

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

**Part Number:** [0877159106](#)  
**Status:** **Active**  
**Overview:**  
**Description:** 1.00mm (.039") Pitch, PCI Express\* Connector, 64 Circuits, Nylon 4/6 Glass-filled, Black Housing, Phosphor Bronze, 0.76µm (30µ") Gold (Au) Plating, with Plastic Pegs, 2.54mm (.100") Solder tail, Lead Free

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family Edge Card Connectors  
 Series 87715  
 Comments PCI 4 lanes  
 Component Type Edgecard to PCB  
 Overview pci\_express\_card\_edge\_connector  
 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  
 Plating min: Mating (µin) 30  
 Plating min: Mating (µm) 0.76  
 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**

Lead-free Process Capability Wave Capable (TH only)  
 Process Temperature max. C 245

**Material Info**

**Reference - Drawing Numbers**

**EU RoHS**

**ELV and RoHS  
 Compliant**

**REACH SVHC**

Not Reviewed

**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

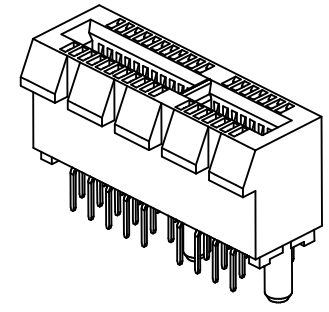
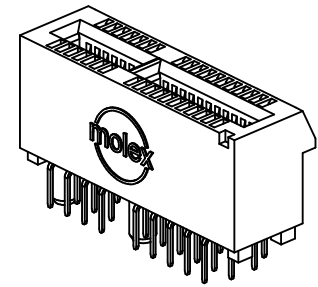
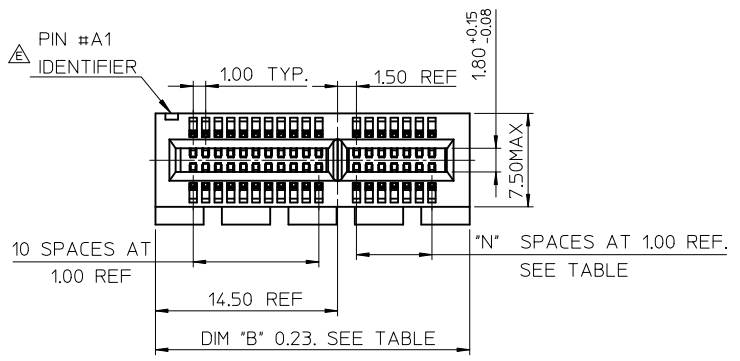
Packaging Specification  
Product Specification  
Sales Drawing  
Test Summary

PK-87715-207  
PS-87715-200  
SD-87715-207  
TS-87715-207

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

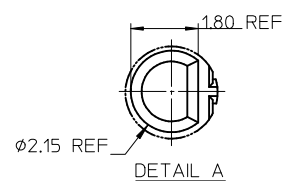
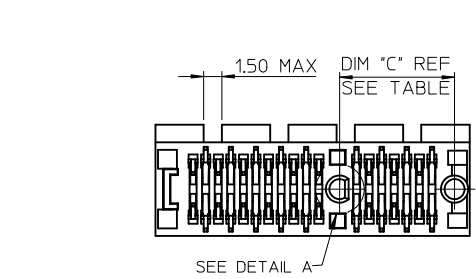
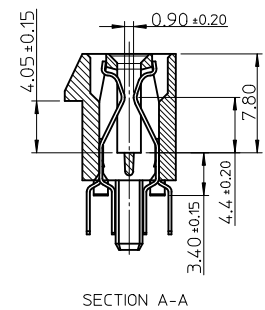
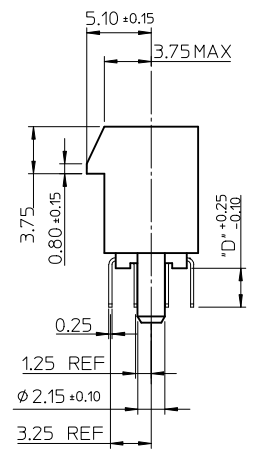
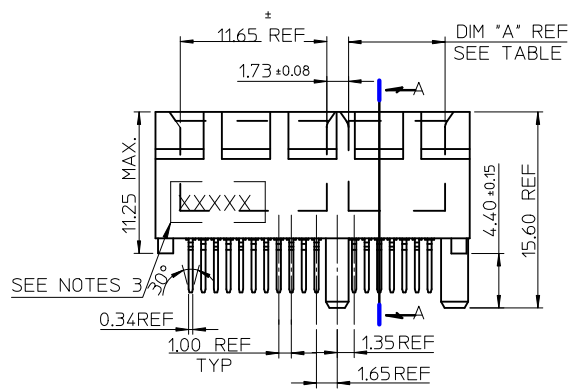
This document was generated on 06/04/2010

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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.

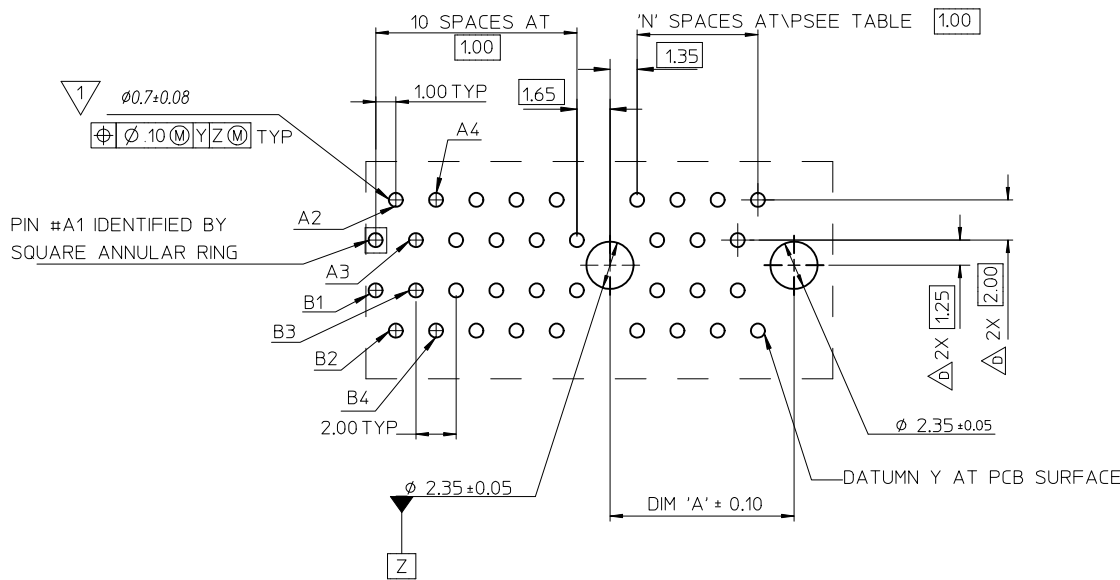


CONNECTOR LINK WIDTH	# POS REF	N	DIM 'A'	DIM 'B'	DIM 'C'
X4	64	20	21.65	39.00	23.15
X8	98	37	38.65	56.00	40.15

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

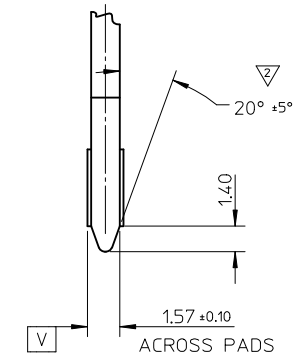
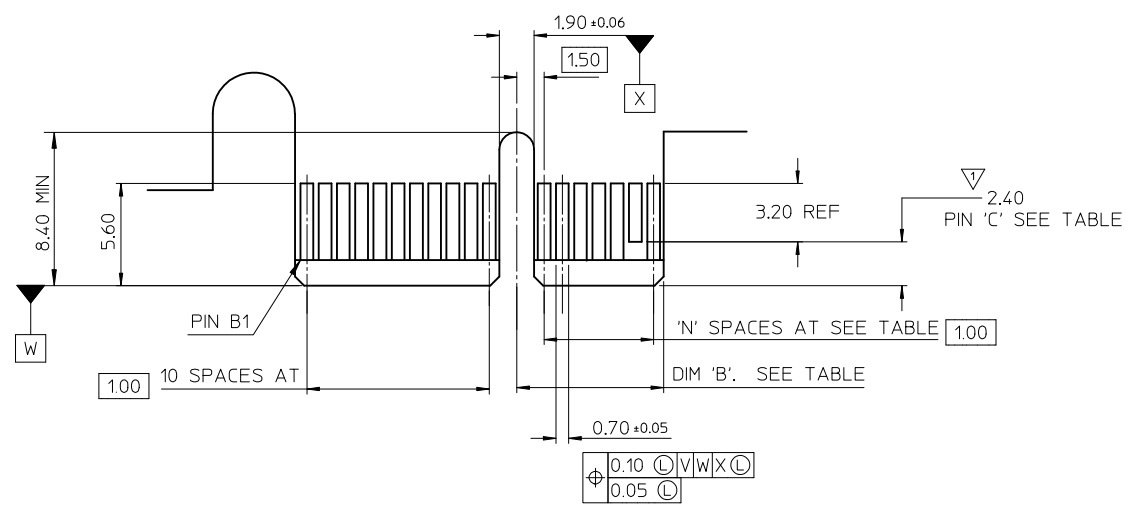
REVISED IEC NO: SH2010-0425 DR:WNRZHHANG 2010/05/14 CH:KD:ALLEN L LIN 2004/07/20 APPR:X.J.SONG 2010/06/03	QUALITY SYMBOLS F=0 E=0 E=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE METRIC	DESIGN UNITS METRIC		THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± 0.25 ± ---		mm INCH 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)					
		ANGULAR ± 3 °		MATERIAL NO. SEE SHEET 4		MOLEX INCORPORATED				DOCUMENT NO. SD-87715-207	
		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					

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



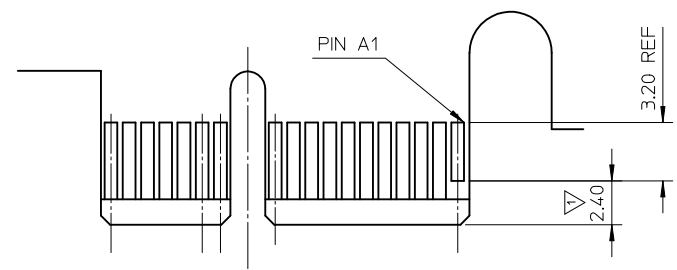
CONNECTOR LINK WIDTH	# POS REF	N	DIM 'A'
X4	64	20	23.15
X8	98	37	40.15

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