

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

**Part Number:** **0877156106**  
**Status:** **Planned for Obsolescence**  
**Description:** 1.00mm (.039") Pitch, PCI Express\* Connector, 64 Circuits, Nylon 6/6 Glass-filled, Black Housing, Phosphor Bronze, 0.76µm (30µ") Gold (Au) Plating, with Plastic Pegs, 2.54mm (.100") Solder tail, Lead Free

**Documents:**

[3D Model](#) [Product Specification PS-87715-200 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family Edge Card Connectors  
 Series [87715](#)  
 Comments PCI 4 lanes  
 Component Type Edgecard to PCB  
 Product Name PCI Express\*

**Physical**

Circuits (Loaded) 64  
 Circuits (maximum) 64  
 Circuits Detail All Signal  
 Durability (mating cycles max) 50  
 Entry Angle Vertical (Top Entry)  
 Flammability 94V-0  
 Keying to Mating Part Yes  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 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) 1.60 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  
 Polarized to Mating Part Yes  
 Temperature Range - Operating -55°C to +85°C  
 Termination Interface: Style Through Hole

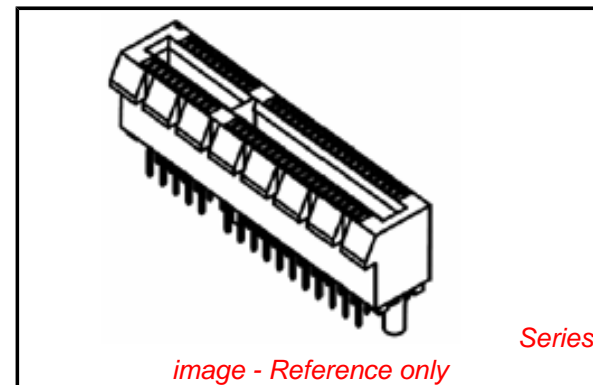
**Electrical**

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

**Material Info**

**Reference - Drawing Numbers**

Packaging Specification PK-87715-207  
 Product Specification PS-87715-200  
 Sales Drawing SD-87715-207  
 Test Summary TS-87715-207



**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](#)

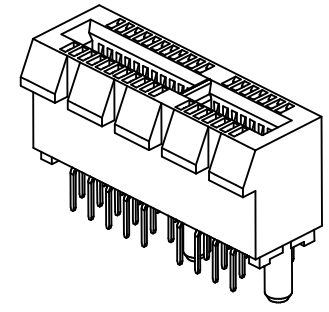
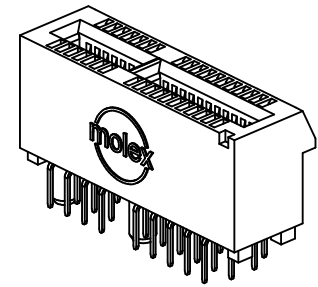
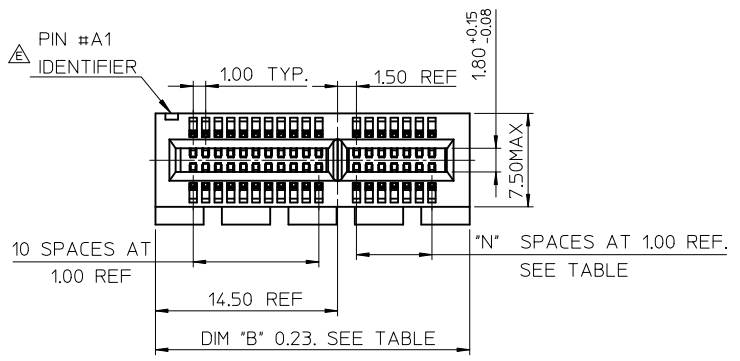
Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**  
[87715Series](#)

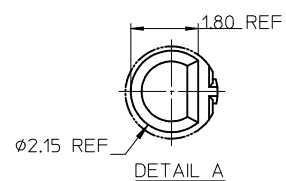
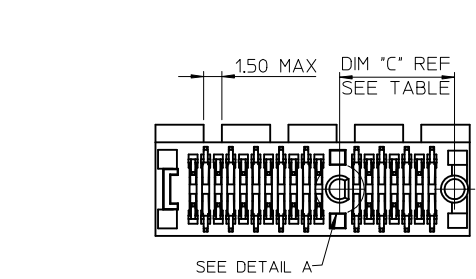
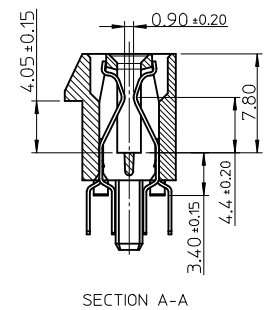
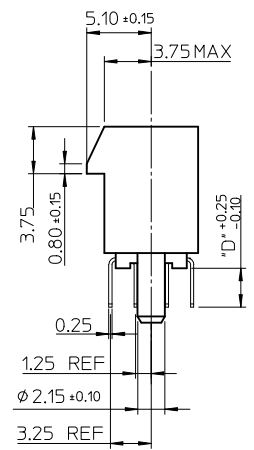
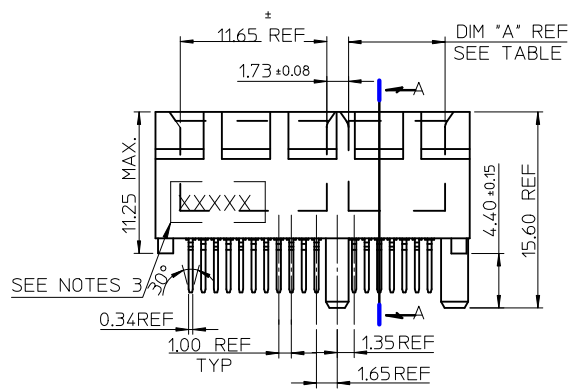
| \* PCI Express is a registered trademark of PCI-SIG®

This document was generated on 06/01/2010

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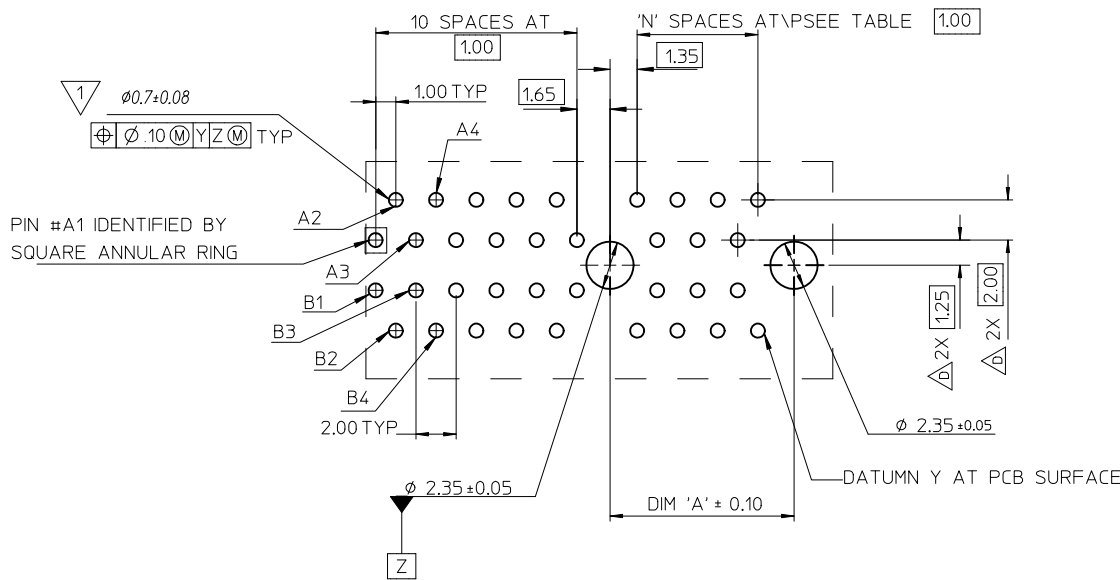
- NOTES:
- 1.MATERIALS:  
1-1.HOUSING: SEE TABLE ,GLASS FIBER FILLED UL94V-0, COLOR: SEE TABLE.  
1-2.CONTACT: SEE TABLE
  - 2.PLATING:  
2-1.CONTACT AREA: GOLD, THICKNESS : SEE TABLE .  
2-2.SOLDER TAIL: 100 MICRINCH MIN. TIN PLATING.  
2-3.UNDER PLATING: NICKEL PLATING OVERALL.
  - 3.WEEK CODE: XX(YEAR) XXI(WEEK) X(LOCATION),
  - 4.PRODUCT SPECIFICATION REFER TO PS-87715-200.
  - 5.PACKAGING SPECIFICATION REFER TO PK-87715-207.
  - 6.TEST SUMMARY:REFER TO TS-87715-207.
  - 7.LEAD FREE AND ROHS COMPLIANCE PRODUCT.



CONNECTOR LINK WIDTH	# POS REF	N	DIM 'A'	DIM 'B'	DIM 'C'
X4	64	20	21.65	39.00	23.15
X8	98	37	38.65	56.00	40.15

PCB THK (REF)	DIM 'D'
1.60	2.30
1.58	2.54
2.36	3.00

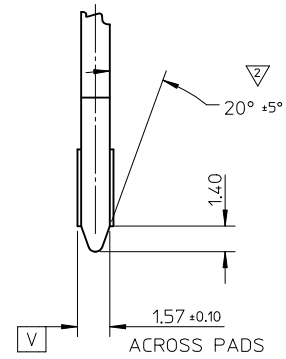
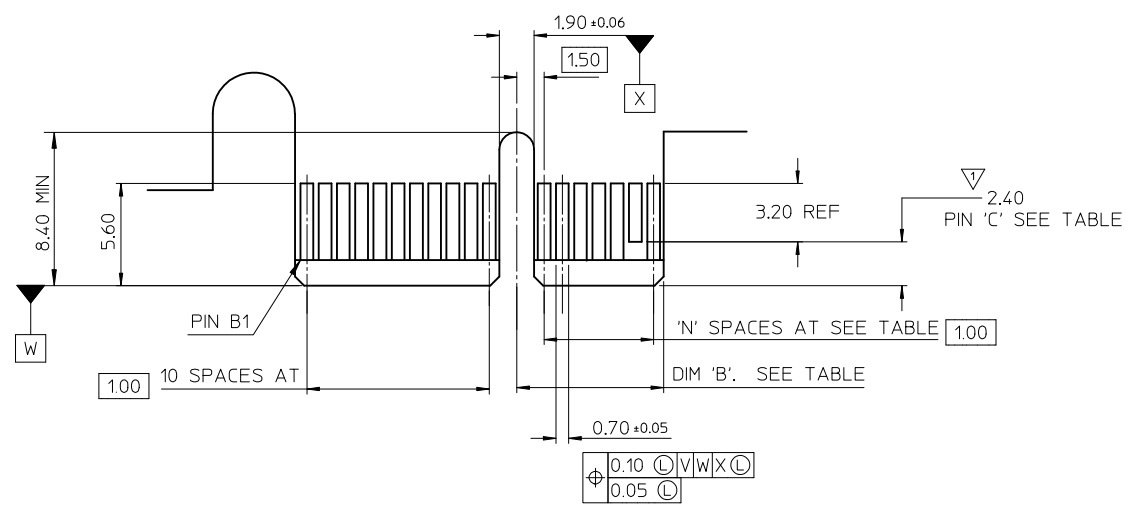
REVISED IEC NO: SH2010-0425 DRWR:RZHANG 2010/05/14 CHYKD:ALLEN L LIN 2004/07/20 APPR:X.J.SONG 2010/06/03	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	$\nabla F = 0$ $\nabla E = 0$ $\nabla D = 0$	mm    INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± 0.25 ± --- ANGULAR ± 3 °	MM ONLY	METRIC	DRAWN BY: TOM    DATE: 2004/07/20 CHECKED BY: ALLEN LIN    DATE: 2004/07/20 APPROVED BY: WILSON    DATE: 2004/07/20	TITLE	PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION) MOLEX INCORPORATED SD-87715-207
	DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE SHEET 4	MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
	REV			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		



1 THE HORIZONTAL AXIS FOR THE HOLE PATTERN IS ESTABLISHED BY A LINE THROUGH THE CENTER OF THE TWO  $\phi 2.35$  HOLES. THE VERTICAL AXIS IS 90° TO THE HORIZONTAL AXIS, THROUGH THE CENTER OF DATUM Z

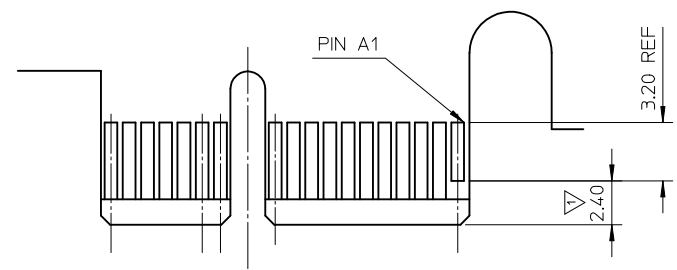
CONNECTOR LINK WIDTH	# POS REF	N	DIM 'A'
X4	64	20	23.15
X8	98	37	40.15

SEE SHEET 1 EC NO: SH2010-0425 DRWR:ZHANG 2010/05/14 CHKD:ALLEN LIN 2004/07/20 APPR:XJSONG 2010/06/03	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		$F_A=0$	mm	INCH	MM ONLY				
		$F_G=0$	4 PLACES ± ---	± ---	DRAWN BY	DATE	TITLE		
		$F_P=0$	3 PLACES ± ---	± ---	TOM	2004/07/20	PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION)		
		2 PLACES ± 0.25	± 0.25	CHECKED BY	DATE	MOLEX INCORPORATED			
		1 PLACE ± 0.25	± ---	ALLEN LIN	2004/07/20	DOCUMENT NO.			
		ANGULAR ± 3°		APPROVED BY	DATE	SHEET NO.			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		WILSON	2004/07/20	2 OF 4			
				MATERIAL NO.	SEE SHEET 4		SD-87715-207		
				SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
				A3					



← I/O PANEL DIRECTION

PRIMARY (COMPONENT) SIDE



I/O PANEL DIRECTION →

SECONDARY (SOLDER) SIDE

- 1 NO TIE BAR PERMITTED FROM CARD EDGE TO LEADING EDGE OF PAD FOR PINS A1 AND "C".
- 2 CHAMFER EDGES MUST BE FREE OF CUTTING BURRS.
- 3. TOLERANCE: .XX±.13

CONNECTOR LINK WIDTH	# POS REF	N	DIM 'B'	'C'
X4	64	20	22.15	B17, B31
X8	98	37	39.15	B17, B31 B48

SEE SHEET 1  
 EC NO: SH2010-0425 2010/05/14  
 DR: WNRZhang 2010/07/20  
 CHK: ALLEN LIN 2004/07/20  
 APPR: XJ.SONG 2010/06/03

QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm	INCH
= 0	4 PLACES ± ---	± ---
= 0	3 PLACES ± ---	± ---
= 0	2 PLACES ± 0.25	± ---
	1 PLACE ± 0.25	± ---
	ANGULAR ± 3 °	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE		SCALE	DESIGN UNITS
MM ONLY			METRIC
DRAWN BY	DATE	TITLE	
TOM	2004/07/20	PCI EXPRESS	
CHECKED BY	DATE	EDGE CARD CONNECTOR	
ALLEN LIN	2004/07/20	(LEAD FREE VERSION)	
APPROVED BY	DATE	MOLEX INCORPORATED	
WILSON	2004/07/20		
MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
SEE SHEET 4	SD-87715-207	3 OF 4	

THIRD ANGLE PROJECTION

MOLEX INCORPORATED

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MOLEX P/N	CIRCUIT SIZE	HOUSING MATERIAL	HOUSING COLOR	TERMINAL MATERIAL	CONTACT PLATING	SOLDER TAIL 'D' LENGTH
87715-9100	64	NYLON46	BLACK	PHOSPHOR BRONZE	GOLD FLASH	2.54
87715-9101					10 MICROINCH	
87715-9102					15 MICROINCH	
87715-9103					GOLD FLASH	3.00
87715-9104					10 MICROINCH	
87715-9105					15 MICROINCH	
87715-9106					30 MICROINCH	2.54
87715-9107					GOLD FLASH	2.30
87715-9108					15 MICROINCH	
87715-9109	30 MICROINCH					

MOLEX P/N	CIRCUIT SIZE	HOUSING MATERIAL	HOUSING COLOR	TERMINAL MATERIAL	CONTACT PLATING	SOLDER TAIL 'D' LENGTH
87715-9200	98	NYLON46	BLACK	PHOSPHOR BRONZE	GOLD FLASH	2.54
87715-9201					10 MICROINCH	
87715-9202					15 MICROINCH	
87715-9203					GOLD FLASH	3.00
87715-9204					10 MICROINCH	
87715-9205					15 MICROINCH	
87715-9206					30 MICROINCH	2.54
87715-9207					GOLD FLASH	2.30
87715-9208					15 MICROINCH	
87715-9209	30 MICROINCH					

MOLEX P/N	CIRCUIT SIZE	HOUSING MATERIAL	HOUSING COLOR	TERMINAL MATERIAL	CONTACT PLATING	SOLDER TAIL 'D' LENGTH
87715-9602	98	NYLON46	BLACK	BRASS	15 MICROINCH	2.54

SEE SHEET 1 EC NO: SH2010-0425 DRWNR:ZHANG 2010/05/14 CHKD:ALLEN LIN 2004/07/20 APPR:XJ.SONG 2010/06/03	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	$F_A=0$ $F_C=0$ $F_P=0$	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± 0.25 ± --- ANGULAR ± 3 °	MM ONLY	DRAWN BY DATE TOM 2004/07/20 CHECKED BY DATE ALLEN LIN 2004/07/20 APPROVED BY DATE WILSON 2004/07/20	TITLE	METRIC	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	MATERIAL NO. DOCUMENT NO.	PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION)		MOLEX INCORPORATED	
			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		SD-87715-207	SHEET NO. 4 OF 4