

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0475059300](#)

Status: **Active**

Overview:

Description: 1.00mm (.039") Pitch, PCI Express* Connector, 164 Circuits, Nylon 4/6 Glass-filled, Black Housing, Phosphor Bronze, Gold (Au) Flash Plating, with Plastic Pegs, 2.54mm (.100") Solder-tail, with Front-type Latch, Lead Free

General

Product Family	Edge Card Connectors
Series	87715
Comments	With Integrated Front-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)	0.100 In
PC Tail Length (mm)	2.54 mm
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.58 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)	2
Plating min: Mating (µm)	0.05
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](#)

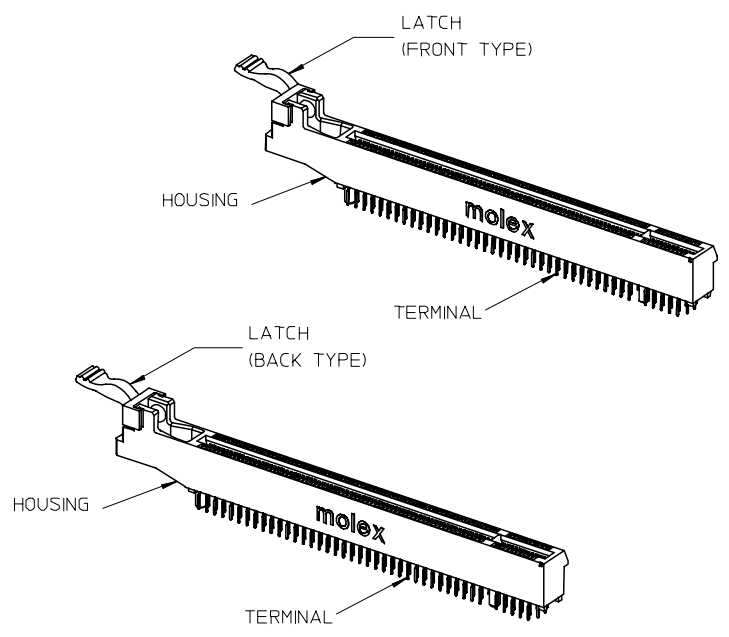
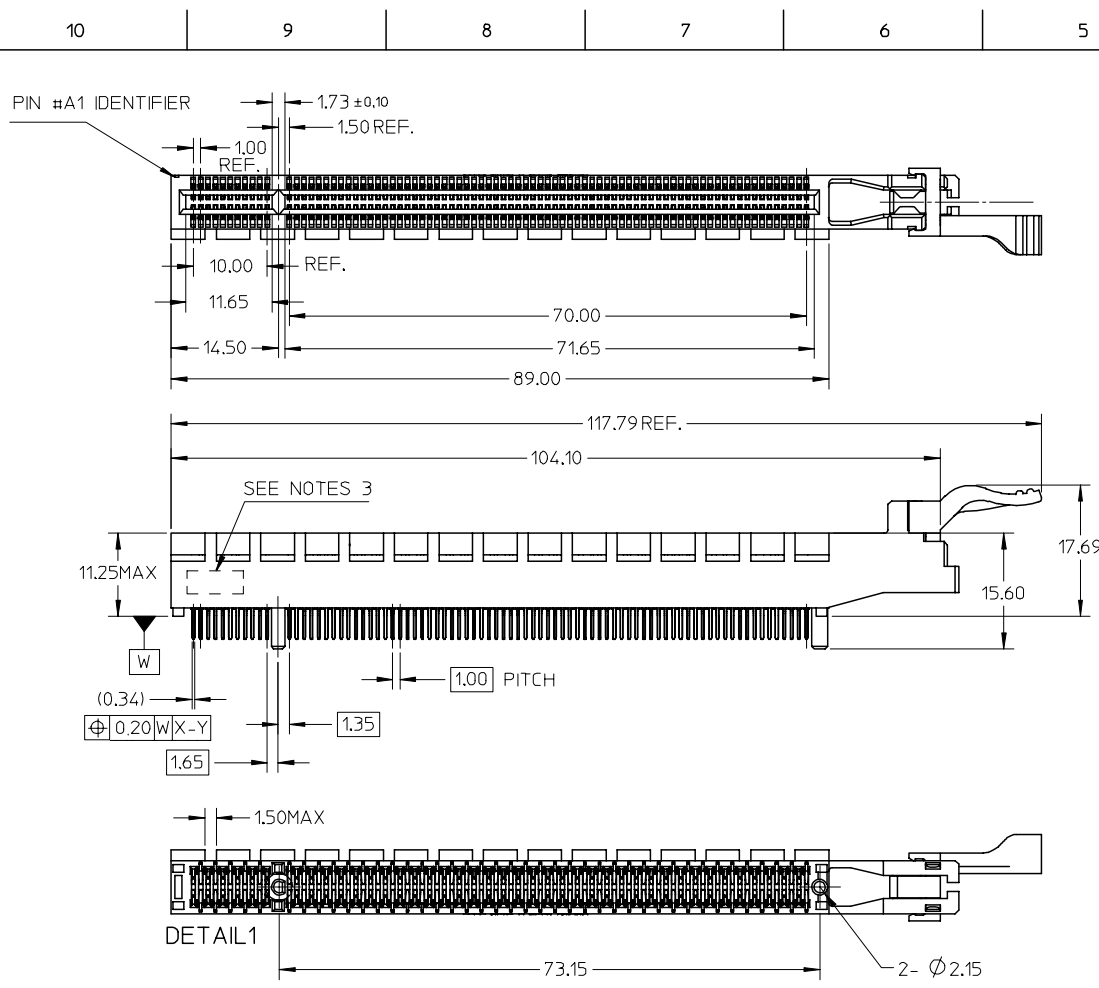
Mates With

PCI Express Card

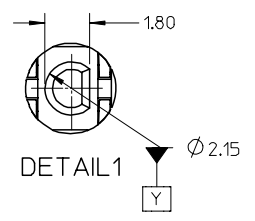
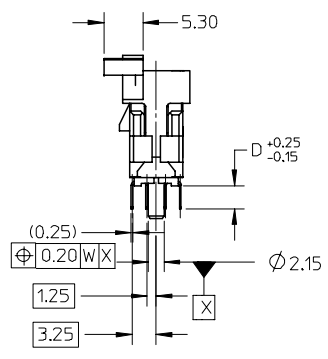
| * PCI Express is a registered trademark of PCI-SIG®

This document was generated on 06/04/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

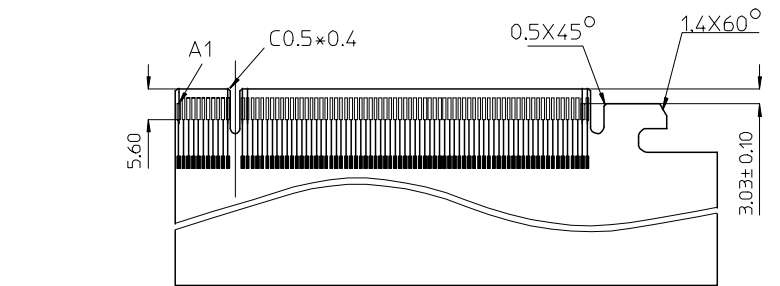
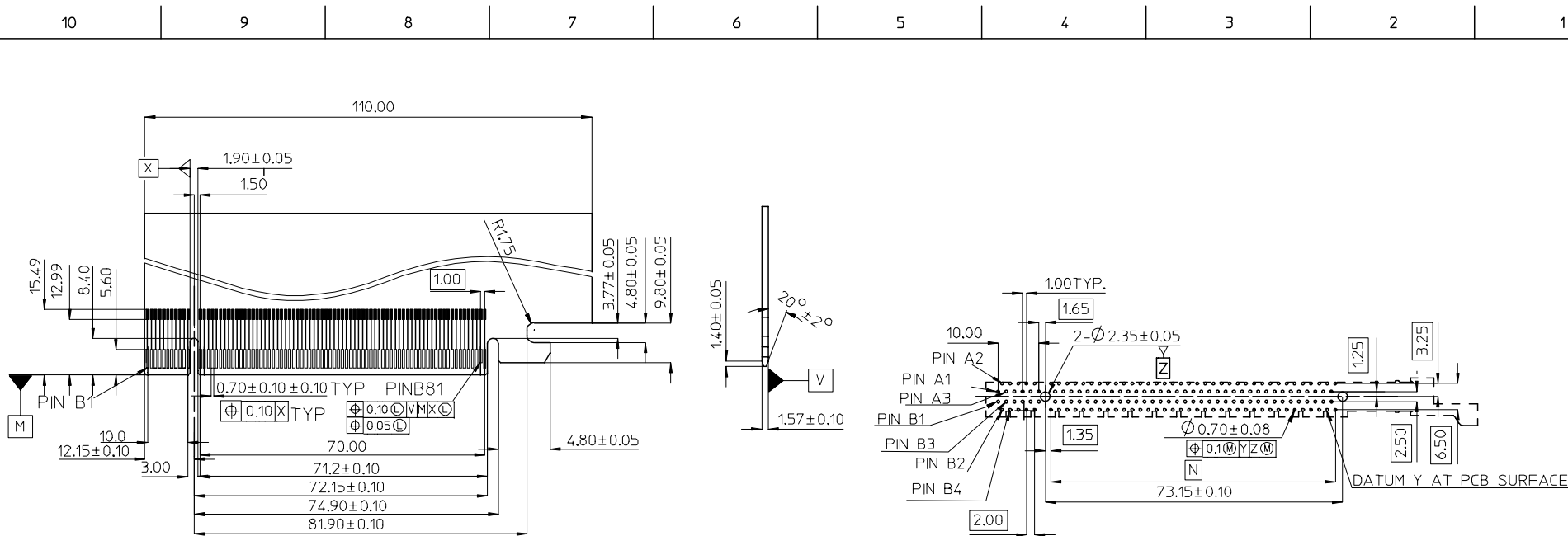


DIM'D*	PCB THK REF.
2.54	1.58
3.10	2.36



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		
			mm	INCH	DRAWN BY DAVID HU	DATE 2007/05/08	TITLE 1.0MM PITCH PCI-EXPRESS 164CKTS W/RM LEAD-FREE			
		4 PLACES	± ---	± ---	CHECKED BY HARVEY	DATE 2007/05/08	APPROVED BY JENNY CHEN			
		3 PLACES	± ---	± ---	DATE 2007/05/08		MOLEX INCORPORATED			
2 PLACES	± 0.25	± ---	ANGULAR ± 3 °		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-47505-001		SHEET NO. 1 OF 4	
1 PLACE	± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					



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 ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm INCH	DRAWN BY DAVID HU	DATE 2007/05/08	TITLE 1.0MM PITCH PCI-EXPRESS 164CKTS W/RM LEAD-FREE		
			4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± ---	APPROVED BY JENNY CHEN	DATE 2007/05/08	MATERIAL NO.	DOCUMENT NO. SD-47505-001	SHEET NO. 2 OF 4
			ANGULAR ± 3 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE			

	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					UNTOOLED
		47505-9312				15 MICROINCH					
E		47505-9320		BLUE (287U)		GOLD FLASH			UNTOOLED		
		47505-9322				15 MICROINCH					
		47505-9330		GREEN (348C)		GOLD FLASH			UNTOOLED		
		47505-9332				15 MICROINCH					
		47505-9340		PURPLE (2736U)		GOLD FLASH			UNTOOLED		
D		47505-9342				15 MICROINCH					
		47505-3303		BLACK		GOLD FLASH			UNTOOLED		
		47505-3305				15 MICROINCH					
		47505-3313		NATURAL(WHITE)		GOLD FLASH			UNTOOLED		
		47505-3315				15 MICROINCH					
C		47505-3323		BLUE (287U)		GOLD FLASH			UNTOOLED		
		47505-3325				15 MICROINCH					
		47505-3333		GREEN (348C)		GOLD FLASH			UNTOOLED		
		47505-3335				15 MICROINCH					
		47505-3343		PURPLE (2736U)		GOLD FLASH			UNTOOLED		
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															
			$\nabla = 0$ $\nabla \square = 0$	<table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>\pm ---</td> <td>\pm ---</td> </tr> <tr> <td>3 PLACES</td> <td>\pm ---</td> <td>\pm ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>\pm ---</td> </tr> <tr> <td>1 PLACE</td> <td>\pm ---</td> <td>\pm ---</td> </tr> </table>		mm	INCH	4 PLACES	\pm ---	\pm ---	3 PLACES	\pm ---	\pm ---	2 PLACES	± 0.25	\pm ---	1 PLACE	\pm ---	\pm ---	MM ONLY	2:1	METRIC	
				mm	INCH																		
			4 PLACES	\pm ---	\pm ---																		
3 PLACES	\pm ---	\pm ---																					
2 PLACES	± 0.25	\pm ---																					
1 PLACE	\pm ---	\pm ---																					
	<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>HARVEY</td> <td>2007/05/08</td> </tr> </table>	DRAWN BY	DATE	TITLE	DAVID HU	2007/05/08	1.0MM PITCH PCI-EXPRESS 164CKTS W/RM LEAD-FREE	HARVEY	2007/05/08	<table border="1"> <tr> <th>DRAWN BY</th> <th>DATE</th> </tr> <tr> <td>JENNY CHEN</td> <td>2007/05/08</td> </tr> </table>	DRAWN BY	DATE	JENNY CHEN	2007/05/08	MOLEX INCORPORATED								
DRAWN BY	DATE	TITLE																					
DAVID HU	2007/05/08	1.0MM PITCH PCI-EXPRESS 164CKTS W/RM LEAD-FREE																					
HARVEY	2007/05/08																						
DRAWN BY	DATE																						
JENNY CHEN	2007/05/08																						
	<table border="1"> <tr> <th>APPROVED BY</th> <th>DATE</th> <th>DOCUMENT NO.</th> <th>SHEET NO.</th> </tr> <tr> <td>JENNY CHEN</td> <td>2007/05/08</td> <td>SD-47505-001</td> <td>3 OF 4</td> </tr> </table>	APPROVED BY	DATE	DOCUMENT NO.	SHEET NO.	JENNY CHEN	2007/05/08	SD-47505-001	3 OF 4	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
APPROVED BY	DATE	DOCUMENT NO.	SHEET NO.																				
JENNY CHEN	2007/05/08	SD-47505-001	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
		47505-8342									15 MICROINCH
D		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	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION															
	$\nabla=0$ $\sphericalangle=0$	<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	± ---	± ---																			
	ANGULAR ± 3°																				
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	DRAWN BY: DAVID HU 2007/05/08 CHECKED BY: HARVEY 2007/05/08 APPROVED BY: JENNY CHEN 2007/05/08		TITLE: 1.0MM PITCH PCI-EXPRESS 164CKTS W/RM LEAD-FREE MOLEX INCORPORATED																
			MATERIAL NO.	DOCUMENT NO.	SHEET NO. 4 OF 4																