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Part Number: [0878240007](#)
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, Embossed Tape on Reel, Leadfree

Documents:

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

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
Gender	Female
Keying to Mating Part	Yes
Lock to Mating Part	None
Material - Metal	Copper Alloy
Material - Plating Mating	Gold
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	Embossed Tape on Reel
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
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

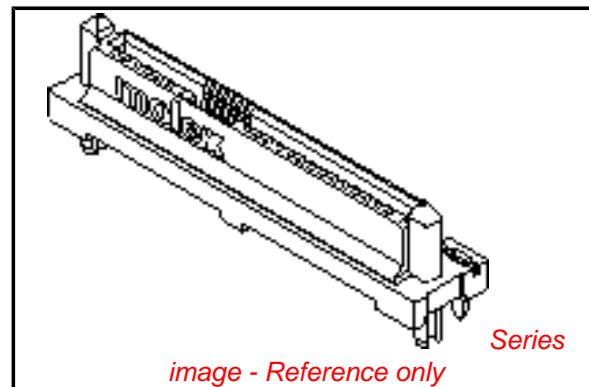


image - Reference only

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

Electrical

Current - Maximum per Contact	1.5A
Shielded	No
Voltage - Maximum	30V

Solder Process Data

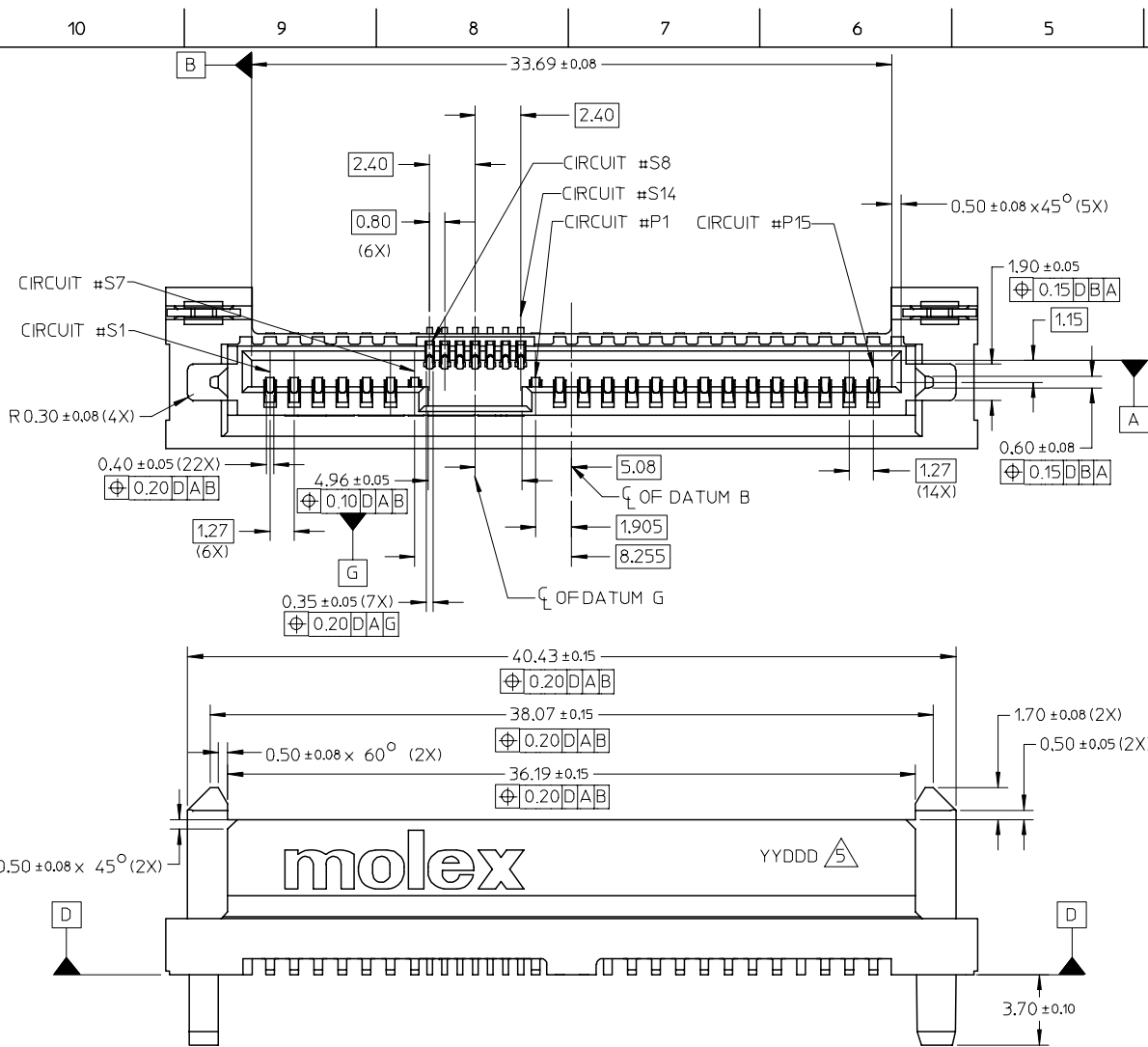
Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

Material Info**Reference - Drawing Numbers**

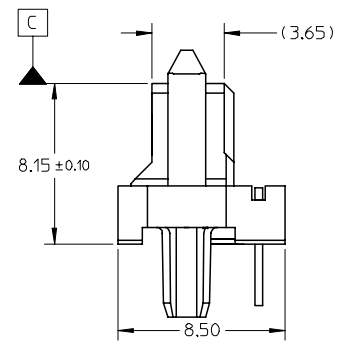
Product Specification	PS-87824-029
Sales Drawing	SD-87824-027

This document was generated on 04/09/2010

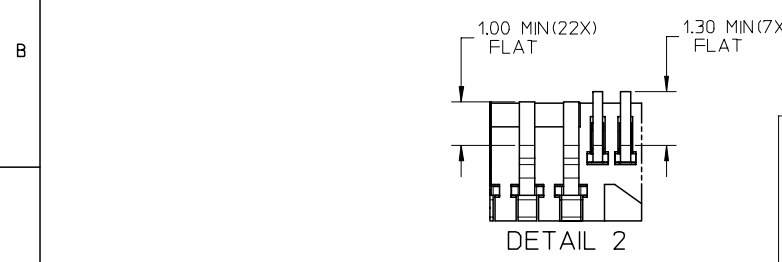
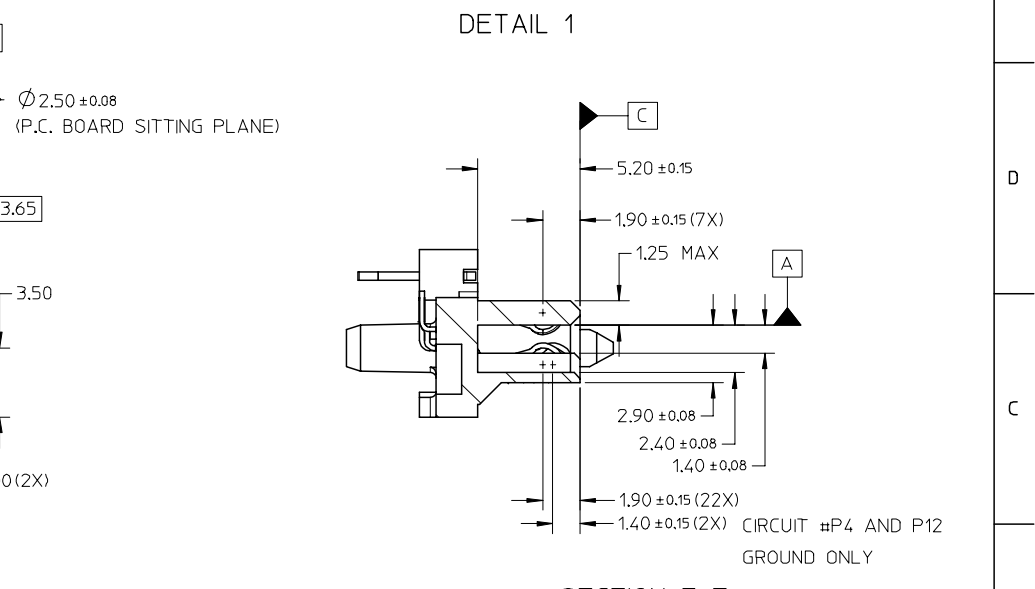
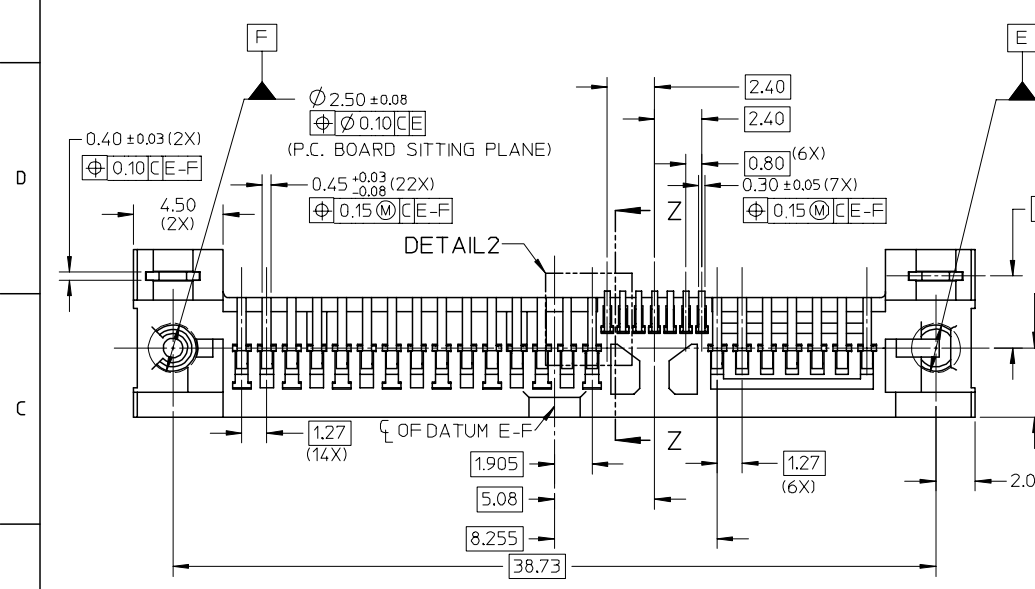
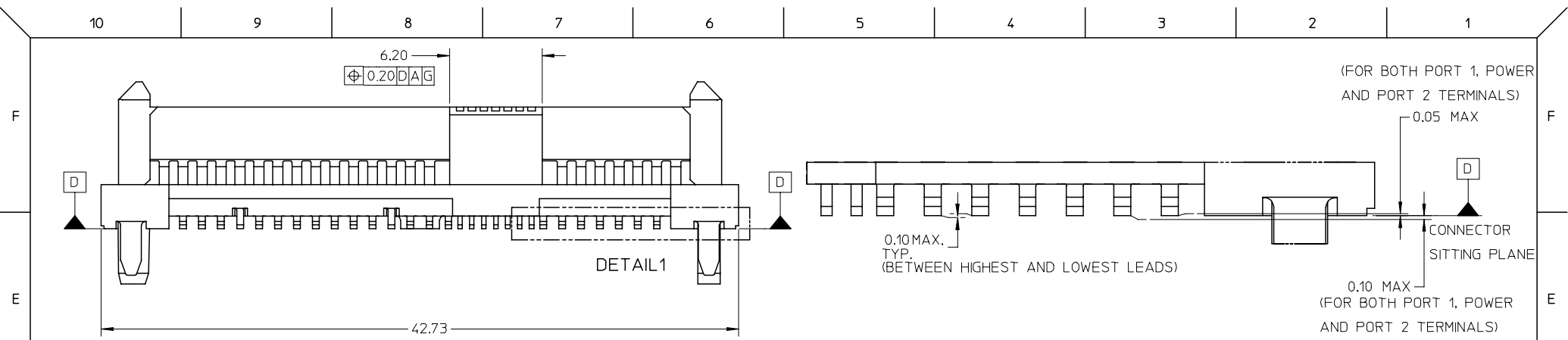
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- NOTES:
- MATERIAL: LIQUID CRYSTALLINE POLYMER (LCP). GLASS FILLED UL 94V-0
COLOR: BLACK
TERMINAL: COPPER ALLOY
 - PLATING:
CONTACT: 0.76µm MIN. SELECTIVE GOLD OVER 1.27µm MIN.
NICKEL UNDERPLATE
SOLDERTAIL: 2.54µm MIN. TIN OVER 1.27 µm MIN.
NICKEL 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



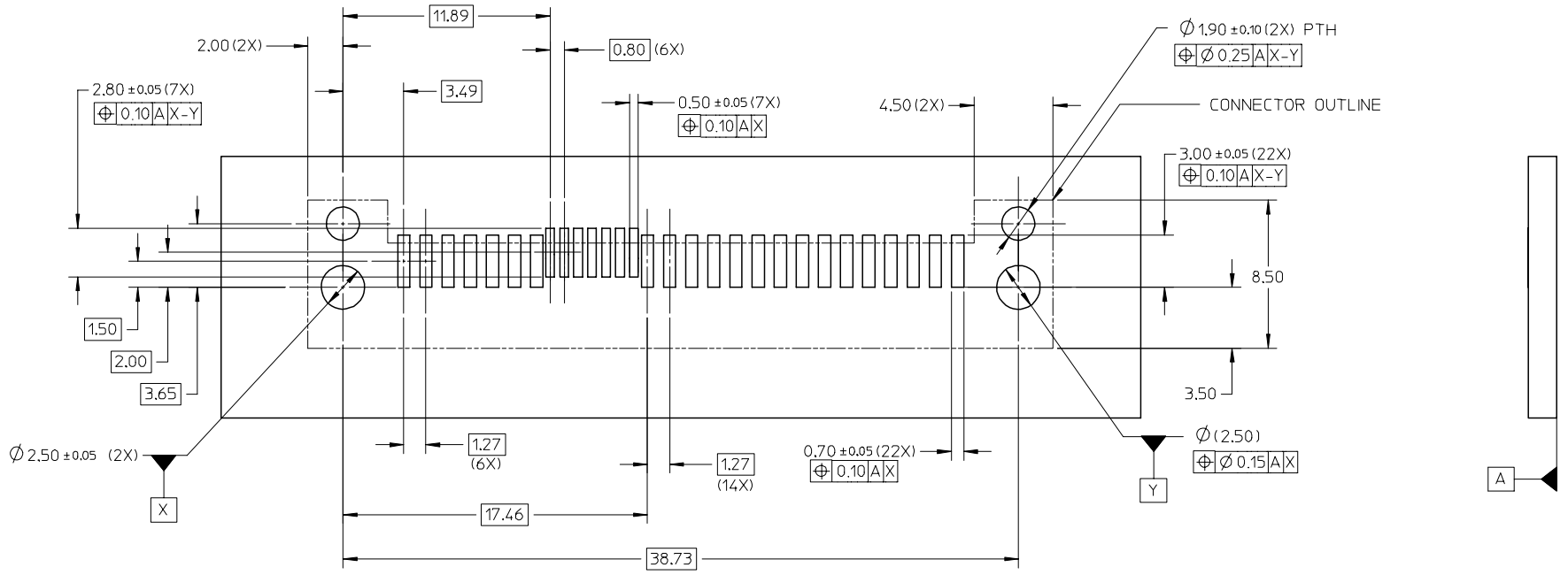
NEW PKG OPTION EC NO: S2006-0334 DRWN:KHLIM CHKD:SHONG APPR:KCLING 2005/10/26 2005/10/27 2005/10/28	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY KHLIM	DATE 2004/10/12	SERIAL ATTACH SCSI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



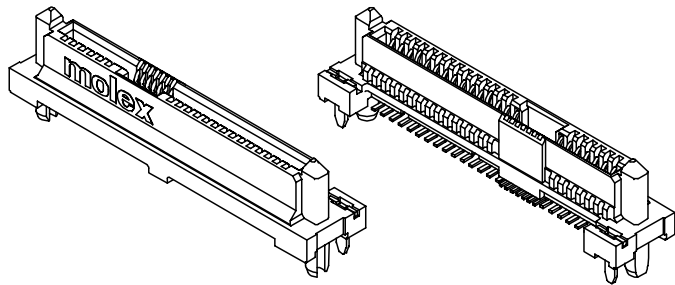
NEW PKG OPTION EC NO: S2006-0334 DRWN:KHLIM CHKD:SHONG APPR:KCLING	2005/10/26 2005/10/27 2005/10/28	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
			$\nabla=0$ $\sphericalangle=0$	mm INCH 4 PLACES ± --- ± --- 3 PLACES ±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

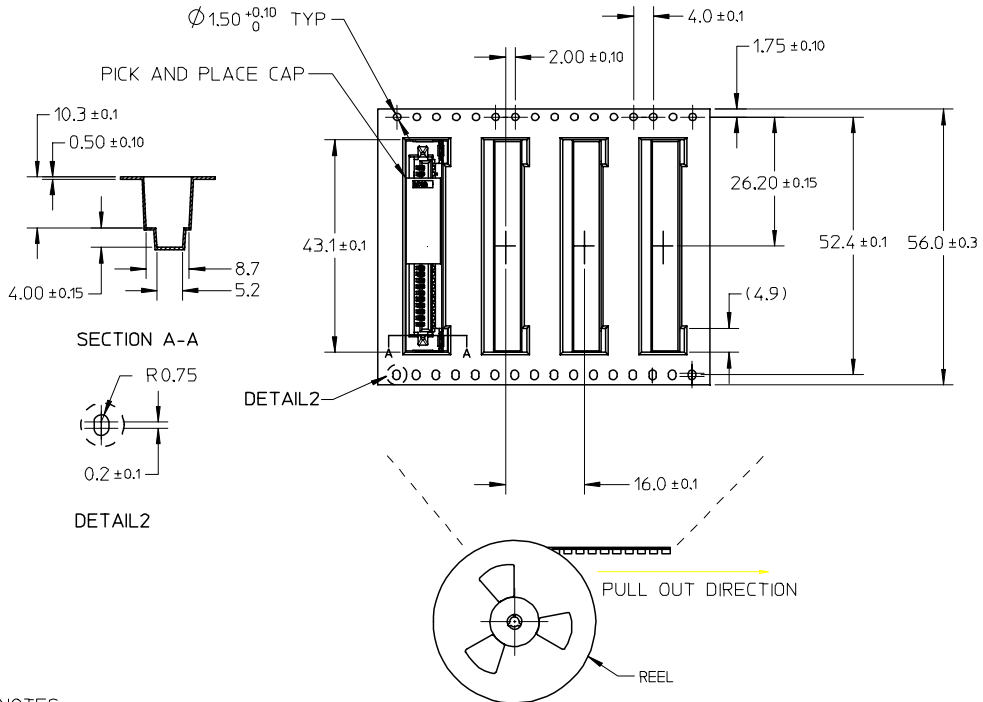


NEW PKG OPTION EC NO: S2006-0334 DRWN:KHLIM 2005/10/26 CHKD:SHONG 2005/10/27 APPR:KCLING 2005/10/28	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</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> </tbody> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.20	± ---	1 PLACE	± ---	± ---	DIMENSION STYLE MM ONLY	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
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DESCRIPTION A4	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: KHLIM DATE: 2004/10/12	TITLE: SERIAL ATTACH SCSI STD HEIGHT BACKPLANE SMT RECEIPT (WITH BLADE)	MOLEX INCORPORATED	DOCUMENT NO. SD-87824-027	SHEET NO. 3 OF 4															
		CHECKED BY: KCLING DATE: 2004/11/25	APPROVED BY: SKTOH DATE: 2004/11/26				SEE TABLE														
		MATERIAL NO.		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																	

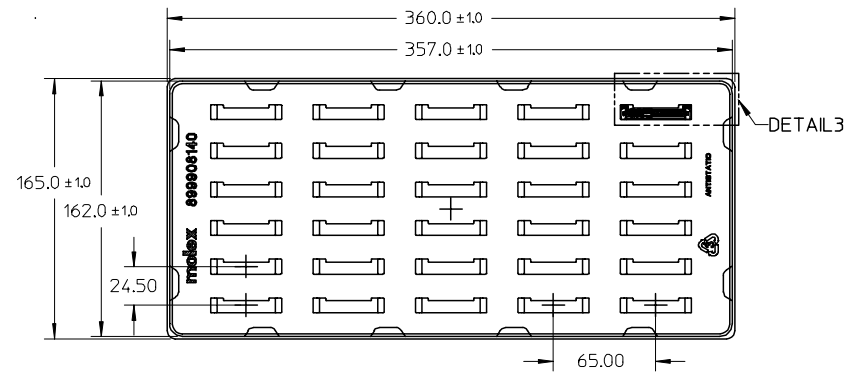
9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

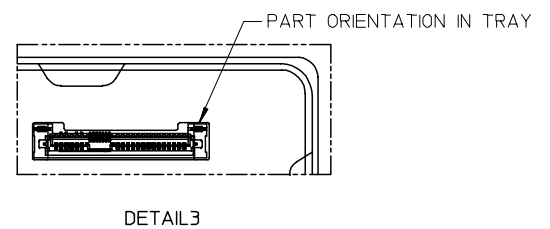
TAPE AND REEL PACKAGING



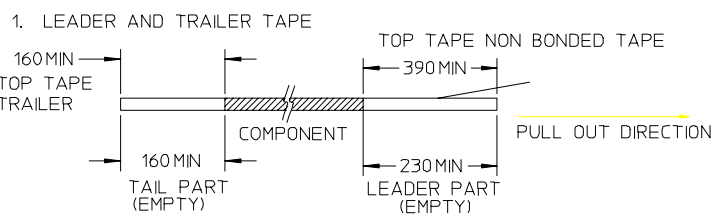
TRAY PACKAGING



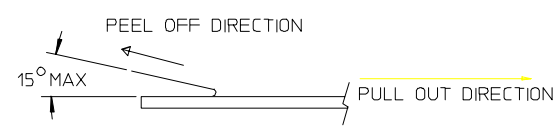
- NOTES:
 1. PACKAGING QTY: 30PCS/TRAY
 2. NO PICK AND PLACE CAP



NOTES:



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.

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

QUALITY SYMBOLS	▽=0 △=0
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GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	
	MM ONLY	
	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.20	± ---
1 PLACE	± ---	± ---
ANGULAR ± 3 °		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

DRAWN BY	DATE	TITLE
KHLIM	2004/10/12	SERIAL ATTACH SCSI STD HEIGHT BACKPLANE SMT RECEPT (WITH BLADE)
CHECKED BY	DATE	
KCLING	2004/11/25	MOLEX INCORPORATED
APPROVED BY	DATE	
SKTOH	2004/11/26	
MATERIAL NO.	DOCUMENT NO.	SHEET NO.
SEE TABLE	SD-87824-027	4 OF 4

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	

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9 8 7 6 5 4 3 2 1