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Part Number: [0878240003](#)
Status: **Active**
Description: 1.27mm (.050") Signal Pitch, 0.80mm (.031") SCSI Pitch, 1.27mm (.050") Power Pitch SAS Receptacle, Vertical, Surface Mount, with Straight Solder Tab, 1.6mm (.062") PCB Thickness, 29 Circuits, with Cap, Tray, Leadfree

Documents:

[3D Model](#) [Product Specification PS-87824-029 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
 UL E29179

General

Product Family I/O Connectors
 Series [87824](#)
 Application Board-to-Board
 Comments With 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 Copper Alloy
 Material - Plating Mating Gold, Tin
 Material - Plating Termination Tin
 Material - Resin High Temperature Thermoplastic
 Number of Rows 2
 Orientation Vertical
 PCB Locator Yes
 PCB Retention Yes
 PCB Thickness Recommended (in) 0.063 In
 PCB Thickness Recommended (mm) 1.60 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
 Polarized to PCB Yes

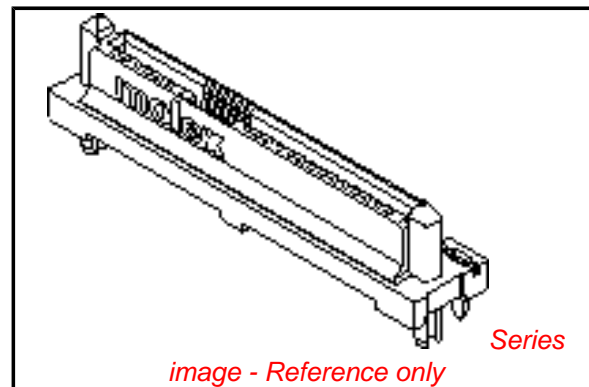


image - Reference only

EU RoHS

**ELV and RoHS
 Compliant**

REACH SVHC

Not Reviewed

Halogen-Free

Status

Not Halogen-Free

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

[87824Series](#)

Mates With

SFF-8482 Hard Disk Drive and Backplane Plug. [87679](#) Serial ATA Device Plug with Latch. [87703](#) Serial ATA Device Plug without Jumper. [87799](#) Serial ATA Device Plug with Jumper

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

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	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

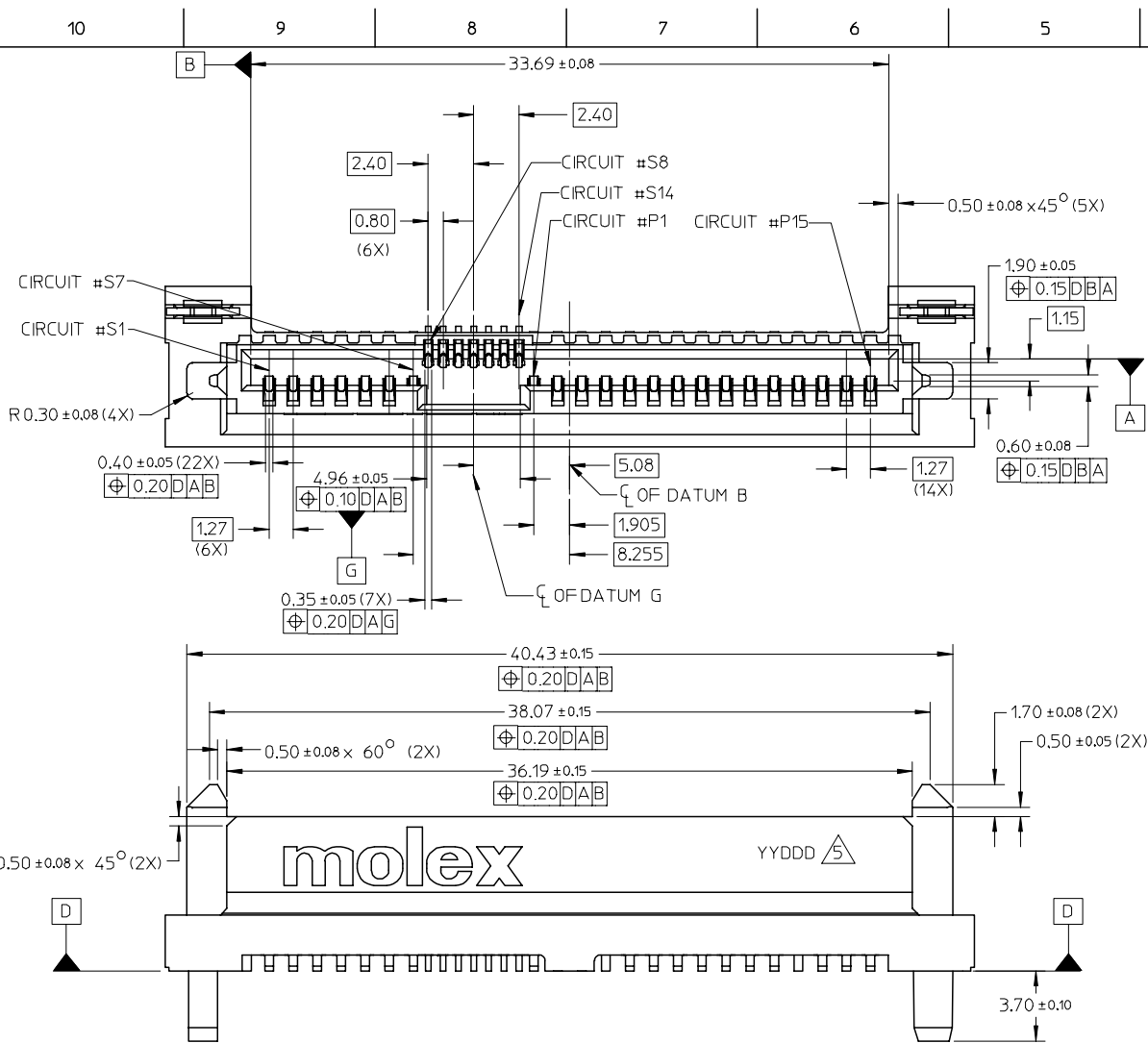
Material Info

Reference - Drawing Numbers

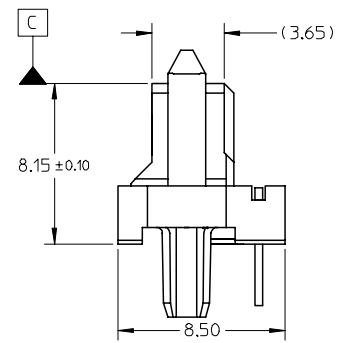
Product Specification	PS-87824-029
Sales Drawing	SD-87824-027

This document was generated on 04/09/2010

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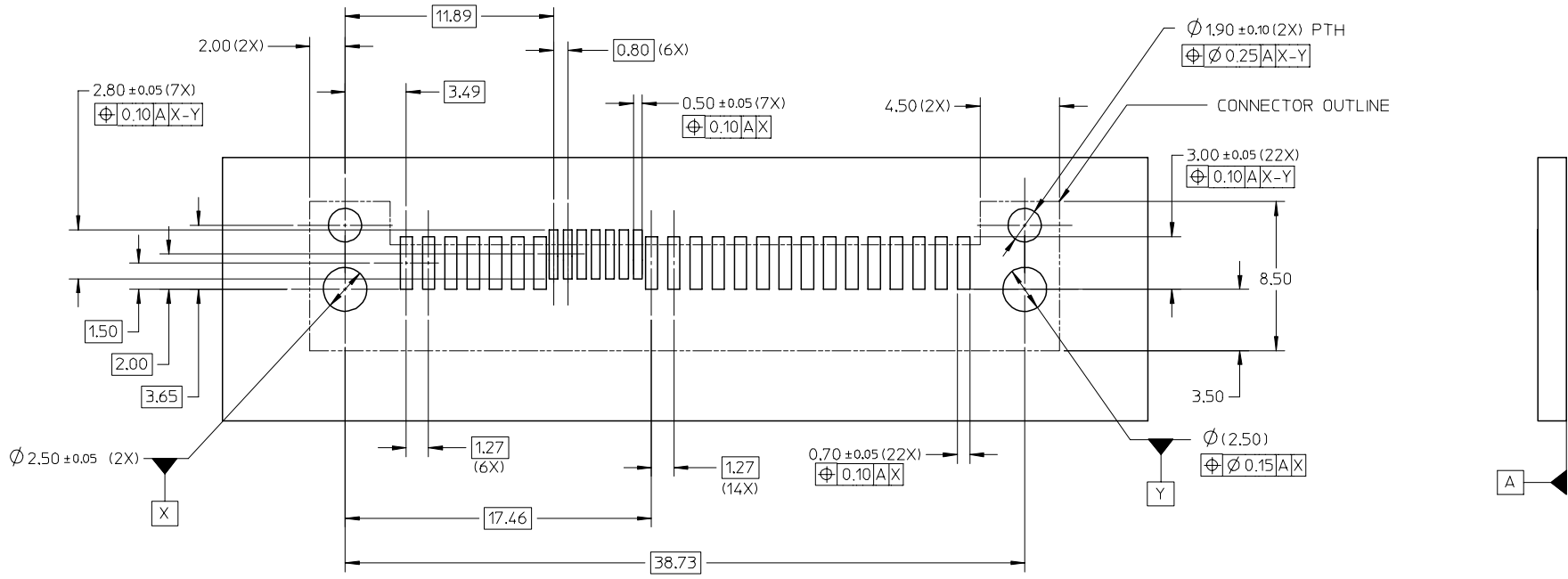
- NOTES:
- MATERIAL: LIQUID CRYSTALLINE POLYMER (LCP). GLASS FILLED UL 94V-0
COLOR: BLACK
TERMINAL: COPPER ALLOY
 - PLATING:
CONTACT: 0.76µm MIN. SELECTIVE GOLD OVER 1.27µm MIN.
NICKEL UNDERPLATE
SOLDERTAIL: 2.54µm MIN. TIN OVER 1.27 µm MIN.
NICKEL UNDERPLATE
 - MOLEX LOGO LOCATED APPROXIMATELY AS SHOWN
 - PACKAGING: SEE TABLE
 - DATE CODE TO BE LOCATED APPROXIMATELY AS SHOWN.
 - PRODUCT IS COMPLIANT TO RoHS DIRECTIVE WITH THE FOLLOWING BANNED SUBSTANCES - LEAD, MERCURY, CADMIUM, HEXAVALENT CHROMIUM, POLYBROMINATED BIPHENYLS AND POLYBROMINATED DIPHENYL ETHERS.
 - PRODUCT SPECIFICATION PS-87824-029 APPLIES.
 - MATES WITH: SFF-8482 PLUG
SATA PLUG SERIES: 87679, 87703, 87799



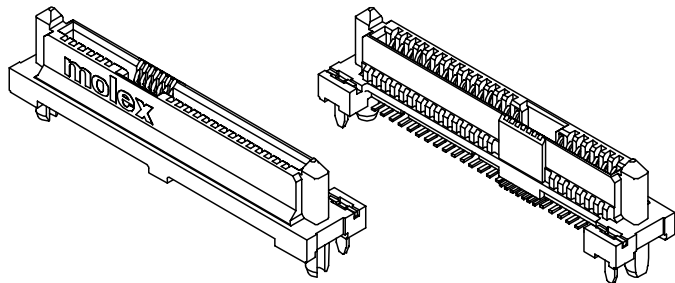
NEW PKG OPTION EC NO: S2006-0334 DRWN:KHLIM CHKD:SHONG APPR:KCLING 2005/10/26 2005/10/27 2005/10/28	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY	DATE	TITLE			
		4 PLACES	± ---	± ---	KHLIM	2004/10/12	SERIAL ATTACH SCSI STD HEIGHT BACKPLANE SMT RECEPT (WITH BLADE)			
		3 PLACES	± ---	± ---	CHECKED BY	DATE				
2 PLACES	± 0.20	± ---	KCLING	2004/11/25	MOLEX INCORPORATED					
1 PLACE	± ---	± ---	APPROVED BY	DATE						
ANGULAR ± 3°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SKTOH	2004/11/26	DOCUMENT NO.		SHEET NO.		
A4		REV		SEE TABLE		SD-87824-027		1 OF 4		

10 9 8 7 6 5 4 3 2 1

PART NO	PACKAGING	QUANTITY	PICK AND PLACE CAP
87824-0003	TRAY	50/TRAY	YES
87824-0005	TRAY	30/TRAY	NO
87824-0007	TAPE AND REEL	350/REEL	YES



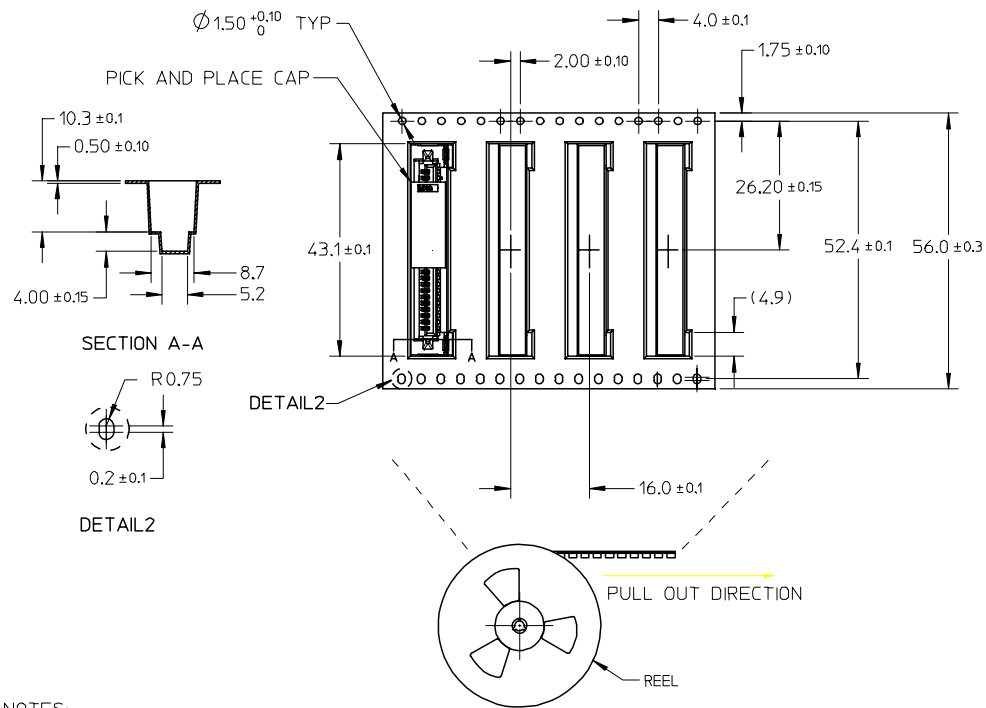
RECOMMENDED PCB LAYOUT
THICKNESS: 1.60±0.10



NEW PKG OPTION EC NO: S2006-0334 DRWN:KHLIM 2005/10/26 CHKD:SHONG 2005/10/27 APPR:KCLING 2005/10/28	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <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>± 0.20</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td colspan="3">ANGULAR ± 3°</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.20	± ---	1 PLACE	± ---	± ---	ANGULAR ± 3°			DIMENSION STYLE MM ONLY	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
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		APPROVED BY SKTOH 2004/11/26	DATE 2004/11/26	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87824-027	MOLEX INCORPORATED																		
		SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	SHEET NO. 3 OF 4																				

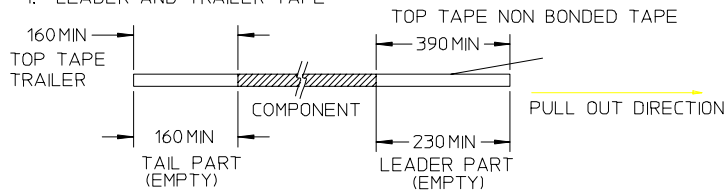
9 8 7 6 5 4 3 2 1

TAPE AND REEL PACKAGING

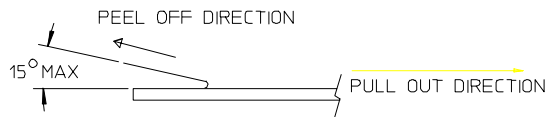


NOTES:

1. LEADER AND TRAILER TAPE



2. PEELING OFF FORCE OF THE TOP TAPE: 80gf MAX.
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)

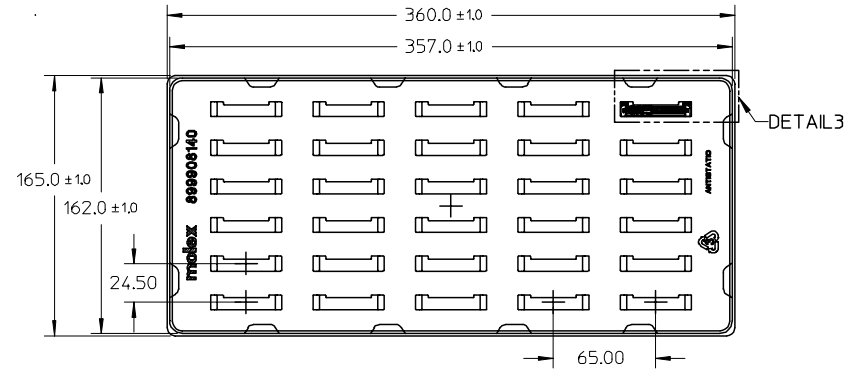


3. PACKAGING QTY: 350 PCS/REEL

4. PACKAGING STANDARD IS AS PER EIA-481.

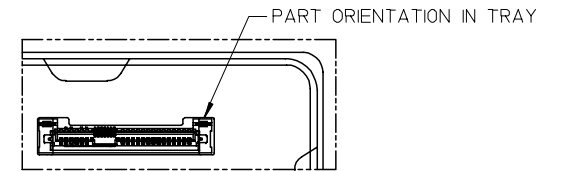
5. CONNECTOR COMES WITH PICK AND PLACE CAP.

TRAY PACKAGING



NOTES:

1. PACKAGING QTY: 30PCS/TRAY
2. NO PICK AND PLACE CAP



DETAIL3

NEW PKG OPTION EC NO: S2006-0334 DRWN:KHLIM CHKD:SHONG APPR:KCLING	2005/10/26	DESCRIPTION REV
	2005/10/27	
	2005/10/28	
	A4	

QUALITY SYMBOLS	▽=0
	△=0

GENERAL TOLERANCES (UNLESS SPECIFIED)	mm	INCH
	4 PLACES ± ---	± ---
	3 PLACES ± ---	± ---
	2 PLACES ± 0.20	± ---
	1 PLACE ± ---	± ---
	ANGULAR ± 3 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	

DIMENSION STYLE MM ONLY	
DRAWN BY KHLIM	DATE 2004/10/12
CHECKED BY KCLING	DATE 2004/11/25
APPROVED BY SKTOH	DATE 2004/11/26
MATERIAL NO.	DOCUMENT NO. SD-87824-027
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SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
SERIAL ATTACH SCSI STD HEIGHT BACKPLANE SMT RECEPT (WITH BLADE)		
MOLEX INCORPORATED		
SHEET NO. 4 OF 4		