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Part Number: **0877131006**
Status: **Active**
Description: 1.27mm (.050") Pitch Serial ATA Host Receptacle, Surface Mount, Vertical, Standard Height, with 1.05mm (.041") Plastic Locating Peg, 0.76µm (30µ") Gold (Au) Selective Plating, with Kapton Tape, Tape on Reel Packaging, 22 Circuits, Leadfree

Documents:

[3D Model](#) [Product Specification PS-87713-016 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

General

Product Family	PCB Receptacles
Series	87713
Application	Board-to-Board
Comments	1.05mm (.041") Plastic Locating Peg
Product Name	Serial ATA

Physical

Circuits (Loaded)	22
Circuits Detail	Power 15 pins Signal 7 pins
Durability (mating cycles max)	500
Glow-Wire Compliant	No
Lock to Mating Part	Yes
Material - Metal	Copper Alloy
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	1
Orientation	Vertical
PCB Locator	Yes
PCB Retention	None
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.60 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.050 In
Pitch - Mating Interface (mm)	1.27 mm
Plating min: Mating (µin)	30
Plating min: Mating (µm)	0.76
Plating min: Termination (µin)	100
Plating min: Termination (µm)	2.54
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Surface Mount Compatible (SMC)	N/A
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Surface Mount

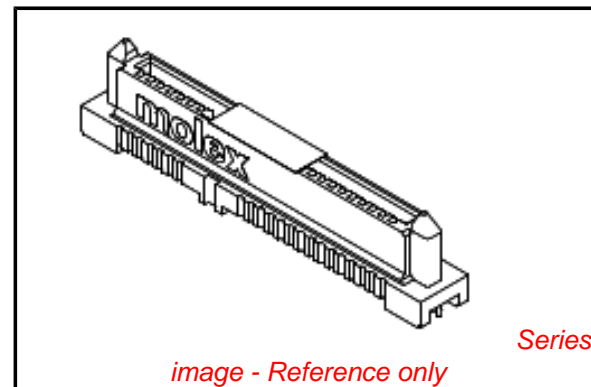
Electrical

Current - Maximum per Contact	1.5A
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



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
 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

87713Series

Mates With

87679 , 87799 , 87703

Reference - Drawing Numbers

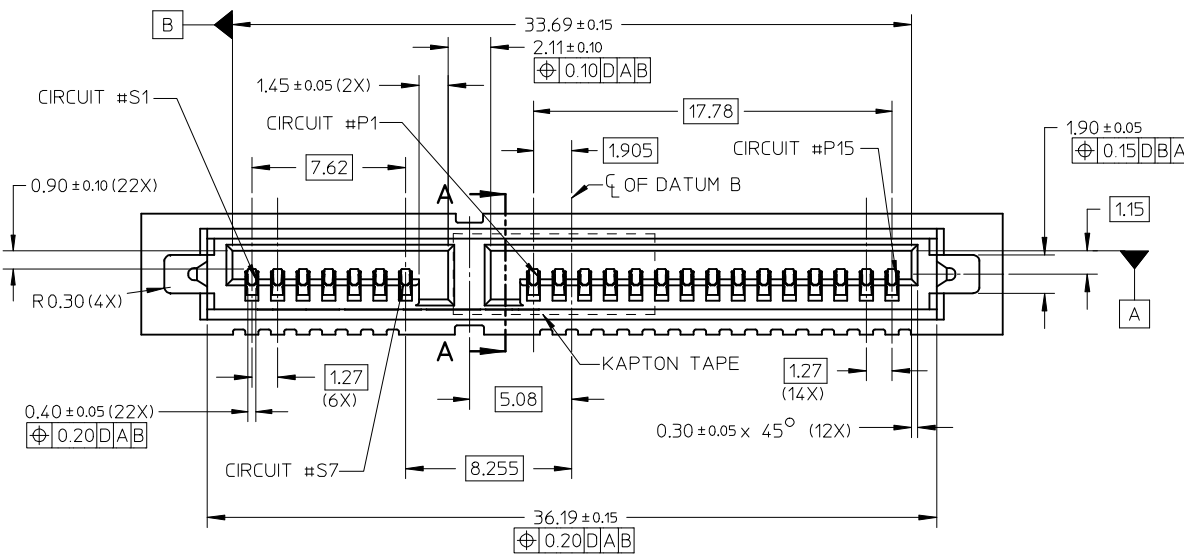
Product Specification
Sales Drawing

PS-87713-016
SD-87713-029

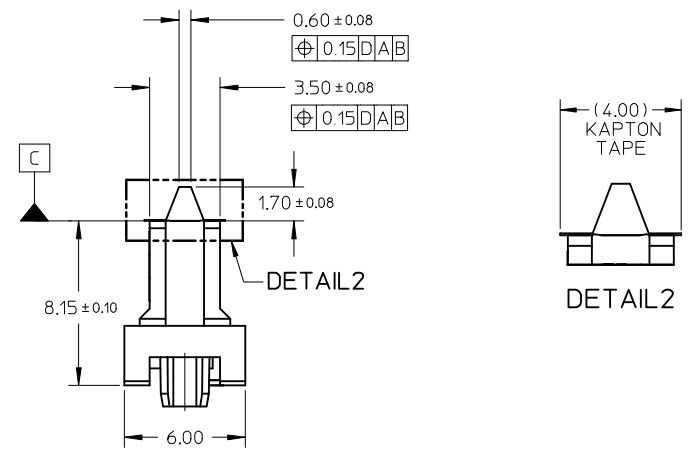
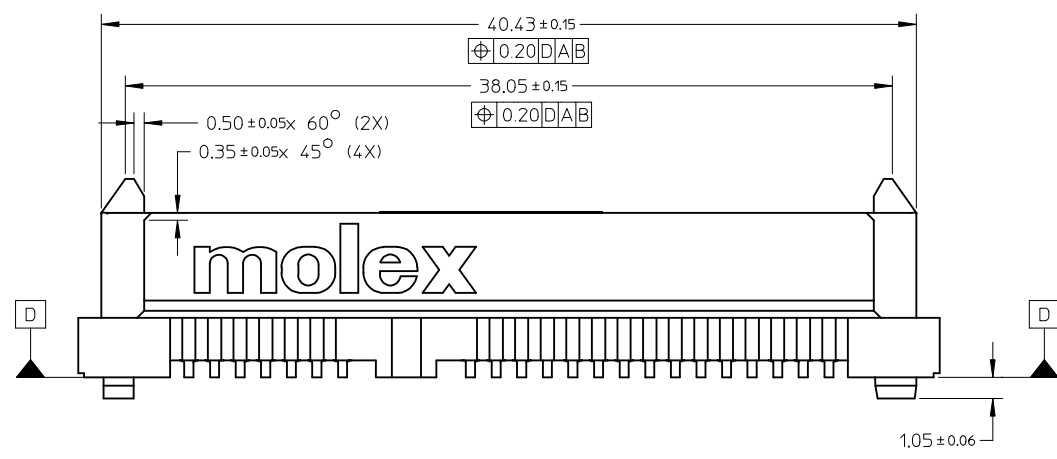
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	3	2	1
	ASSEMBLY	KAPTON TAPE	PACKAGING
	87713-1005	NO	TRAY
	87713-1006	YES	TAPE & REEL

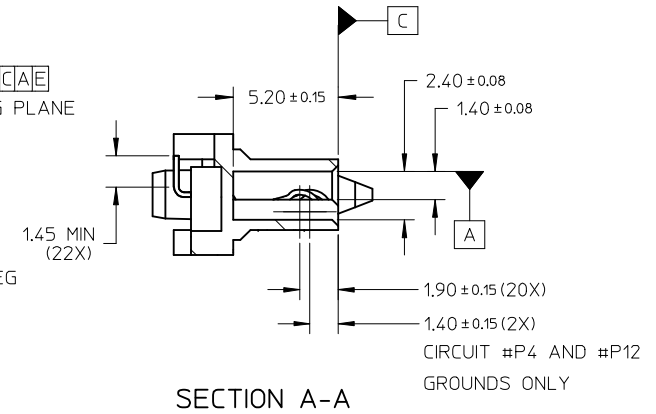
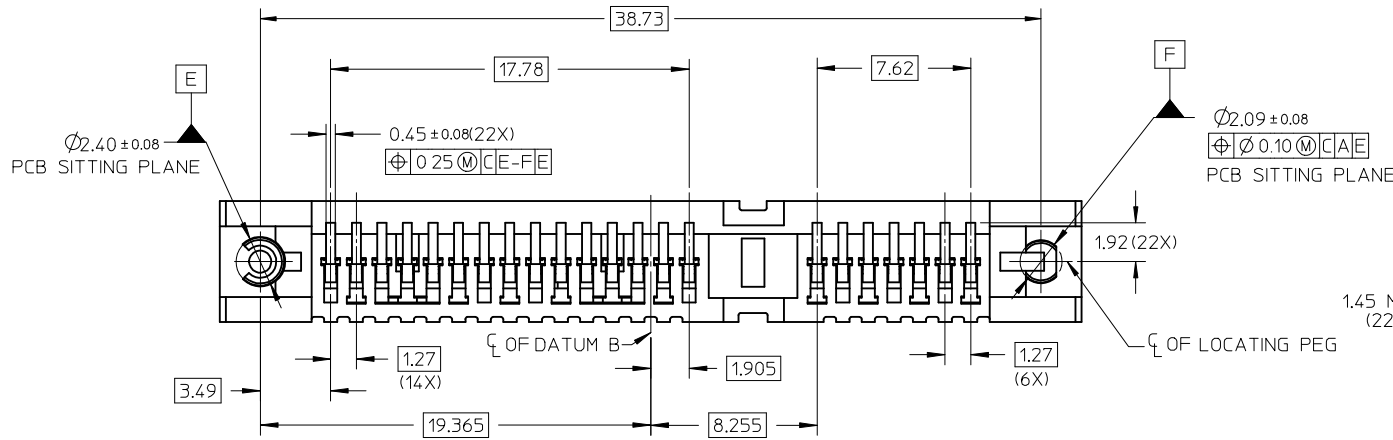
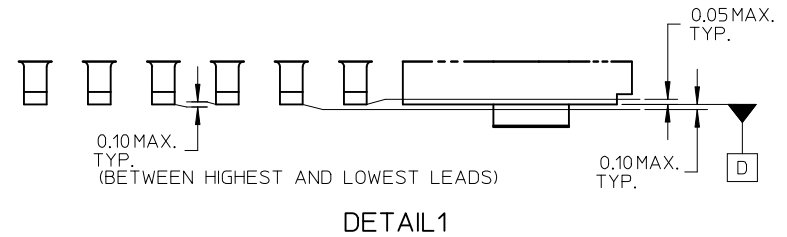
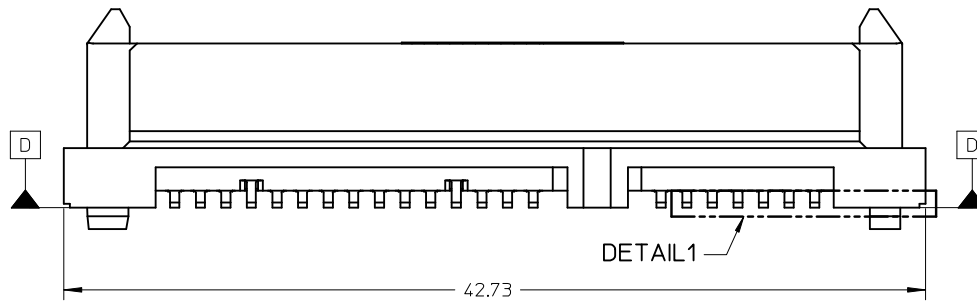


- NOTES:
- MATERIAL: LCP, GLASS FILLED, UL 94V-0, COLOR: BLACK
TERMINAL: COPPER ALLOY
 - PLATING:
CONTACT: 0.76µm MIN. SELECTIVE GOLD OVER 1.27µm MIN. NICKEL UNDERPLATE
SOLDERTAIL: 2.54µ MIN. TIN OVER 1.27 µm MIN. NICKEL UNDERPLATE
 - MOLEX LOGO LOCATED APPROXIMATELY AS SHOWN
 - MAXIMUM WARPAGE OF 0.13 mm OVER THE LENGTH OF THE CONNECTOR IN ANY DIRECTION BEFORE AND AFTER EXPOSURE TO MAX. 260°C FOR 10 SECONDS
 - PRODUCT SPECIFICATION: PS-87713-016 APPLIES
 - PACKAGING
30 CONNECTORS PER TRAY
 - KAPTON TAPE : 11.00mm X 4.00mm. KAPTON TAPE LOCATION IS CENTERED ALONG THE PART AS SHOWN. TOP SURFACE OF TAPE TO BE FLAT FOR THE PURPOSE OF PICK & PLACE.



NEW KAPTON TAPE EC NO: S2009-0322 DRW:KHLIM CHKD:CGOH APPR:BOKOK 2008/12/04 2008/12/04 2008/12/05	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	2005/03/07	SERIAL ATA BACKPLANE SIL WITH 1.05 PEGS STD HEIGHT, RECEPT., SMT			
		3 PLACES	± ---	± ---	CHECKED BY	DATE				
2 PLACES	± 0.20	± ---	KCLING	2005/04/14	MOLEX INCORPORATED					
1 PLACE	± ---	± ---	APPROVED BY	DATE						
ANGULAR ± 3°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SKTOH	2005/04/14	DOCUMENT NO.		SHEET NO.		
				SEE TABLE		SD-87713-029		1 OF 5		
				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

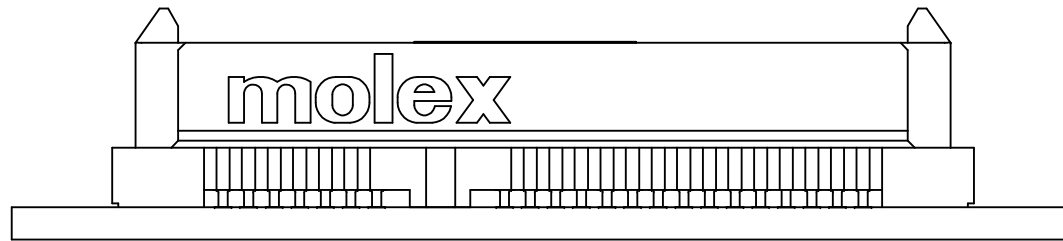
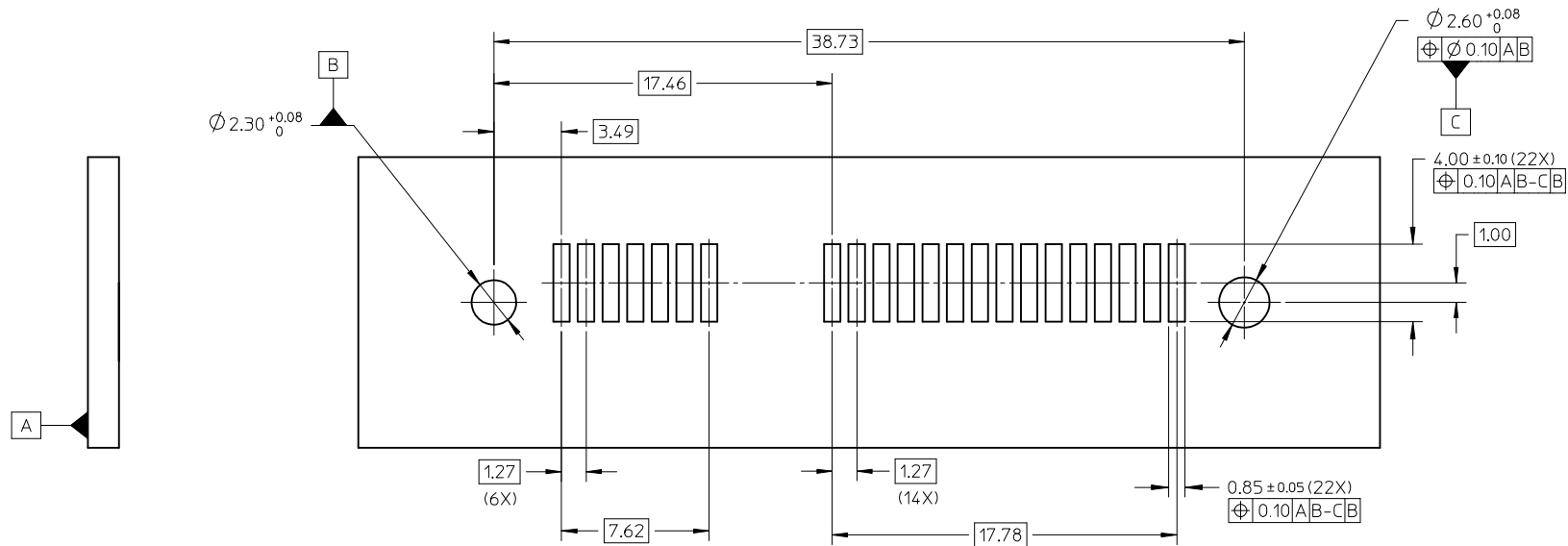
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SECTION A-A

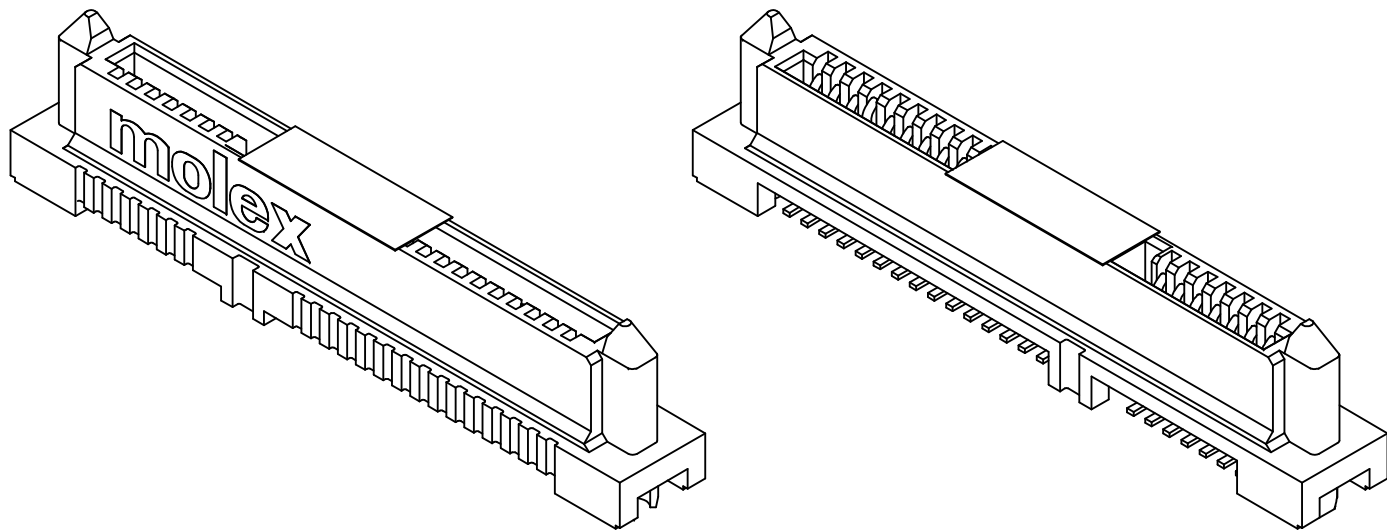
NEW KAPTON TAPE EC NO: S2009-0322 DRW:KHLIM CHKD:CGOH APPR:BOKOK	2008/12/04 2008/12/04 2008/12/05	DESCRIPTION B3	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
			$\nabla=0$ $\nabla=0$	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	MM ONLY	NTS	METRIC		
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: KHLIM DATE: 2005/03/07 CHECKED BY: KCLING DATE: 2005/04/14 APPROVED BY: SKTOH DATE: 2005/04/14	TITLE	SERIAL ATA BACKPLANE SIL WITH 1.05 PEGS STD HEIGHT, RECEPT., SMT		
					MATERIAL NO. SEE TABLE SIZE: A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	MOLEX INCORPORATED DOCUMENT NO. SD-87713-029 SHEET NO. 2 OF 5			

9 8 7 6 5 4 3 2 1



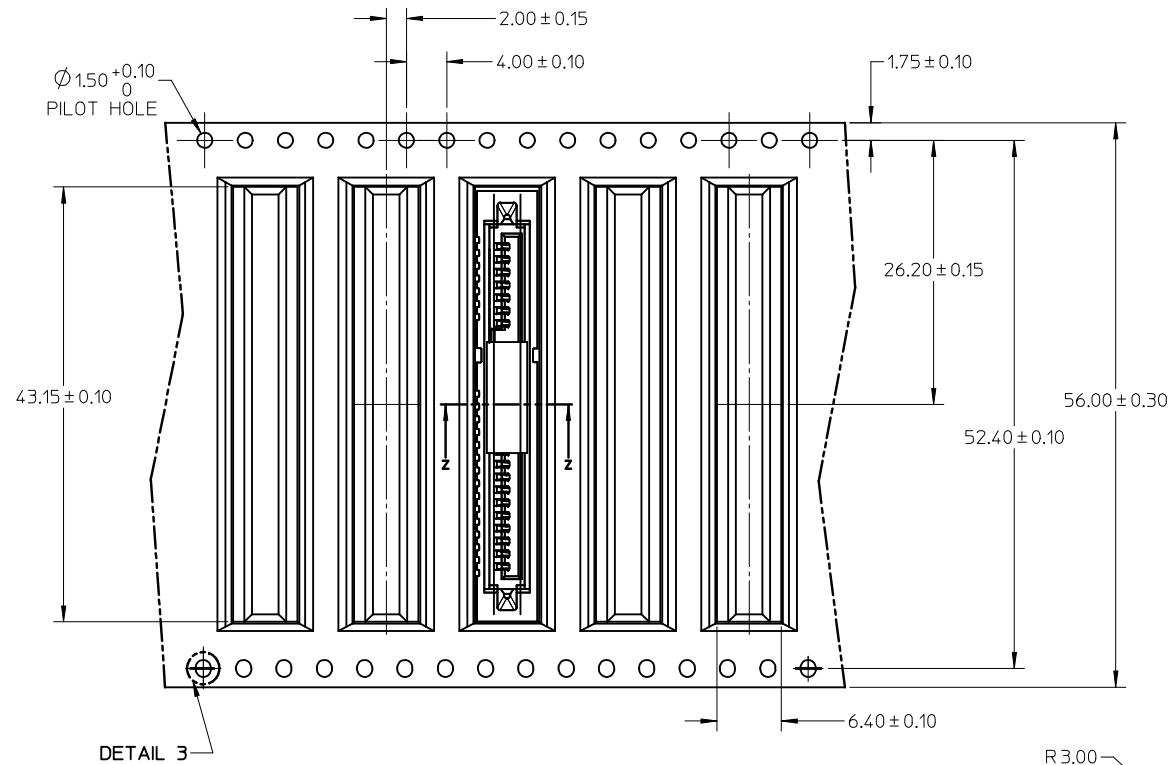
PCB THICKNESS: 1.60±0.10 mm
RECOMMENDED PCB LAYOUT

NEW KAPTON TAPE EC NO: S2009-0322 DRW:KHLIM CHKD:CGOH APPR:BOKOK 2008/12/04 2008/12/04 2008/12/05	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION													
		<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	± ---	± ---	DRAWN BY: KHLIM DATE: 2005/03/07	TITLE SERIAL ATA BACKPLANE SIL WITH 1.05 PEGS STD HEIGHT, RECEPT., SMT
		mm	INCH																
	4 PLACES	± ---	± ---																
3 PLACES	± ---	± ---																	
2 PLACES	± 0.20	± ---																	
1 PLACE	± ---	± ---																	
	ANGULAR ± 3 °	CHECKED BY: KCLING DATE: 2005/04/14	APPROVED BY: SKTOH DATE: 2005/04/14	MOLEX INCORPORATED															
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87713-029	SHEET NO. 3 OF 5															



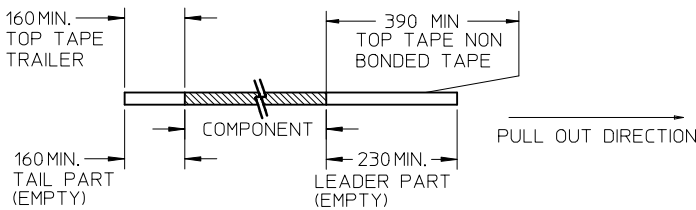
NEW KAPTON TAPE EC NO: S2009-0322 DRW:KHLIM 2008/12/04 CHKD:CGOH 2008/12/04 APPR:BOKOK 2008/12/05	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± ---	mm INCH ± --- ± --- ± 0.20 ± --- ± --- ± ---	DRAWN BY KHLIM	DATE 2005/03/07	TITLE SERIAL ATA BACKPLANE SIL WITH 1.05 PEGS STD HEIGHT, RECEPT., SMT				
			ANGULAR ± 3 °	APPROVED BY SKTOH	DATE 2005/04/14	MOLEX INCORPORATED					
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87713-029	SHEET NO. 4 OF 5						

TAPE AND REEL PACKAGING

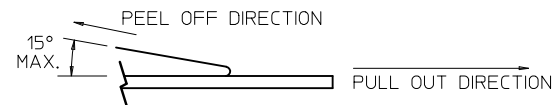


NOTES:

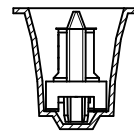
1. LEADER AND TRAILER TAPE



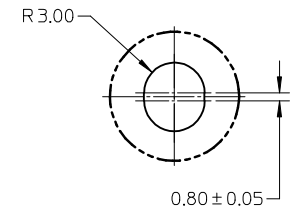
2. PEELING OFF FORCE OF THE TOP TAPE: 80gf MAX. (PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)



- 3. TAPE AND REEL SPECIFICATION IS AS PER EIA-481.
- 4. TAPE AND REEL QUANTITY : 400 PCS/ REEL.
- 5. THE TAPE IS TREATED FOR ANTI-STATIC.



SECTION Z-Z



DETAIL 3

NEW KAPTON TAPE EC NO: S2009-0322 DRW:KHLIM CHKD:CGOH APPR:BOKOK	2008/12/04 2008/12/04 2008/12/05	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
			$\nabla=0$ $\nabla C=0$	mm INCH	MM ONLY	NTS	METRIC	
				4 PLACES \pm --- \pm ---	DRAWN BY	DATE	TITLE	
				3 PLACES \pm --- \pm ---	KHLIM	2005/03/07	SERIAL ATA BACKPLANE SIL WITH 1.05 PEGS STD HEIGHT, RECEPT., SMT	
	2 PLACES ± 0.20 \pm ---	CHECKED BY	DATE					
	1 PLACE \pm --- \pm ---	KCLING	2005/04/14					
	ANGULAR $\pm 3^\circ$	APPROVED BY	DATE					
		SKTOH	2005/04/14					
		MATERIAL NO.		DOCUMENT NO.				
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		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						
		SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
		A3						