

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

**Part Number:** [0877159108](#)  
**Status:** **Active**  
**Overview:**  
**Description:** 1.00mm (.039") Pitch, PCI Express\* Connector, 64 Circuits, Nylon 4/6 Glass-filled, Black Housing, Phosphor Bronze, 0.38µm (15µ") Gold (Au) Plating, with Plastic Pegs, 2.30mm (.091") 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)	0.091 In
PC Tail Length (mm)	2.30 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)	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**

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 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

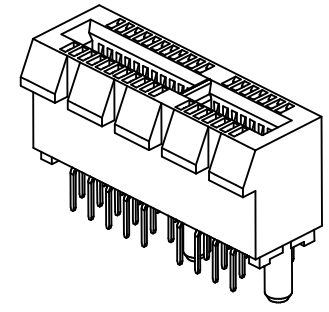
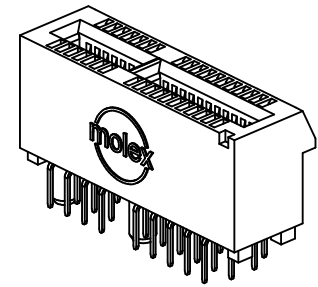
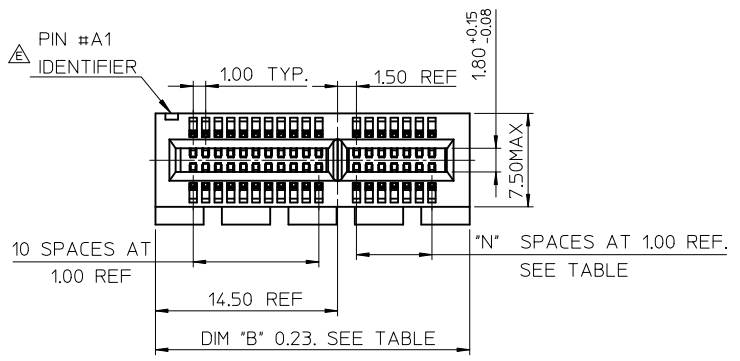
Packaging Specification  
Product Specification  
Sales Drawing  
Test Summary

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

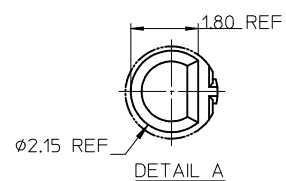
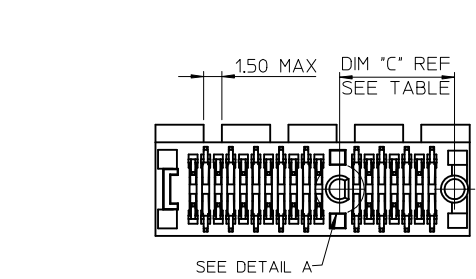
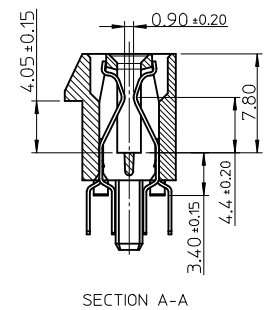
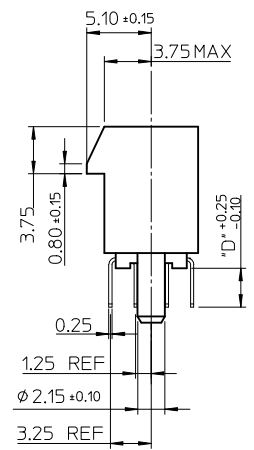
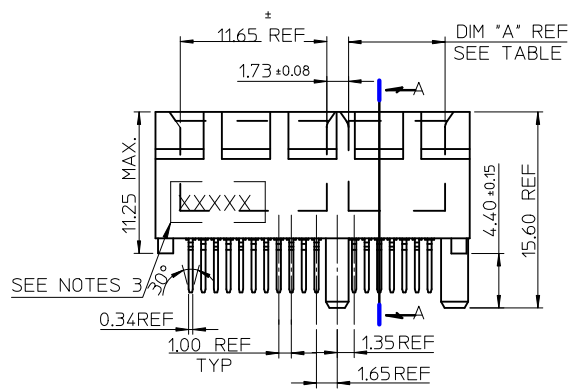
\* PCI Express is a registered trademark of PCI-SIG®

This document was generated on 06/04/2010

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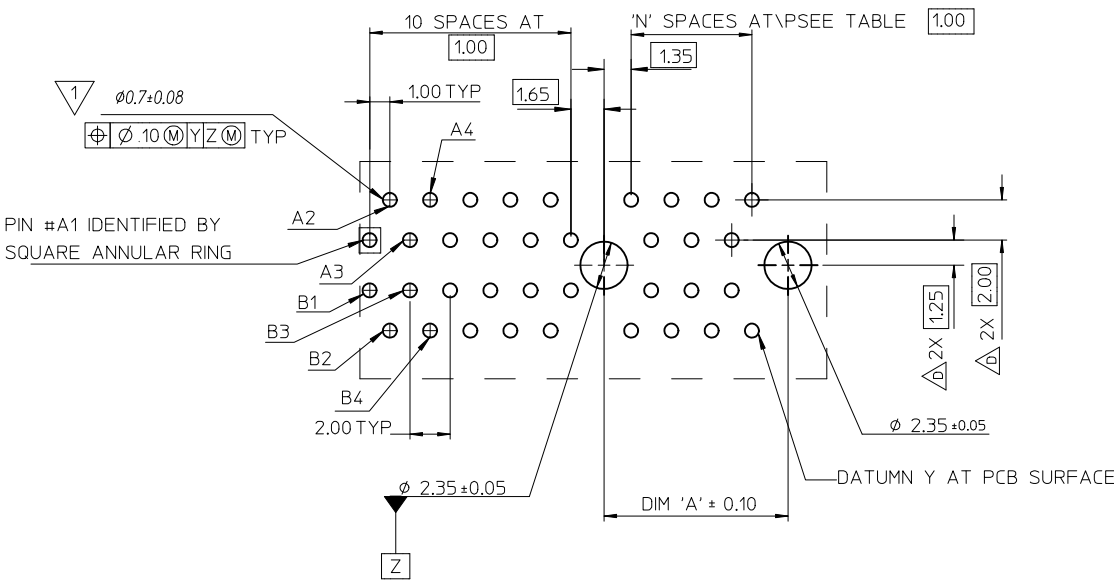
- NOTES:
- 1.MATERIALS:  
1-1.HOUSING: SEE TABLE ,GLASS FIBER FILLED UL94V-0, COLOR: SEE TABLE.  
1-2.CONTACT: SEE TABLE
  - 2.PLATING:  
2-1.CONTACT AREA: GOLD, THICKNESS : SEE TABLE .  
2-2.SOLDER TAIL: 100 MICRINCH MIN. TIN PLATING.  
2-3.UNDER PLATING: NICKEL PLATING OVERALL.
  - 3.WEEK CODE: XX(YEAR)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

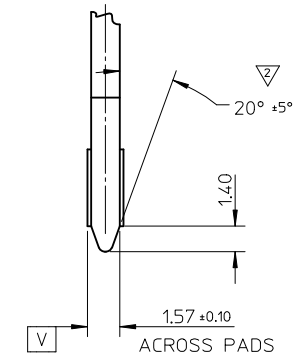
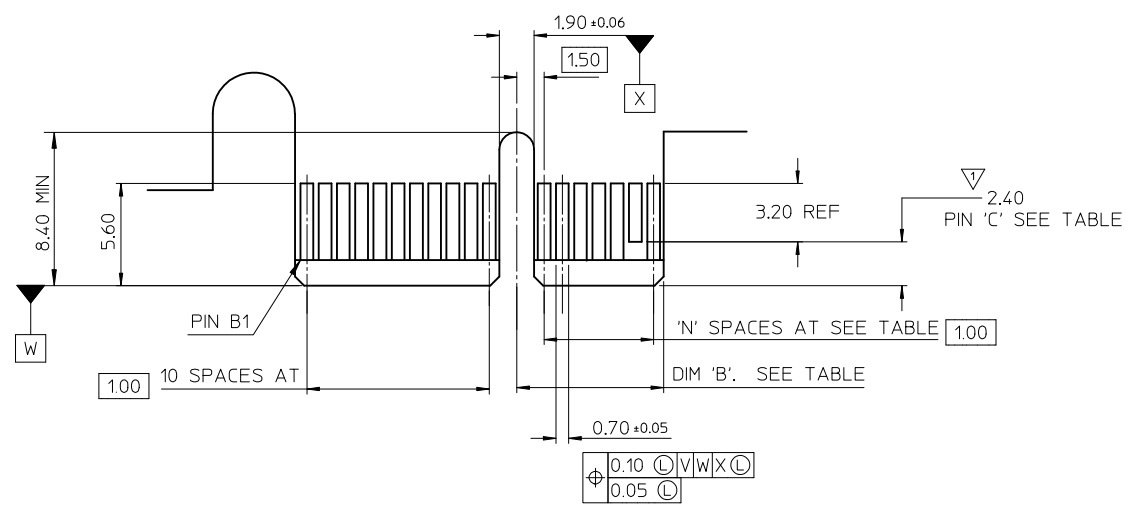
REVISED IEC NO: SH2010-0425 DRWNR:ZHANG CHYKD:ALLEN L LIN APPR:X.J.SONG	2010/05/14 2004/07/20 2010/06/03	QUALITY SYMBOLS F=0 E=0 E=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY		DATE	TITLE			
			4 PLACES ± ---	± ---	TOM		2004/07/20	PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION)			
			3 PLACES ± ---	± ---	CHECKED BY		DATE				
2 PLACES ± 0.25	± ---	ALLEN LIN		2004/07/20	MOLEX INCORPORATED						
1 PLACE ± 0.25	± ---	APPROVED BY		DATE							
ANGULAR ± 3 °			WILSON		2004/07/20	MATERIAL NO.		DOCUMENT NO.			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE SHEET 4		SD-87715-207		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

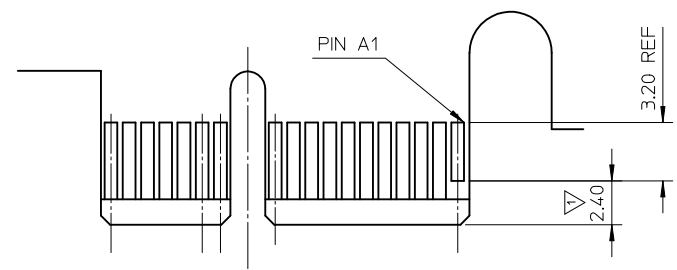
CONNECTOR LINK WIDTH	# POS REF	N	DIM 'A'
X4	64	20	23.15
X8	98	37	40.15

SEE SHEET 1	EC NO: SH2010-0425	2010/05/14		QUALITY SYMBOLS FA=0 FG=0 FP=0	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE <b>MM ONLY</b>		SCALE	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION	
	DRWR:ZHANG	2010/07/20				mm	INCH	DRAWN BY	DATE	TITLE <b>PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION)</b>	
	CHKD:ALLEN LIN	2004/07/20				4 PLACES	± ---	± ---	TOM		2004/07/20
	APPR:XJSONG	2010/06/03				3 PLACES	± ---	± ---	CHECKED BY		DATE
						2 PLACES	± 0.25	± ---	ALLEN LIN		2004/07/20
						1 PLACE	± 0.25	± ---	APPROVED BY		DATE
			ANGULAR ± 3 °			WILSON	2004/07/20				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						SEE SHEET 4		MATERIAL NO.		DOCUMENT NO.	
						SIZE <b>A3</b>		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 DRWNR: ZHANG 2010/05/14 CHKD: ALLEN LIN 2004/07/20 APPR: XJ.SONG 2010/06/03	REV	DESCRIPTION

QUALITY SYMBOLS	$\nabla_{\text{A}}=0$
	$\nabla_{\text{B}}=0$
	$\nabla_{\text{C}}=0$
	ANGULAR $\pm 3^\circ$

GENERAL TOLERANCES (UNLESS SPECIFIED)	
mm	INCH
4 PLACES $\pm$ ---	$\pm$ ---
3 PLACES $\pm$ ---	$\pm$ ---
2 PLACES $\pm 0.25$	$\pm$ ---
1 PLACE $\pm 0.25$	$\pm$ ---

DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM ONLY		METRIC	
DRAWN BY	DATE	TITLE	PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION) MOLEX INCORPORATED
CHECKED BY	DATE		
APPROVED BY	DATE		
MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
SEE SHEET 4	SD-87715-207	3 OF 4	

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

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 DRW: RZHUANG 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	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY DATE TOM 2004/07/20 CHECKED BY DATE ALLEN LIN 2004/07/20 APPROVED BY DATE WILSON 2004/07/20	TITLE	PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION)	
			MATERIAL NO. SEE TABLE SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	MOLEX INCORPORATED DOCUMENT NO. SD-87715-207	SHEET NO. 4 OF 4