

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0475054305](#)

Status: **Active**

Overview:

Description: 1.00mm (.039") Pitch, PCI Express* Connector, 164 Circuits, Nylon 4/6 Glass-filled, Black Housing, Phosphor Bronze, 0.38µm (15µ") Gold (Au) Plating, with Plastic Pegs, 3.10mm (.122") Solder tail, with Back-type Latch, Lead Free

General

Product Family	Edge Card Connectors
Series	87715
Comments	With Integrated Back-type Latch
Component Type	Edgecard to PCB
Overview	pci_express_card_edge_connector
Product Name	PCI Express*

Physical

Circuits (Loaded)	164
Circuits (maximum)	164
Circuits Detail	All Signal
Color - Resin	Black
Durability (mating cycles max)	50
Entry Angle	Vertical
Keying to Mating Part	Yes
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic, Nylon
PC Tail Length (in)	0.122 In
PC Tail Length (mm)	3.10 mm
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.093 In
PCB Thickness Recommended (mm)	2.36 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.039 In
Pitch - Mating Interface (mm)	1.00 mm
Pitch - Term. Interface (in)	0.039 In
Pitch - Term. Interface (mm)	1.00 mm
Plating min: Mating (µin)	15
Plating min: Mating (µm)	0.375
Plating min: Termination (µin)	100
Plating min: Termination (µm)	2.5
Polarized to Mating Part	Yes
Temperature Range - Operating	-55°C to +85°C
Termination Interface: Style	Through Hole

Electrical

Current - Maximum per Contact	1.1A
Voltage - Maximum	50V AC (RMS)/DC

Material Info

Reference - Drawing Numbers

Packaging Specification	PK-47505-001
Product Specification	PS-47505-001
Sales Drawing	SD-47505-001
Test Summary	TS-47505-001

EU RoHS

**ELV and RoHS
Compliant**

REACH SVHC

Not Reviewed

Halogen-Free

Status

Not Reviewed

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

[87715Series](#)

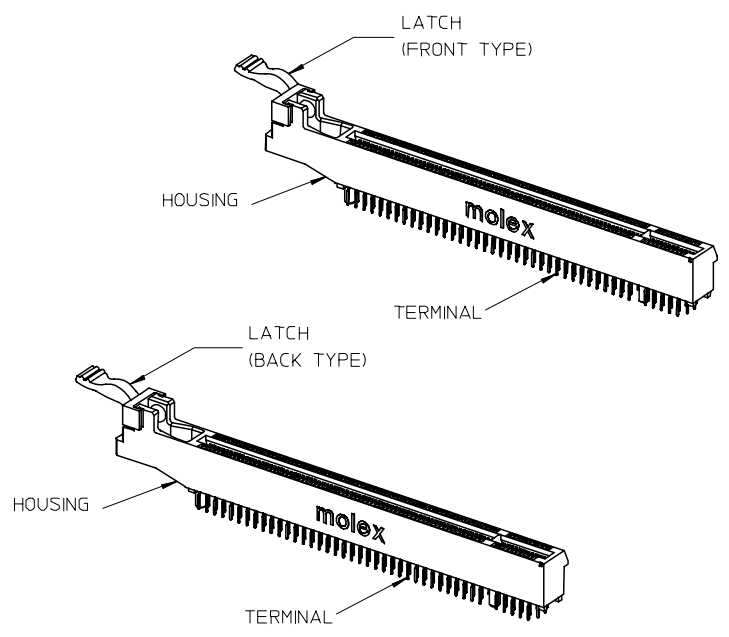
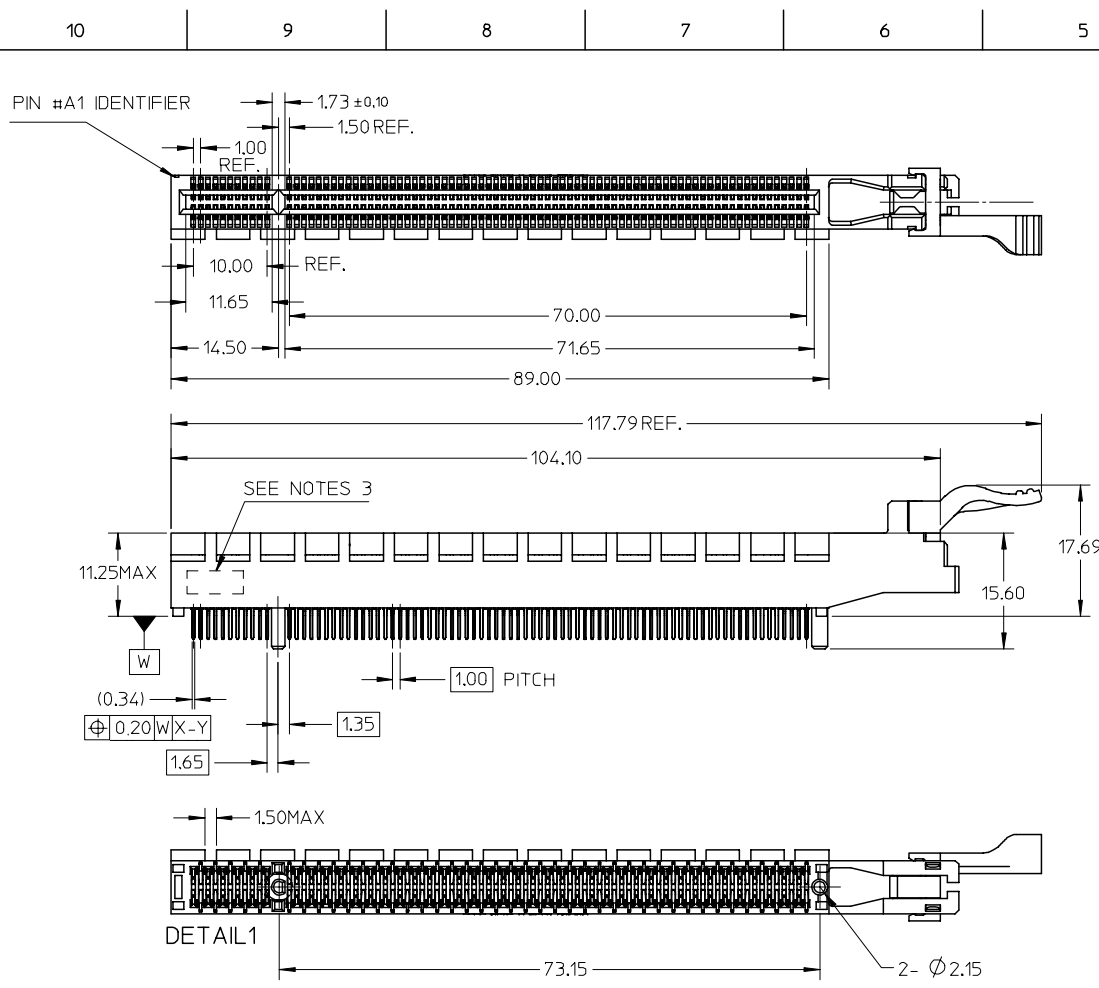
Mates With

PCI Express Module Card

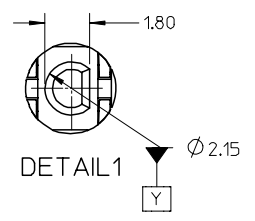
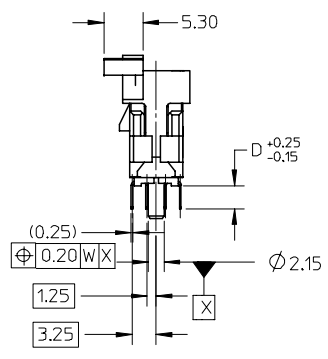
| * PCI Express is a registered trademark of PCI-SIG®

This document was generated on 06/04/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

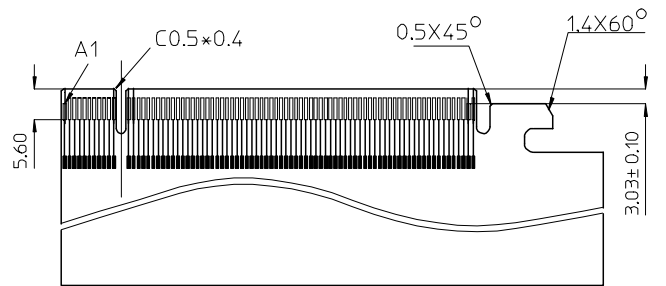
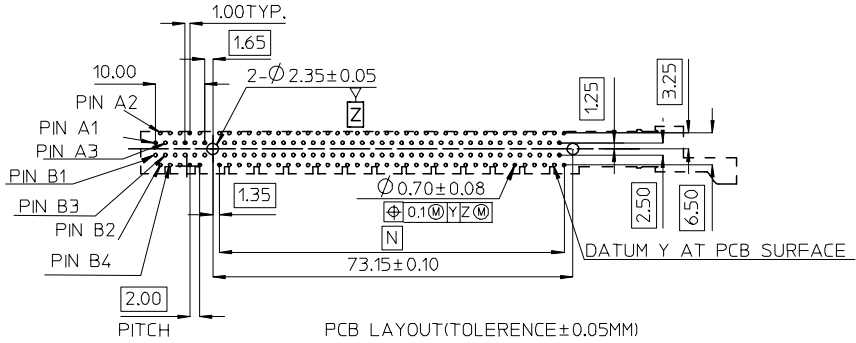
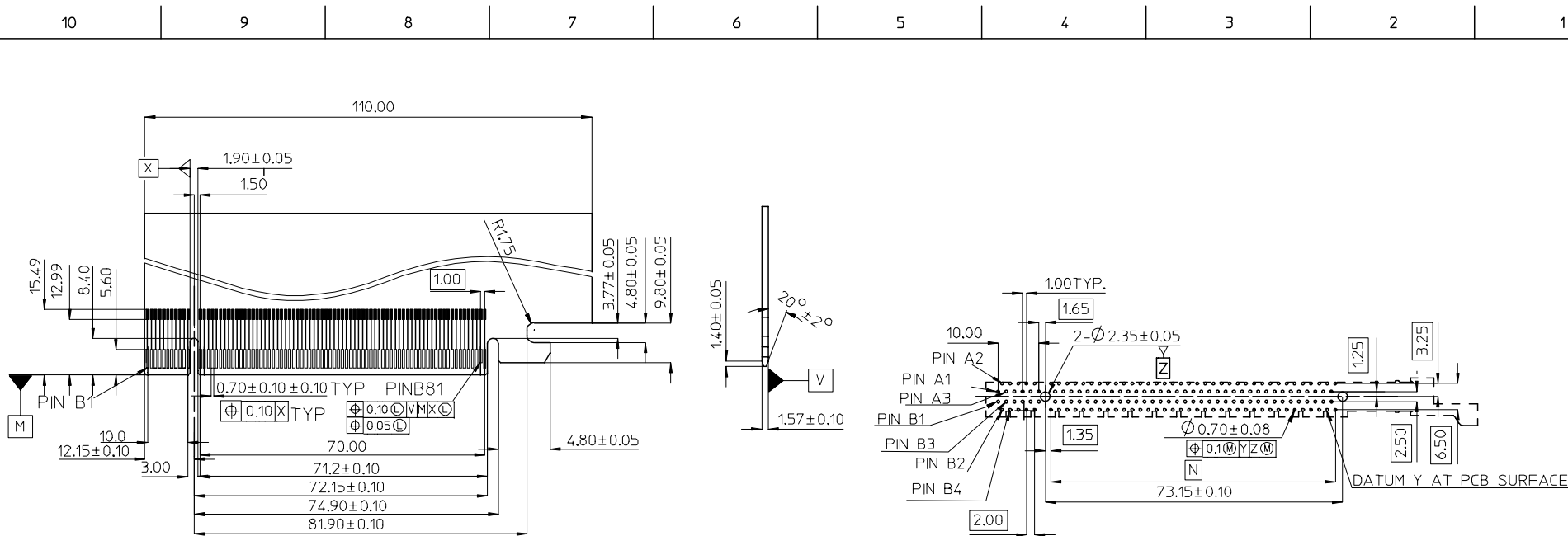


DIM'D*	PCB THK REF.
2.54	1.58
3.10	2.36



NOTES:
 1.MATERIALS:
 1-1.HOUSING:SEE TABLE .GLASS FIBER FILLED UL94V-0,COLOR:SEE TABLE.
 1-2.TERMINAL: SEE TABLE
 1-3.LATCH:NYLON66,GLASS FIBER FILLED UL94V-0,COLOR:BLACK.
 2.PLATING:
 TERMINAL :
 2-1.CONTACT AREA:SEE TABLE .
 2-2.SOLDER TAIL:SEE TABLE.
 2-3.UNDER PLATING: 50 MICROINCH MIN. NICKEL PLATING OVERALL.
 3.DATE CODE: YY MM DD.
 4.PART 47505**** COMPLIANT TO ROHS DIRECTIVE 2002/95/EC AND ELV DIRECTIVE 2000/53/EC.

NEW RELEASE EC NO: SH2008-0170 DRWN:DRU 2007/10/15 CHKD:ROST ZHANG 2007/10/15 APPR:HWANG 2007/11/13	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
				DRAWN BY DAVID HU	DATE 2007/05/08	TITLE 1.0MM PITCH PCI-EXPRESS 164CKTS W/RM LEAD-FREE			
				CHECKED BY HARVEY	DATE 2007/05/08	APPROVED BY JENNY CHEN			
				APPROVED BY JENNY CHEN		DATE 2007/05/08	MOLEX INCORPORATED		
A	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-47505-001		SHEET NO. 1 OF 4	



MODULE LAYOUT (MATING PART ONLY)
(TOLERANCE: ±0.10MM)

- 1.NO TIE BAR PERMITTED FROM CARD EDGE TO LEADING EDGE OF PAD FOR PINS A1 AND "B81".
- 2.CHAMFER EDGES MUST BE FREE OF CUTTING BURRS.
- 3.TO THE PCB LAYOUT:THE HORIZONTAL AXIS FOR THE HOLE PATTERN IS ESTABLISHED BY A LINE THROUGH THE CENTER OF THE TWO Ø2.35 HOLES.
THE VERTICAL AXIS IS 90° TO THE HORIZONTAL AXIS.THE CENTRE OF DATUM Z.

NEW RELEASE EC NO: SH2008-0170 DRWN:DHU CHKD:ROST ZHANG APPR:HWANG	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		▽=0 ∇=0	mm INCH	DRAWN BY DATE DAVID HU 2007/05/08	TITLE 1.0MM PITCH PCI-EXPRESS 164CKTS W/RM LEAD-FREE	MOLEX INCORPORATED	SHEET NO. 2 OF 4
			4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± ---	CHECKED BY DATE HARVEY 2007/05/08			
			ANGULAR ± 3 °	APPROVED BY DATE JENNY CHEN 2007/05/08	MATERIAL NO.	DOCUMENT NO. SD-47505-001	
A			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		

	10	9	8	7	6	5	4	3	2	1
		MOLEX P/N	HOUSING MATERIAL	HOUSING COLOR	TERMINAL MATERIAL	CONTACT PLATING	SOLDER TAIL PLATING	SOLDER TAIL "D" LENGTH	DESCRIPTION	LATCH TYPE
F		47505-9300	NYLON 46	BLACK	PHOSPHOR BRONZE	GOLD FLASH	100 MICROINCH TIN OVER 50 MICROINCH NICKEL OVER ALL	2.54	TOOLED	FRONT TYPE
		47505-9302				15 MICROINCH				
		47505-9310		NATURAL(WHITE)		GOLD FLASH				
		47505-9312				15 MICROINCH				
E		47505-9320		BLUE (287U)		GOLD FLASH				
		47505-9322				15 MICROINCH				
		47505-9330		GREEN (348C)		GOLD FLASH				
		47505-9332				15 MICROINCH				
		47505-9340		PURPLE (2736U)		GOLD FLASH				
D		47505-9342				15 MICROINCH				
		47505-3303		BLACK		GOLD FLASH				
		47505-3305				15 MICROINCH				
		47505-3313		NATURAL(WHITE)		GOLD FLASH				
		47505-3315				15 MICROINCH				
C		47505-3323		BLUE (287U)		GOLD FLASH				
		47505-3325				15 MICROINCH				
		47505-3333		GREEN (348C)		GOLD FLASH				
		47505-3335				15 MICROINCH				
		47505-3343		PURPLE (2736U)		GOLD FLASH				
B		47505-3345				15 MICROINCH				

NEW RELEASE EC NO: SH2008-0170 DRWN:DRU CHKD:ROST ZHANG APPR:HWANG	2007/10/15 2007/10/15 2007/11/13	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION															
			$\nabla=0$ $\nabla C=0$	<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> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.25	± ---	1 PLACE	± ---	± ---	MM ONLY	2:1	METRIC	
				mm	INCH																		
			4 PLACES	± ---	± ---																		
3 PLACES	± ---	± ---																					
2 PLACES	± 0.25	± ---																					
1 PLACE	± ---	± ---																					
	<table border="1"> <tr> <th>DRAWN BY</th> <th>DATE</th> <th>TITLE</th> </tr> <tr> <td>DAVID HU</td> <td>2007/05/08</td> <td rowspan="2">1.0MM PITCH PCI-EXPRESS 164CKTS W/RM LEAD-FREE</td> </tr> <tr> <td>CHECKED BY</td> <td>DATE</td> </tr> <tr> <td>HARVEY</td> <td>2007/05/08</td> <td></td> </tr> <tr> <td>APPROVED BY</td> <td>DATE</td> <td></td> </tr> <tr> <td>JENNY CHEN</td> <td>2007/05/08</td> <td></td> </tr> </table>	DRAWN BY	DATE	TITLE	DAVID HU	2007/05/08	1.0MM PITCH PCI-EXPRESS 164CKTS W/RM LEAD-FREE	CHECKED BY	DATE	HARVEY	2007/05/08		APPROVED BY	DATE		JENNY CHEN	2007/05/08						
DRAWN BY	DATE	TITLE																					
DAVID HU	2007/05/08	1.0MM PITCH PCI-EXPRESS 164CKTS W/RM LEAD-FREE																					
CHECKED BY	DATE																						
HARVEY	2007/05/08																						
APPROVED BY	DATE																						
JENNY CHEN	2007/05/08																						
			ANGULAR ± 3°	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	SD-47505-001	MOLEX INCORPORATED	SHEET NO. 3 OF 4															

10	9	8	7	6	5	4	3	2	1
	MOLEX P/N	HOUSING MATERIAL	HOUSING COLOR	TERMINAL MATERIAL	CONTACT PLATING	SOLDER TAIL PLATING	SOLDER TAIL "D" LENGTH	DESCRIPTION	LATCH TYPE
F	47505-8300	NYLON 46	BLACK	PHOSPHOR BRONZE	GOLD FLASH	100 MICROINCH TIN OVER 50 MICROINCH NICKEL OVER ALL	2.54	TOOLED	BACK TYPE
	47505-8302				15 MICROINCH				
	47505-8310		NATURAL(WHITE)		GOLD FLASH				
	47505-8312				15 MICROINCH				
E	47505-8320		BLUE (287U)		GOLD FLASH				
	47505-8322				15 MICROINCH				
	47505-8330		GREEN (348C)		GOLD FLASH				
	47505-8332				15 MICROINCH				
	47505-8340		PURPLE (2736U)		GOLD FLASH				
D	47505-8342				15 MICROINCH				
	47505-4303		BLACK		GOLD FLASH				
	47505-4305				15 MICROINCH				
	47505-4313		NATURAL(WHITE)		GOLD FLASH				
	47505-4315				15 MICROINCH				
C	47505-4323		BLUE (287U)		GOLD FLASH				
	47505-4325				15 MICROINCH				
	47505-4333		GREEN (348C)		GOLD FLASH				
	47505-4335				15 MICROINCH				
	47505-4343		PURPLE (2736U)		GOLD FLASH				
B	47505-4345				15 MICROINCH				
						3.10		UNTOOLED	

NEW RELEASE EC NO: SH2008-0170 DRWN:DRU 2007/10/15 CHKD:ROST ZHANG 2007/10/15 APPR:HWANG 2007/11/13	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION																																						
	$\nabla=0$ $\nabla C=0$	<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	± ---	± ---	<table border="1"> <thead> <tr> <th>DRAWN BY</th> <th>DATE</th> <th>TITLE</th> </tr> </thead> <tbody> <tr> <td>DAVID HU</td> <td>2007/05/08</td> <td rowspan="2">1.0MM PITCH PCI-EXPRESS 164CKTS W/RM LEAD-FREE</td> </tr> <tr> <td>CHECKED BY</td> <td>DATE</td> </tr> <tr> <td>HARVEY</td> <td>2007/05/08</td> <td rowspan="2">MOLEX INCORPORATED</td> </tr> <tr> <td>APPROVED BY</td> <td>DATE</td> </tr> <tr> <td>JENNY CHEN</td> <td>2007/05/08</td> <td>SD-47505-001</td> </tr> </tbody> </table>	DRAWN BY	DATE	TITLE	DAVID HU	2007/05/08	1.0MM PITCH PCI-EXPRESS 164CKTS W/RM LEAD-FREE	CHECKED BY	DATE	HARVEY	2007/05/08	MOLEX INCORPORATED	APPROVED BY	DATE	JENNY CHEN	2007/05/08	SD-47505-001	<table border="1"> <thead> <tr> <th>SIZE</th> <th>THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</th> </tr> </thead> <tbody> <tr> <td>A3</td> <td></td> </tr> </tbody> </table>	SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	A3		<table border="1"> <thead> <tr> <th>DOCUMENT NO.</th> <th>SHEET NO.</th> </tr> </thead> <tbody> <tr> <td>SD-47505-001</td> <td>4 OF 4</td> </tr> </tbody> </table>	DOCUMENT NO.	SHEET NO.	SD-47505-001	4 OF 4
		mm	INCH																																									
	4 PLACES	± ---	± ---																																									
3 PLACES	± ---	± ---																																										
2 PLACES	± 0.25	± ---																																										
1 PLACE	± ---	± ---																																										
DRAWN BY	DATE	TITLE																																										
DAVID HU	2007/05/08	1.0MM PITCH PCI-EXPRESS 164CKTS W/RM LEAD-FREE																																										
CHECKED BY	DATE																																											
HARVEY	2007/05/08	MOLEX INCORPORATED																																										
APPROVED BY	DATE																																											
JENNY CHEN	2007/05/08	SD-47505-001																																										
SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																																											
A3																																												
DOCUMENT NO.	SHEET NO.																																											
SD-47505-001	4 OF 4																																											
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE																																										