

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0877011001](#)
Status: **Active**
Description: 1.27mm (.050") Pitch Serial ATA Host Receptacle, Press-fit, Vertical, Standard Height, 0.76µm (30µ") Gold (Au) Selective, 22 Circuits, Leadfree

Documents:

[3D Model](#) [Product Specification PS-87701-033 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

General

Product Family	PCB Receptacles
Series	87701
Application	Board-to-Board
Product Literature Order No	SNG-029
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
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Number of Rows	2
Orientation	Vertical
PC Tail Length (in)	0.136 In
PC Tail Length (mm)	3.45 mm
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.060 In, 0.062 In, 0.070 In, 0.075 In, 0.080 In
PCB Thickness Recommended (mm)	1.50 mm, 1.60 mm, 1.80 mm, 1.90 mm, 2.00 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)	101.6
Plating min: Termination (µm)	2.54
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole

Electrical

Current - Maximum per Contact	1.5A
Voltage - Maximum	30V

Material Info

Reference - Drawing Numbers

Product Specification	PS-87701-033
Sales Drawing	SD-87701-013

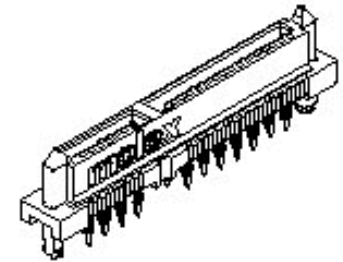


image - Reference only

Series

EU RoHS

ELV and RoHS Compliant

REACH SVHC

Contains SVHC: No

Halogen-Free

Status

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

[87701Series](#)

Mates With

[87679](#) , [87799](#) , [87703](#)

This document was generated on 03/29/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

10 9 8 7 6 5 4 3 2 1

F

E

D

C

B

A

F

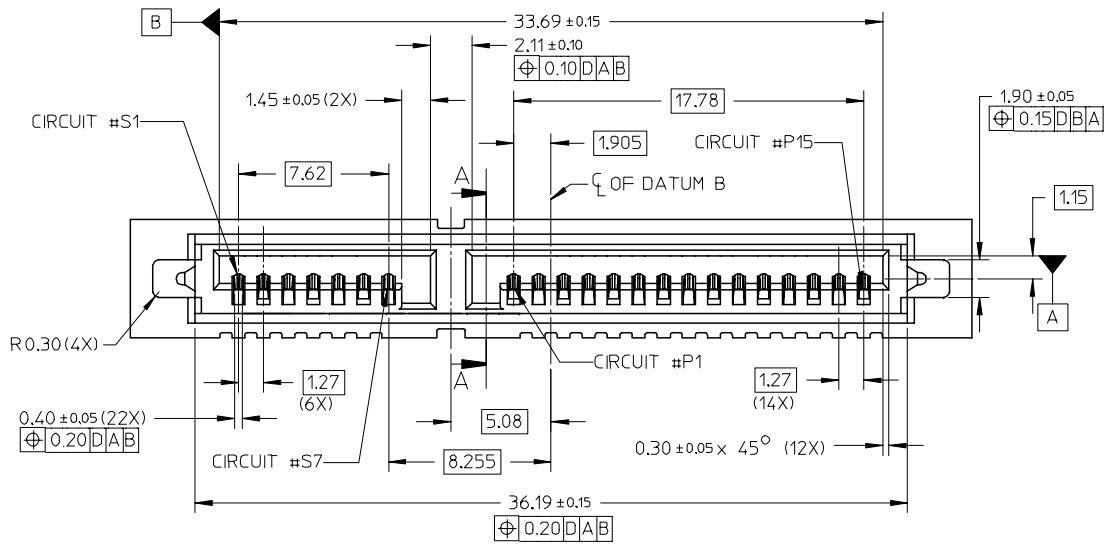
E

D

C

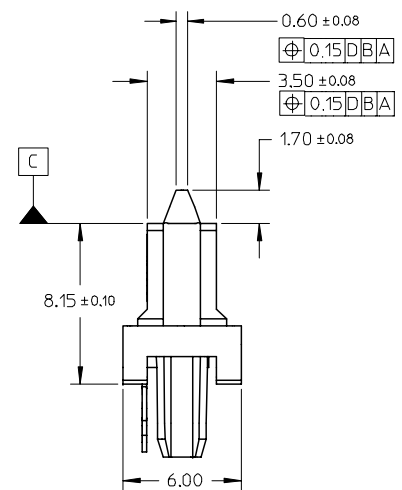
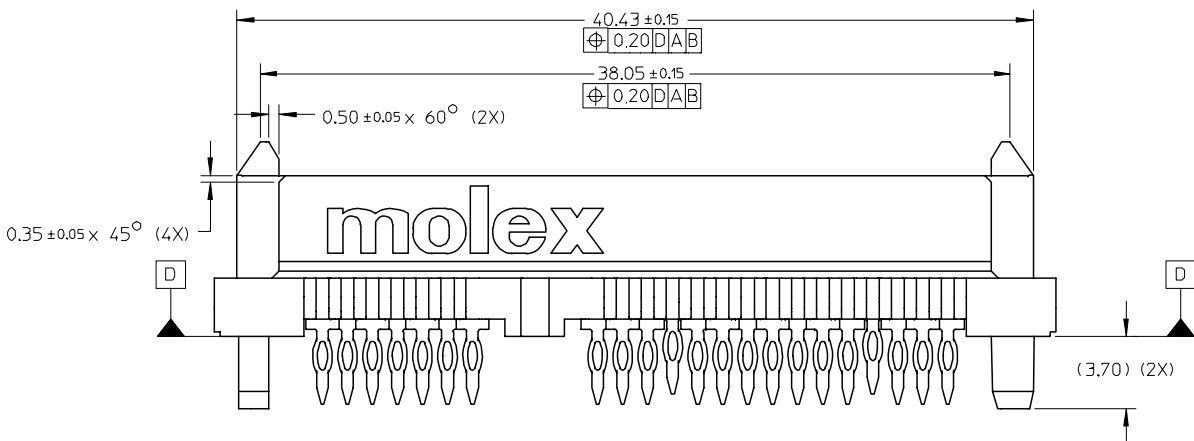
B

A



NOTES:

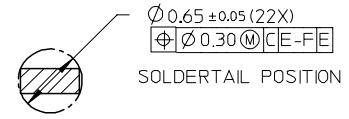
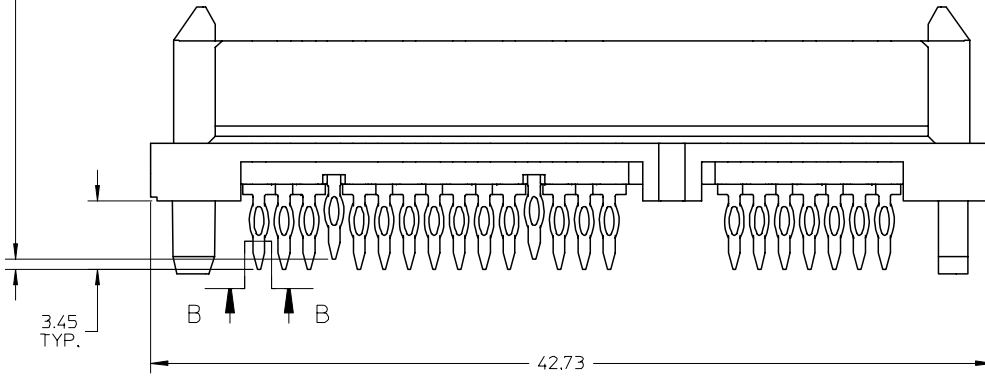
1. MATERIAL: LCP, GLASS FILLED, UL 94V-0, COLOR: BLACK
TERMINAL: COPPER ALLOY
2. PLATING
CONTACT: 0.76µm MIN, SELECTIVE GOLD OVER 1.27µm MIN, NICKEL
UNDERPLATE SOLDER TAIL: 2.54µm MIN, TIN OVER 1.27µm MIN, NICKEL
UNDERPLATE
3. MOLEX LOGO LOCATED APPROXIMATELY AS SHOWN
4. MAXIMUM WARPAGE OF 0.13 mm OVER THE LENGTH OF THE CONNECTOR
IN ANY DIRECTION BEFORE AND AFTER EXPOSURE TO MAX. 260°C FOR
10 SECONDS
5. PCB THICKNESS RANGE FROM 1.50 mm TO 2.00 mm
6. KEEP OUT ZONE ON BOTH SIDE OF PCB FOR CONNECTOR
INSERTION AND EXTRACTION TOOL
7. PRODUCT SPECIFICATION: PS-87701-033 APPLIES
8. PACKAGING
30 CONNECTORS PER TRAY



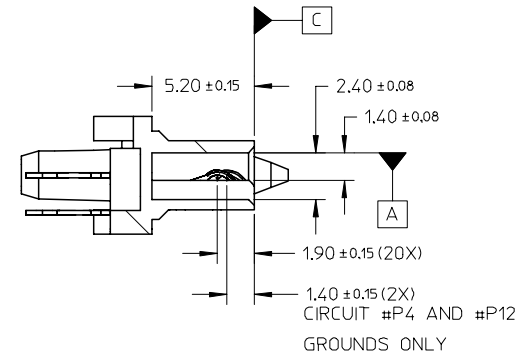
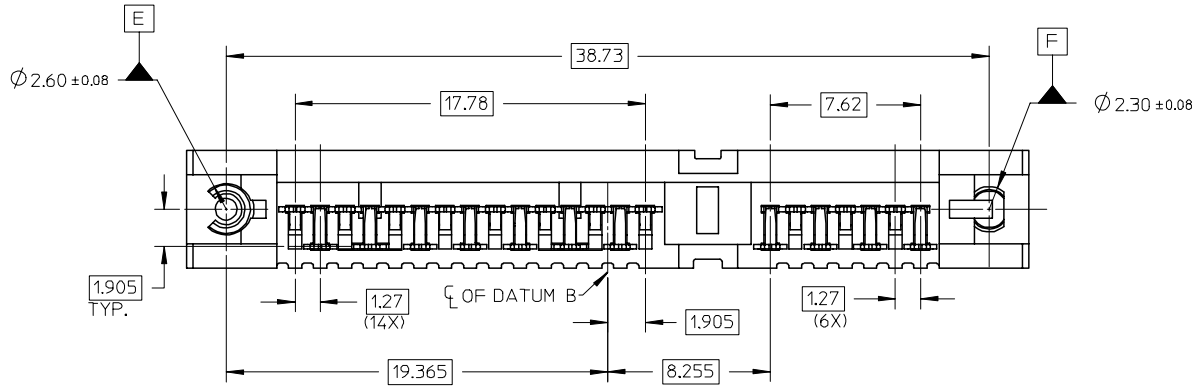
DIM UPDATE EC NO: S2008-0237 DRWN:KLLIM CHKD:CGOH APPR:KCLING 2007/09/20 2007/09/20 2007/09/20	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.20 ± ---	1 PLACE ± --- ± ---	ANGULAR ± 3 °	DRAWN BY DKOH	DATE 2002/07/01	SERIAL ATA BACKPLANE PRESS-FIT STD HEIGHT RECEPTACLE MOLEX INCORPORATED		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					CHECKED BY KCLING	DATE 2002/07/05			
							MATERIAL NO. 87701-1001	DATE 2002/07/05	DOCUMENT NO. SD-87701-013	SHEET NO. 1 OF 4	

9 8 7 6 5 4 3 2 1

CIRCUIT #P4 AND #P12 ONLY
0.50



SECTION B-B

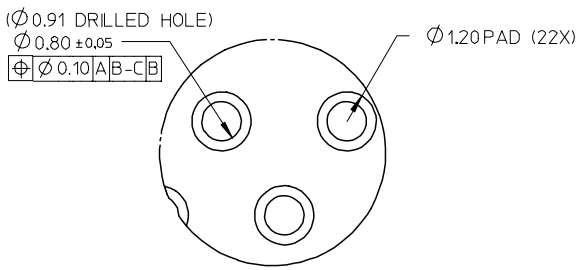
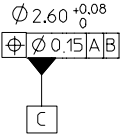
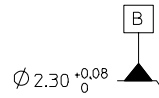
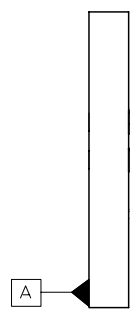
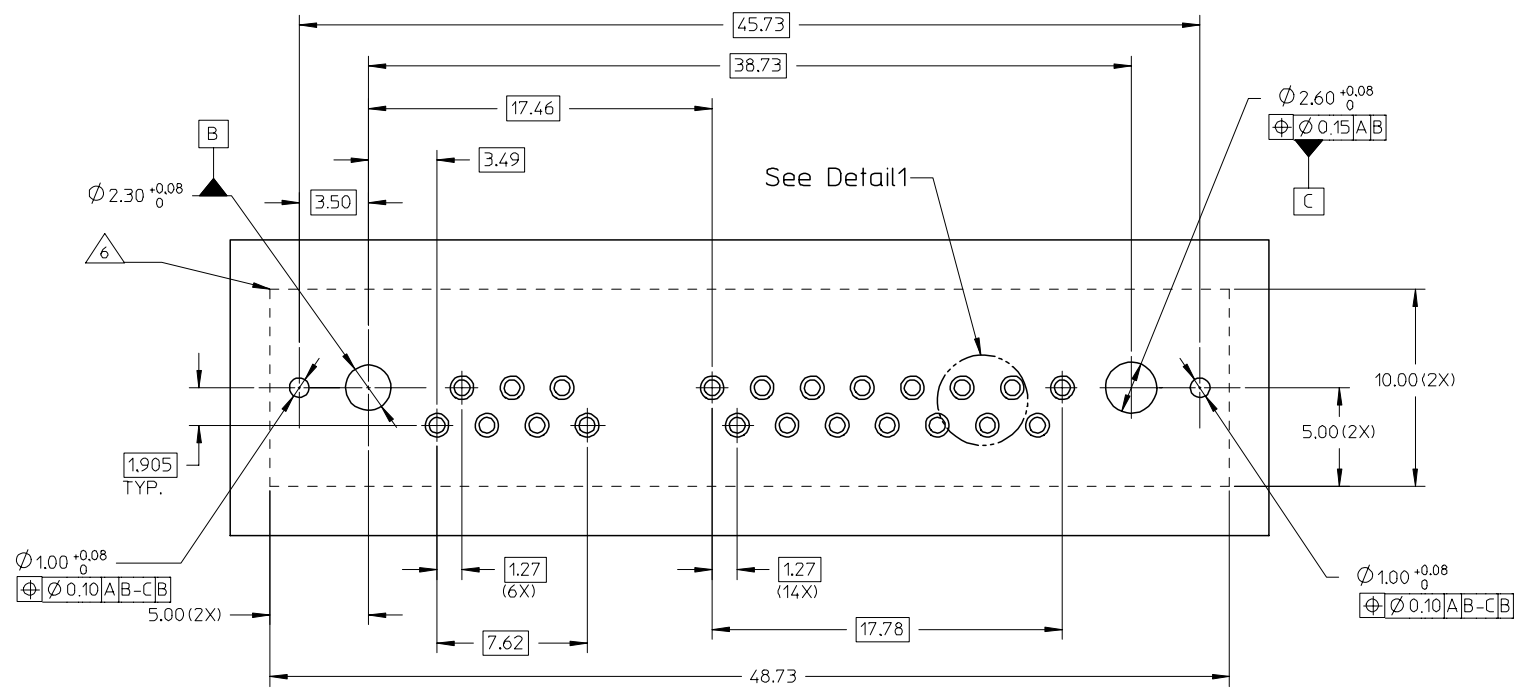


SECTION A-A

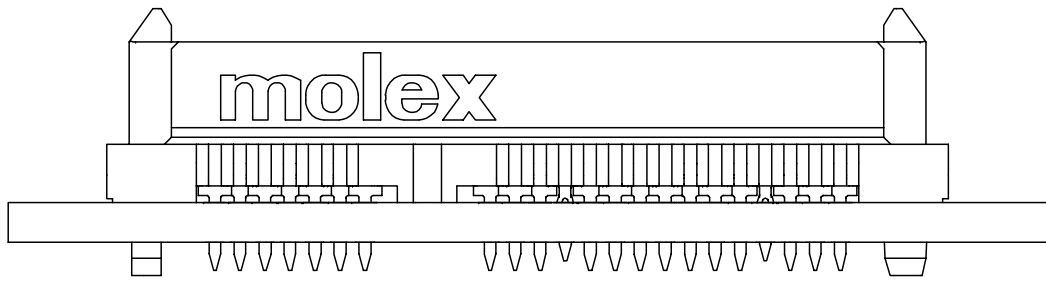
DIM UPDATE EC NO: S2008-0237 DRWN:KLLIM CHKD:CGOH APPR:KCLING 2007/09/20 2007/09/20 2007/09/20	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.20 ± ---	1 PLACE ± --- ± ---	ANGULAR ± 3 °	DRAWN BY DKOH	DATE 2002/07/01	TITLE SERIAL ATA BACKPLANE PRESS-FIT STD HEIGHT RECEPTACLE
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NO. 87701-1001	APPROVED BY SKTOH	DATE 2002/07/05	DOCUMENT NO. SD-87701-013	SHEET NO. 2 OF 4
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

10 9 8 7 6 5 4 3 2 1

F
E
D
C
B
A



Detail1
SCALE 10:1



RECOMMENDED PCB LAYOUT

DIM UPDATE EC NO: S2008-0237 DRWN:KLLM CHKD:CGH APPR:KCLING 2007/09/20 2007/09/20 2007/09/20	QUALITY SYMBOLS $\nabla=0$ $\triangle=0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
		4 PLACES \pm --- \pm ---	3 PLACES \pm --- \pm ---	2 PLACES ± 0.20 \pm ---	1 PLACE \pm --- \pm ---	ANGULAR $\pm 3^\circ$	DRAWN BY DKOH	DATE 2002/07/01	TITLE SERIAL ATA BACKPLANE PRESS-FIT STD HEIGHT RECEPTACLE		
							APPROVED BY SKTOH	DATE 2002/07/05	MOLEX INCORPORATED		
							MATERIAL NO. 87701-1001	DOCUMENT NO. SD-87701-013	SHEET NO. 3 OF 4		
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

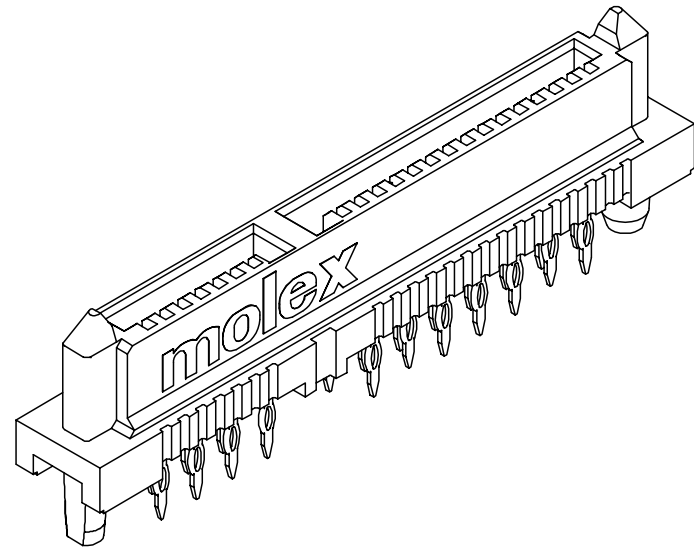
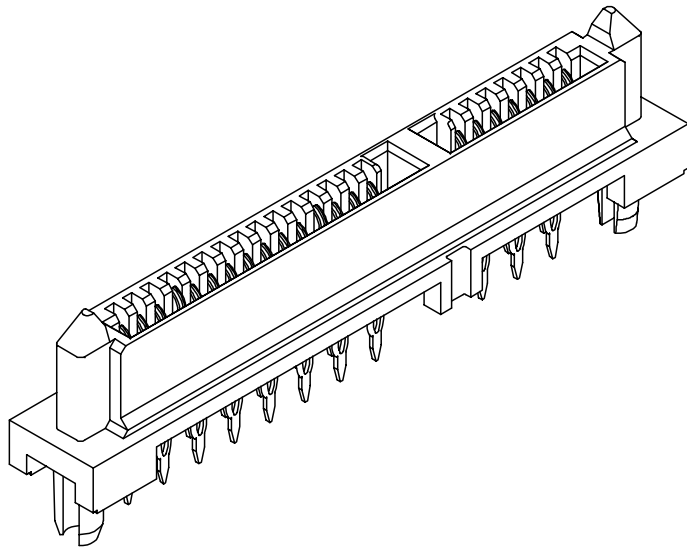
E

D

C

B

A



DIM UPDATE EC NO: S2008-0237 DRWN:KLLIM CHKD:CGOH APPR:KCLING	2007/09/20 2007/09/20 2007/09/20	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			4 PLACES ± --- ± ---	DRAWN BY DKOH	DATE 2002/07/01	SERIAL ATA BACKPLANE PRESS-FIT STD HEIGHT RECEPTACLE					
			3 PLACES ± --- ± ---	CHECKED BY KCLING	DATE 2002/07/05						
			2 PLACES ± 0.20 ± ---	APPROVED BY SKTOH	DATE 2002/07/05	MOLEX INCORPORATED					
		1 PLACE ± --- ± ---	MATERIAL NO. 87701-1001		DOCUMENT NO. SD-87701-013						SHEET NO. 4 OF 4
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