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**Part Number:** [0877159205](#)

**Status:** **Active**

**Overview:**

**Description:** 1.00mm (.039") Pitch, PCI Express\* Connector, 98 Circuits, Nylon 4/6 Glass-filled, Black Housing, Phosphor Bronze, 0.38µm (15µ") Gold (Au) Plating, with Plastic Pegs, 3.00mm (.118") Solder tail, Lead Free

**Agency Certification**

CSA LR19980  
UL E29179

**General**

Product Family Edge Card Connectors  
Series 87715  
Comments PCI 8 lanes  
Component Type Edgecard to PCB  
Overview pci\_express\_card\_edge\_connector  
Product Name PCI Express\*

**Physical**

Circuits (Loaded) 98  
Circuits (maximum) 98  
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) 0.118 In  
PC Tail Length (mm) 3.00 mm  
PCB Locator Yes  
PCB Retention Yes  
PCB Thickness Recommended (in) 0.093 In  
PCB Thickness Recommended (mm) 2.40 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) 0.38  
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

**Solder Process Data**

Duration at Max. Process Temperature (seconds) 10  
Lead-free Process Capability Reflow Capable (SMT only)  
Max. Cycles at Max. Process Temperature 1  
Process Temperature max. C 260

**Material Info**

**EU RoHS**

**ELV and RoHS  
Compliant**

**REACH SVHC**

**Contains SVHC: No**

**Halogen-Free**

**Status**

**Not Halogen-Free**

**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

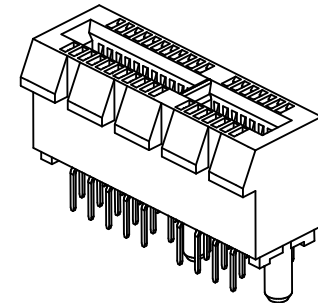
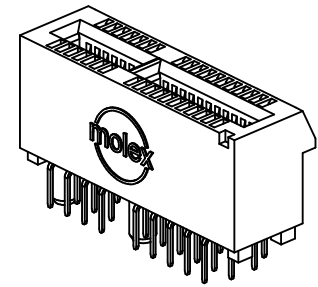
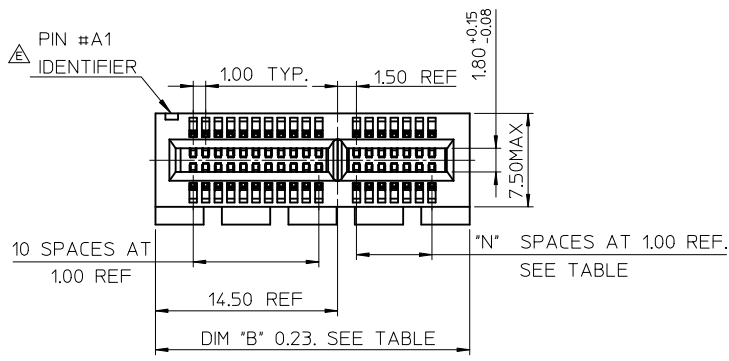
## Reference - Drawing Numbers

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

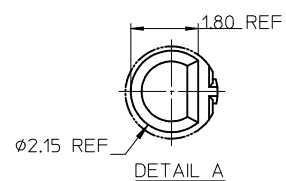
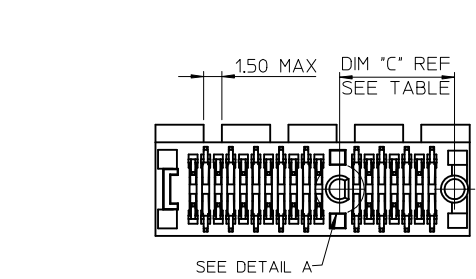
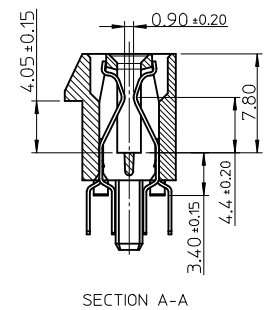
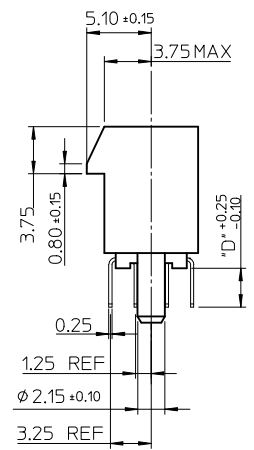
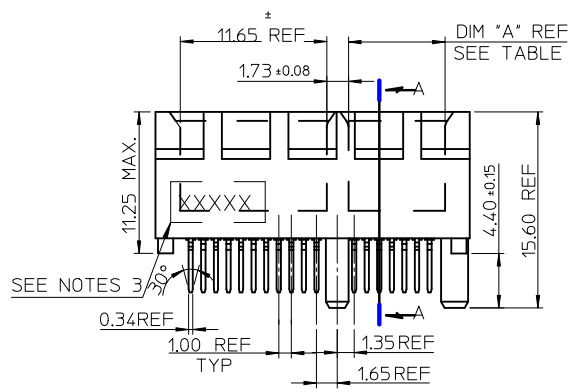
\* PCI Express is a registered trademark of PCI-SIG®

This document was generated on 06/04/2010

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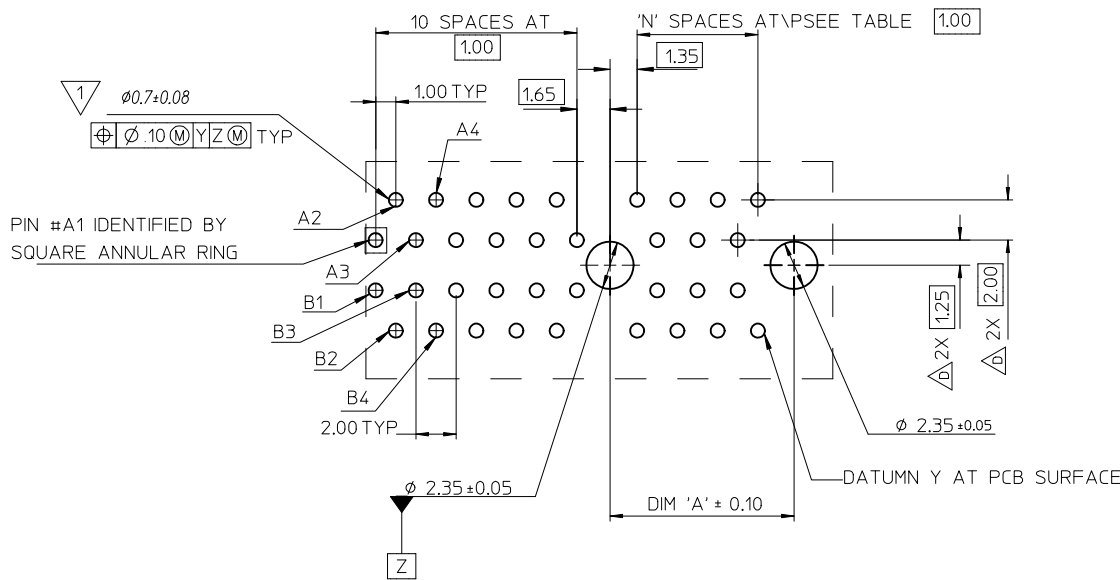
- NOTES:
- 1.MATERIALS:  
1-1.HOUSING: SEE TABLE ,GLASS FIBER FILLED UL94V-0, COLOR: SEE TABLE.  
1-2.CONTACT: SEE TABLE
  - 2.PLATING:  
2-1.CONTACT AREA: GOLD, THICKNESS : SEE TABLE .  
2-2.SOLDER TAIL: 100 MICRINCH MIN. TIN PLATING.  
2-3.UNDER PLATING: NICKEL PLATING OVERALL.
  - 3.WEEK CODE: XX(YEAR) 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

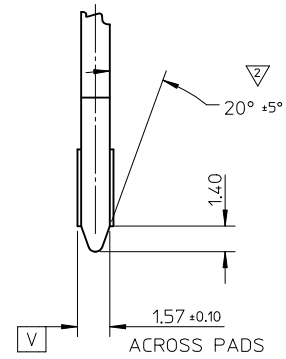
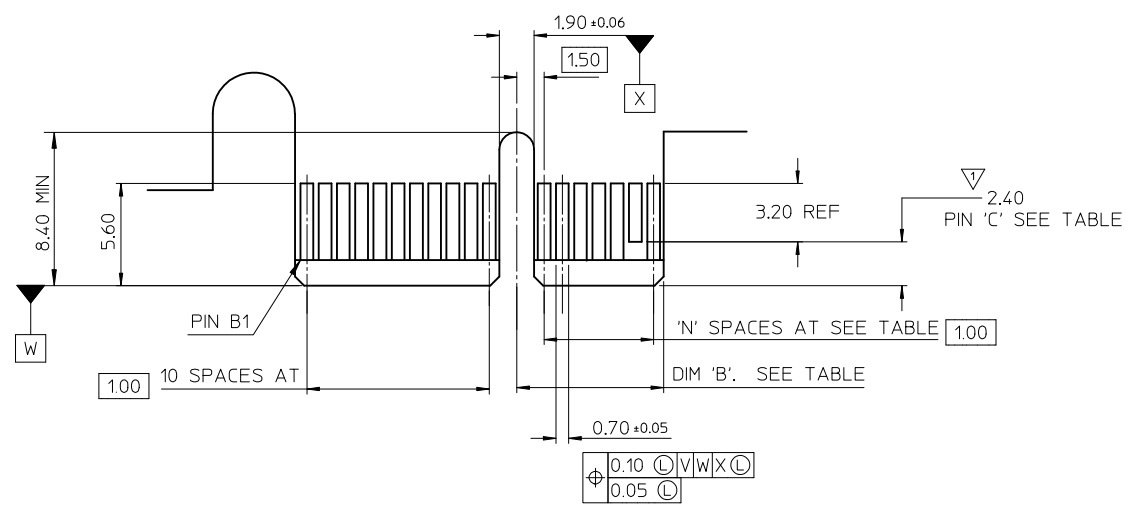
REVISED IEC NO: SH2010-0425 DRW:RZHANG 2010/05/14 CHKD:ALLEN L IN 2004/07/20 APPR:X.J.SONG 2010/06/03	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	$\nabla = 0$ $\nabla = 0$ $\nabla = 0$	mm    INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 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
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE SHEET 4	MATERIAL NO. DOCUMENT NO.	SHEET NO. 1 OF 4			
	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

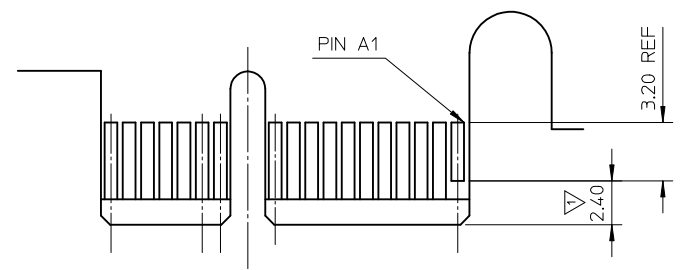
CONNECTOR LINK WIDTH	# POS REF	N	DIM 'A'
X4	64	20	23.15
X8	98	37	40.15

SEE SHEET 1 EC NO: SH2010-0425 DRW: RZHANG 2010/05/14 CHKD: ALLEN LIN 2004/07/20 APPR: XJSONG 2010/06/03	DESCRIPTION QUALITY SYMBOLS $F_A=0$ $F_G=0$ $F_P=0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>		SCALE	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
				mm      INCH	DRAWN BY TOM	DATE 2004/07/20	TITLE PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION)				
				4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± 0.25 ± ---	CHECKED BY ALLEN LIN		DATE 2004/07/20		MOLEX INCORPORATED		
				APPROVED BY WILSON		DATE 2004/07/20					
		ANGULAR ± 3°		MATERIAL NO. SEE SHEET 4		DOCUMENT NO. SD-87715-207		SHEET NO. 2 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					



← 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  
 DR: WNRZhang 2010/05/14  
 CHK: ALLEN LIN 2004/07/20  
 APPR: XJ.SONG 2010/06/03

QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm	INCH
	4 PLACES ± ---	± ---
	3 PLACES ± ---	± ---
	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 EDGE CARD CONNECTOR (LEAD FREE VERSION)	
CHECKED BY	DATE	MOLEX INCORPORATED	
ALLEN LIN	2004/07/20		
APPROVED BY	DATE		
WILSON	2004/07/20		
MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
SEE SHEET 4	SD-87715-207	3 OF 4	

THIRD ANGLE PROJECTION	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	

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		METRIC	
	DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY DATE	TITLE		
	REV		TOM 2004/07/20	PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION)		
			CHECKED BY DATE	MOLEX MOLEX INCORPORATED		
			ALLEN LIN 2004/07/20	SD-87715-207		
			APPROVED BY DATE	DOCUMENT NO.		
			WILSON 2004/07/20	SHEET NO.		
			MATERIAL NO.	4 OF 4		
			SEE TABLE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		