

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0475053305](#)

**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 Front-type Latch, Lead Free

**General**

Product Family	Edge Card Connectors
Series	<a href="#">87715</a>
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)	0.122 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](mailto: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](#)

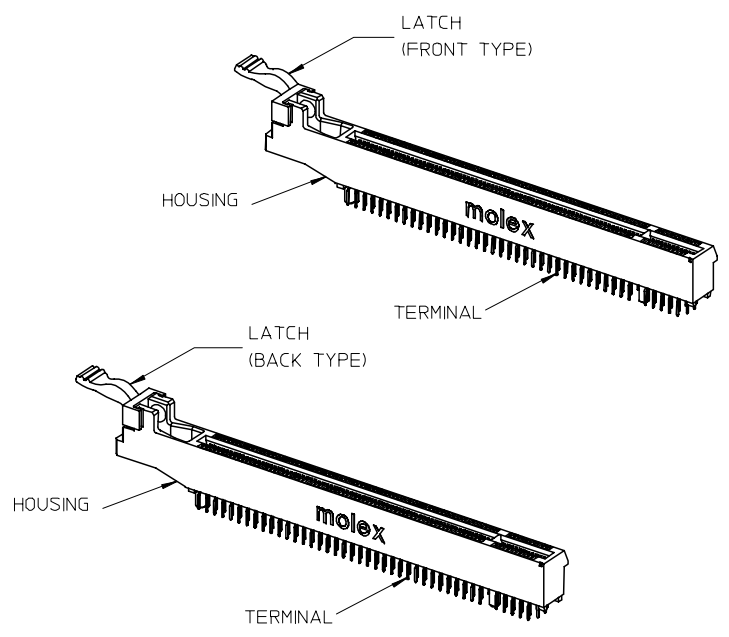
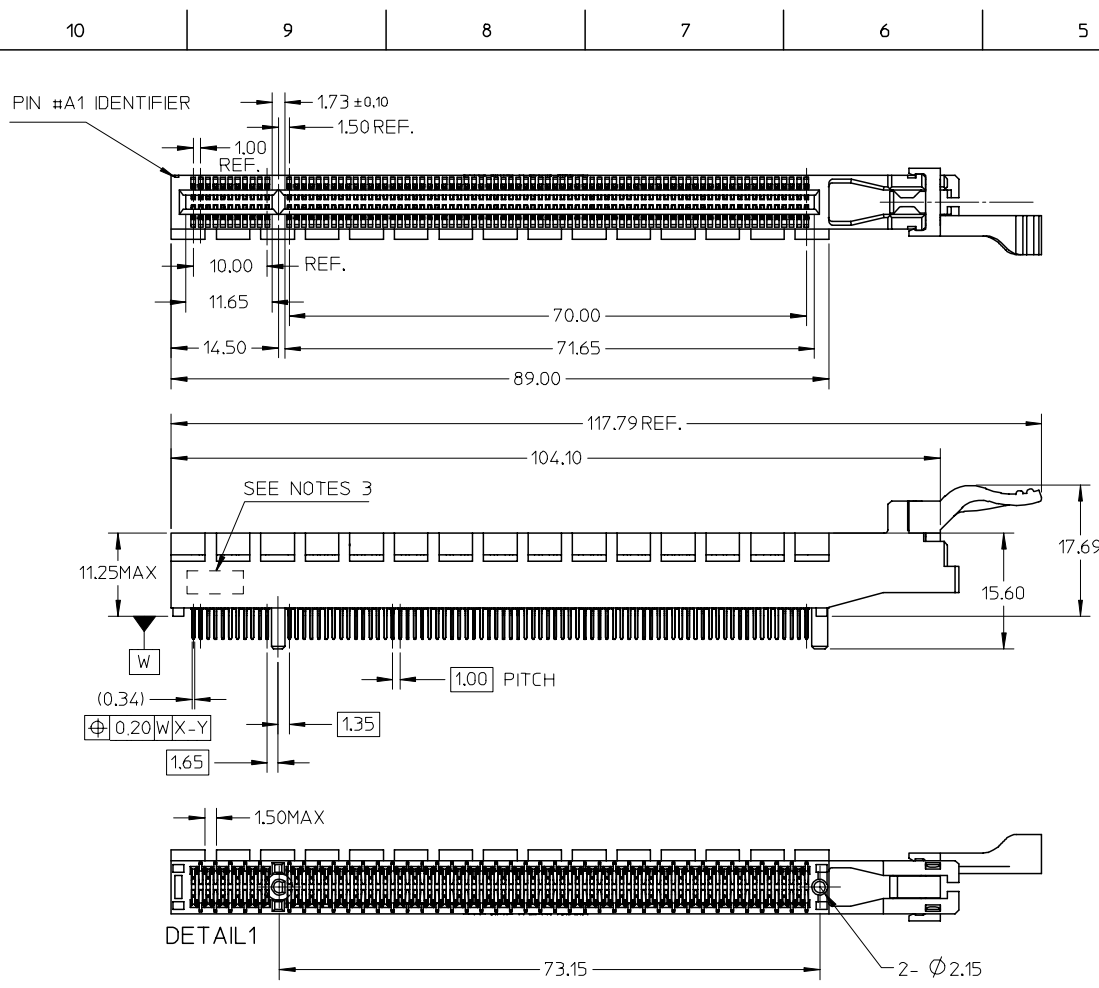
**Mates With**

PCI Express Card

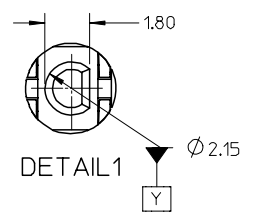
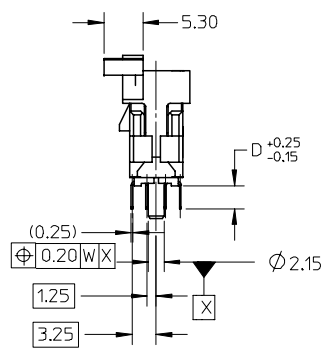
| \* PCI Express is a registered trademark of PCI-SIG®

This document was generated on 06/04/2010

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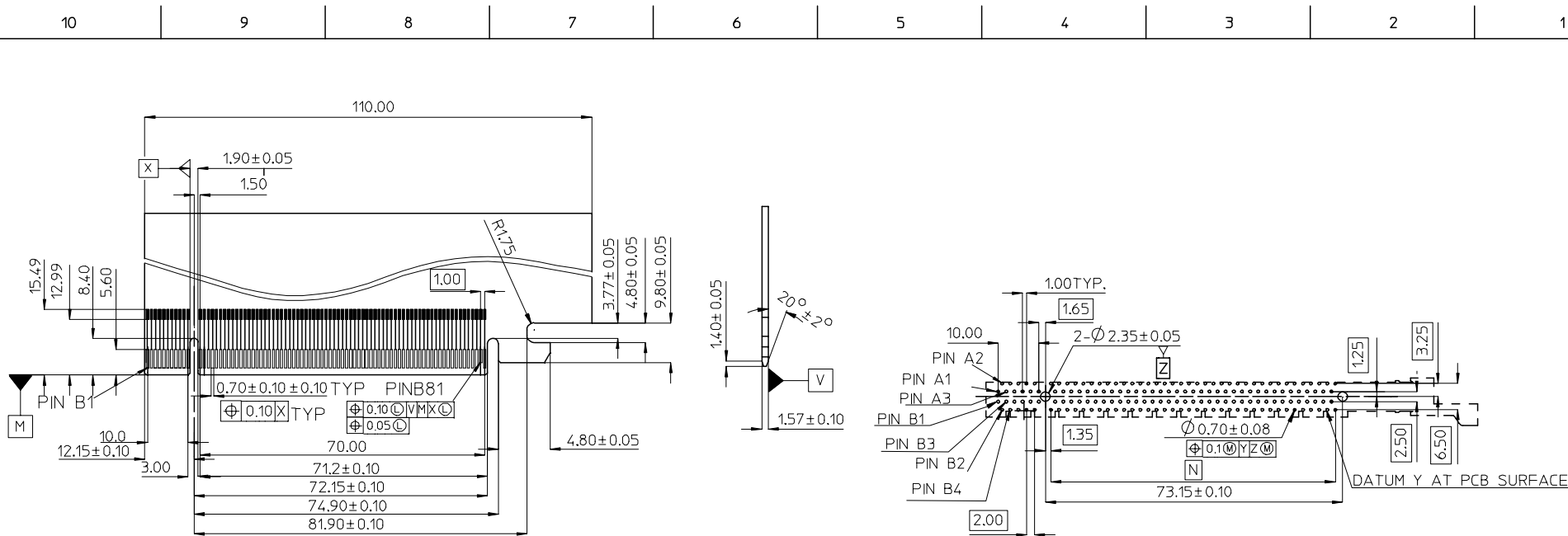


DIM'D*	PCB THK REF.
2.54	1.58
3.10	2.36

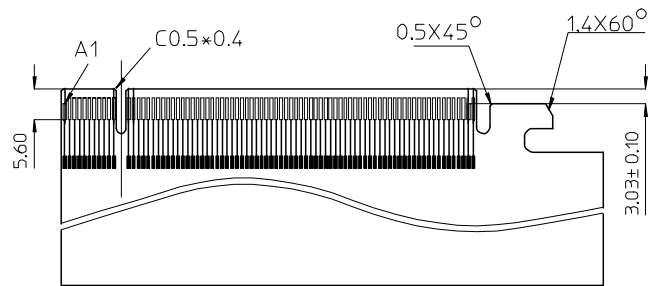


NOTES:  
 1.MATERIALS:  
 1-1.HOUSING:SEE TABLE .GLASS FIBER FILLED UL94V-0.COLOR:SEE TABLE.  
 1-2.TERMINAL: SEE TABLE  
 1-3.LATCH:NYLON66,GLASS FIBER FILLED UL94V-0.COLOR:BLACK.  
 2.PLATING:  
 TERMINAL :  
 2-1.CONTACT AREA:SEE TABLE .  
 2-2.SOLDER TAIL:SEE TABLE.  
 2-3.UNDER PLATING: 50 MICROINCH 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 CHKD:ROST ZHANG APPR:HWANG	2007/10/15 2007/10/15 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	MOLEX INCORPORATED				
			3 PLACES	± ---	± ---	APPROVED BY JENNY CHEN	DATE 2007/05/08	DOCUMENT NO. SD-47505-001				
2 PLACES	± 0.25	± ---	MATERIAL NO.		SEE TABLE		SHEET NO. 1 OF 4					
1 PLACE	± ---	± ---	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					



PCB LAYOUT (TOLERANCE ±0.05MM)



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.

<b>NEW RELEASE</b> EC NO: SH2008-0170 DRWN:DHU CHKD:ROST ZHANG APPR:HWANG	2007/10/15 2007/10/15 2007/11/13	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <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	±---	±---	DIMENSION STYLE <b>MM ONLY</b>	SCALE <b>2:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION
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DRAWN BY DAVID HU	DATE 2007/05/08	TITLE <b>1.0MM PITCH PCI-EXPRESS 164CKTS W/RM LEAD-FREE</b>																					
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APPROVED BY JENNY CHEN	DATE 2007/05/08	MATERIAL NO. <b>SEE TABLE</b>	DOCUMENT NO. <b>SD-47505-001</b>	SHEET NO. <b>2 OF 4</b>																			

	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					TOOLED
		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		
		47505-9342				15 MICROINCH					
D		47505-3303		BLACK		GOLD FLASH			TOOLED		
		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					

<b>NEW RELEASE</b> EC NO: SH2008-0170 DRWN:DRU 2007/10/15 CHK:AROST ZHANG 2007/10/15 APPR:HWANG 2007/11/13	QUALITY SYMBOLS = 0 = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>		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	MOLEX INCORPORATED				
				APPROVED BY JENNY CHEN	DATE 2007/05/08	MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-47505-001	SHEET NO. 3 OF 4	
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	47505-8300	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	

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