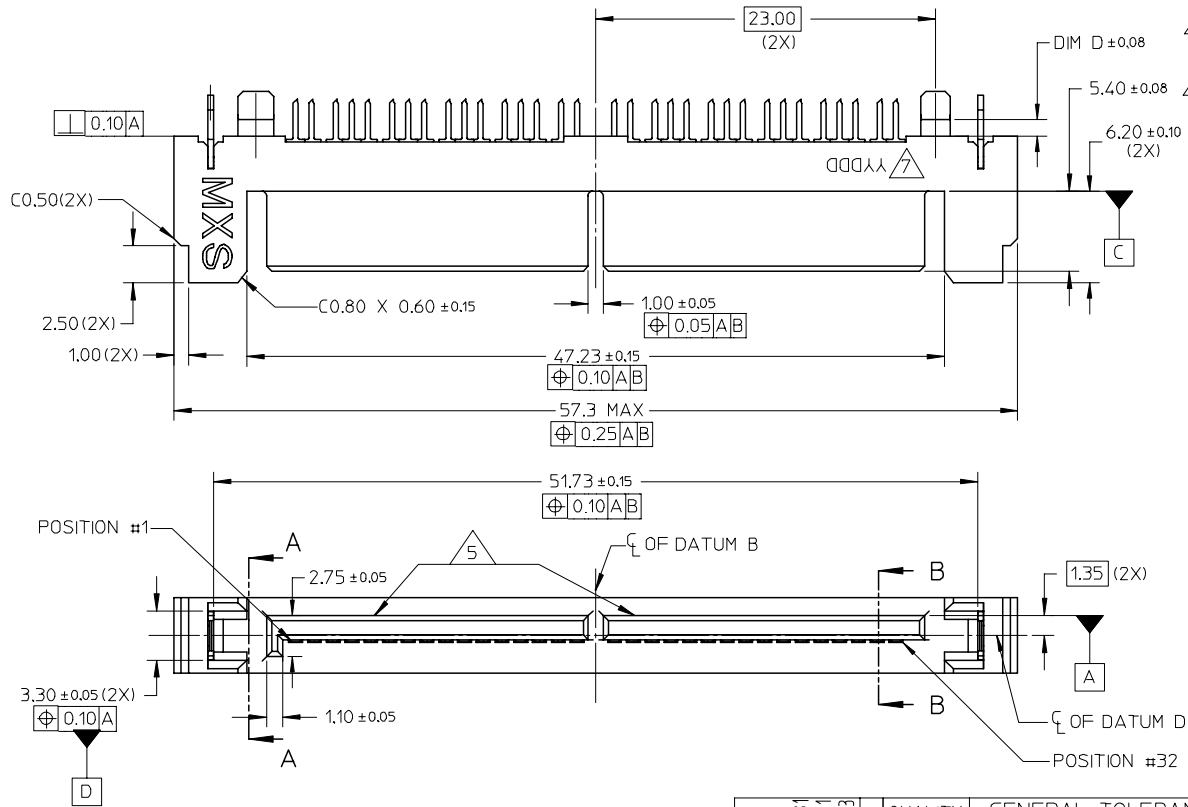
This document was generated on 04/02/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

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: 0.76µm MIN. GOLD OVER 1.27µm MIN. NICKEL UNDERPLATE.
SOLDERTAIL: 2.54µm MIN. TIN(MATT) OVER 1.27µm 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	DESCRIPTION
EC NO: S2006-1001	2006/03/31
DRWN:KHLIM	2006/03/31
CHKD:SHONG	2006/03/31
APPR:KCLING	2006/04/03
A	REV

QUALITY SYMBOLS	DESCRIPTION
▽=0	
△=0	

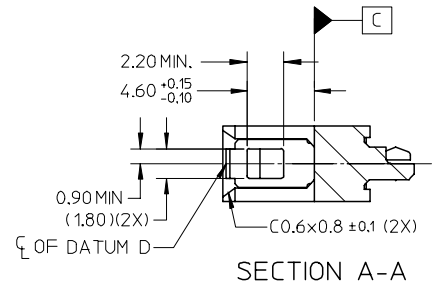
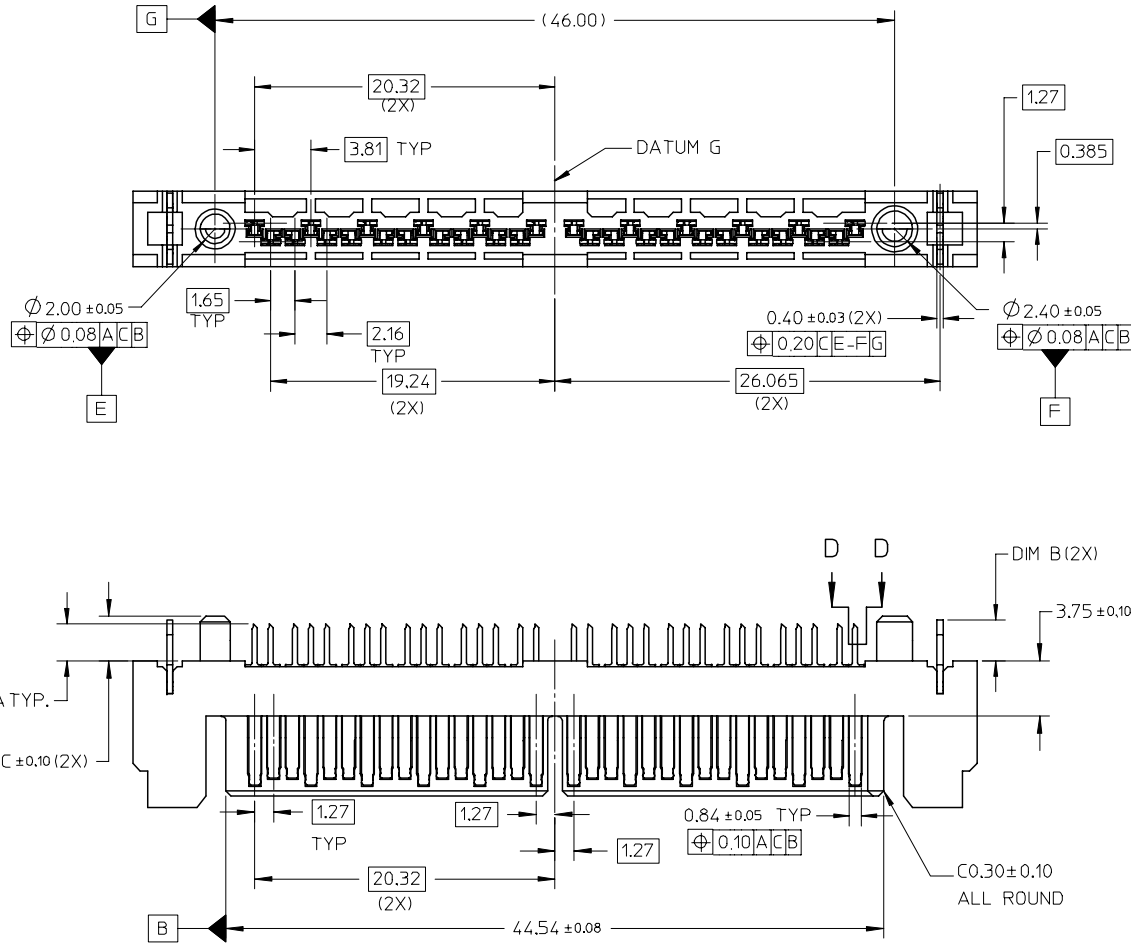
GENERAL TOLERANCES (UNLESS SPECIFIED)	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.25	± ---
1 PLACE	± ---	± ---
ANGULAR ± 3 °		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM ONLY		NTS	METRIC	
DRAWN BY	DATE	TITLE		
KHLIM	2004/10/18	SERIAL INTERNAL MULTI-LANE PLUG, T/H		
CHECKED BY	DATE	MOLEX INCORPORATED		
DKOH	2004/10/20	SD-87959-001		
APPROVED BY	DATE	SHEET NO.		
SKTOH	2004/10/20	1 OF 3		
MATERIAL NO.	DOCUMENT NO.	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
SEE TABLE	SD-87959-001			

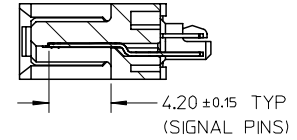
10 9 8 7 6 5 4 3 2 1

F
E
D
C
B
A

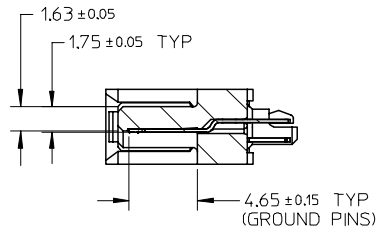
F
E
D
C
B
A



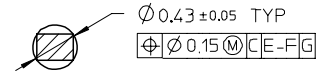
SECTION A-A



SECTION B-B



SECTION C-C



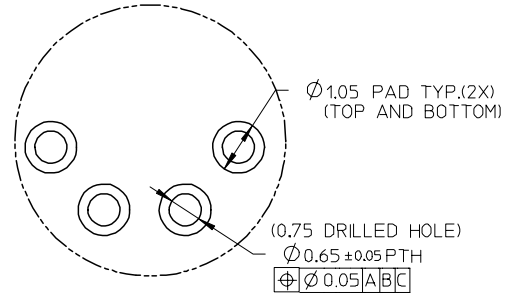
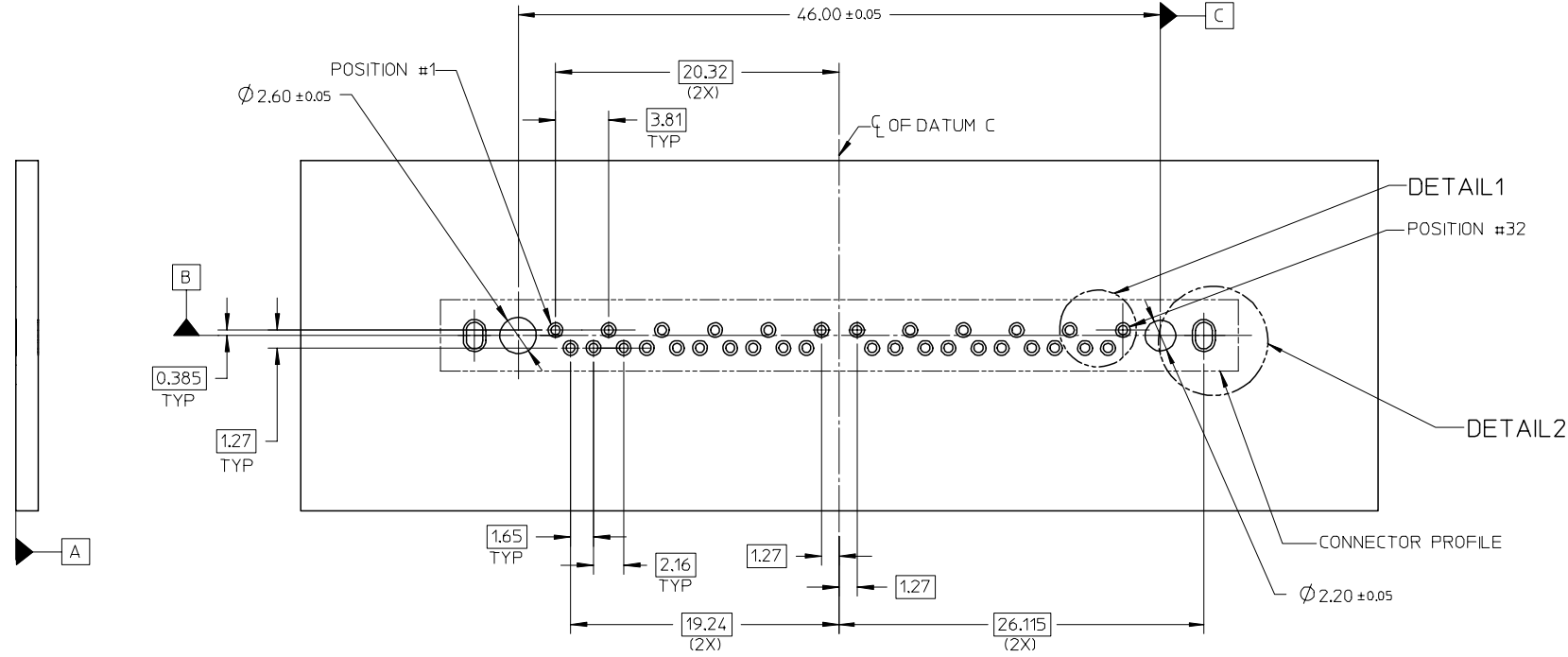
SECTION D-D

<p>UPDATE NOTES ONLY</p> <p>EC NO: S2006-1001 2006/03/31</p> <p>DRWN:KHLIM 2006/03/31</p> <p>CHKD:SHONG 2006/03/31</p> <p>APPR:KCLING 2006/04/03</p> <p>REV DESCRIPTION</p>	QUALITY SYMBOLS	<p>GENERAL TOLERANCES (UNLESS SPECIFIED)</p> <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td colspan="3">ANGULAR ± 3 °</td> </tr> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.25	± ---	1 PLACE	± ---	± ---	ANGULAR ± 3 °			DIMENSION STYLE	SCALE	DESIGN UNITS	<p>THIRD ANGLE PROJECTION</p> <p>SERIAL INTERNAL MULTI-LANE PLUG, T/H</p> <p>MOLEX MOLEX INCORPORATED</p>
			mm	INCH																				
	4 PLACES		± ---	± ---																				
	3 PLACES		± ---	± ---																				
	2 PLACES		± 0.25	± ---																				
1 PLACE	± ---	± ---																						
ANGULAR ± 3 °																								
▽=0	MM ONLY	NTS	METRIC																					
∇=0	DRAWN BY	DATE	TITLE																					
	KHLIM	2004/10/18																						
	CHECKED BY	DATE																						
	DKOH	2004/10/20																						
	APPROVED BY	DATE																						
	SKTOH	2004/10/20																						
	MATERIAL NO.	DOCUMENT NO.	SHEET NO.																					
	SEE TABLE	SD-87959-001	2 OF 3																					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																				

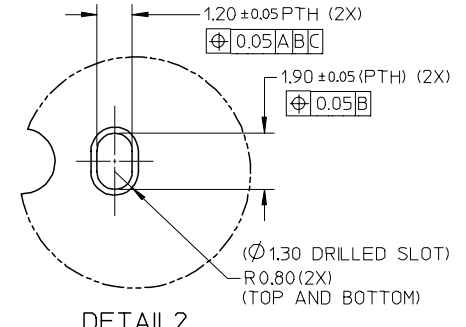
9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

F
E
D
C
B
A



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															
		$\nabla=0$ $\sphericalangle=0$	<table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.25	± ---	1 PLACE	± ---	± ---	MM ONLY	NTS	METRIC	
			mm	INCH																		
		4 PLACES	± ---	± ---																		
3 PLACES	± ---	± ---																				
2 PLACES	± 0.25	± ---																				
1 PLACE	± ---	± ---																				
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: KHLIM CHECKED BY: DKOH APPROVED BY: SKTOH DATE: 2004/10/18 DATE: 2004/10/20 DATE: 2004/10/20	SERIAL INTERNAL MULTI-LANE PLUG, T/H																	
				SEE TABLE	MOLEX INCORPORATED																	
				SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	DOCUMENT NO. SD-87959-001		SHEET NO. 3 OF 3															

9 8 7 6 5 4 3 2 1