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Part Number: **0877159013**
Status: **Planned for Obsolescence**
Description: 1.00mm (.039") Pitch, PCI Express* Connector, 36 Circuits, Nylon 4/6 Glass-filled, White Housing, Phosphor Bronze, Gold (Au) Flash Plating, with Plastic Pegs, 3.00mm (.118") 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

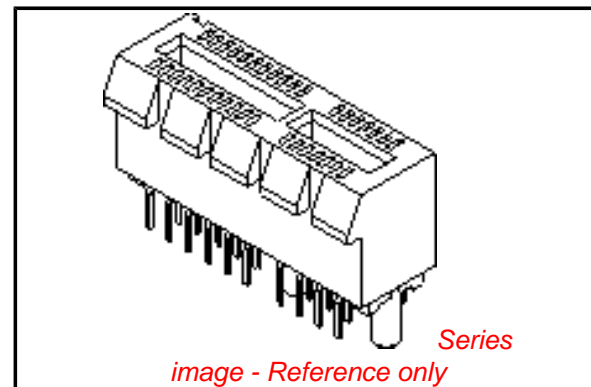
Product Family Edge Card Connectors
 Series [87715](#)
 Comments PCI 1 lane
 Component Type Edgecard to PCB
 Product Name PCI Express*

Physical

Circuits (Loaded) 36
 Circuits (maximum) 36
 Circuits Detail All Signal
 Color - Resin Natural
 Durability (mating cycles max) 50
 Entry Angle Vertical (Top Entry)
 Flammability 94V-0
 Keying to Mating Part Yes
 Material - Metal Phosphor Bronze
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin High Temperature Thermoplastic
 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) 2.36 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) 2
 Plating min: Mating (µm) 0.05
 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



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
 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

Material Info

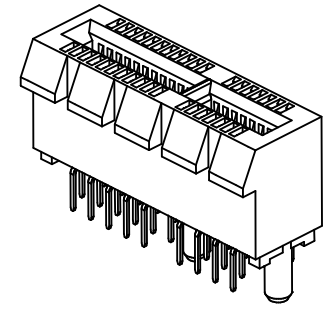
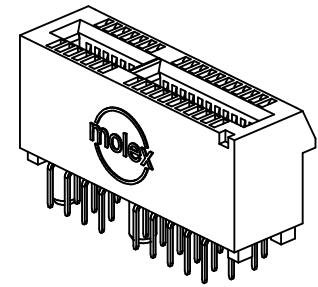
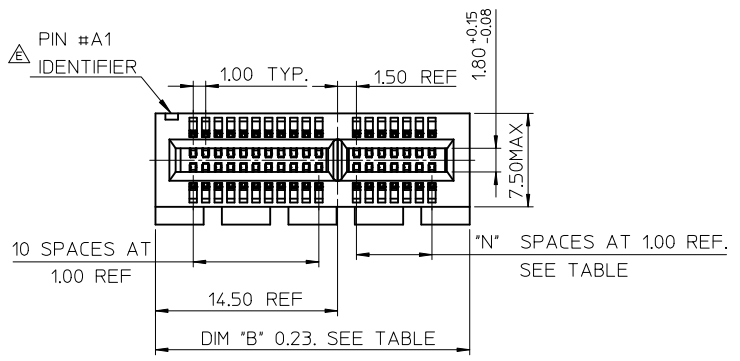
Reference - Drawing Numbers

Packaging Specification	PK-87715-001, PK-87715-207
Product Specification	PS-87715-200
Sales Drawing	SD-87715-207, SD-87715-901
Test Summary	TS-87715-207

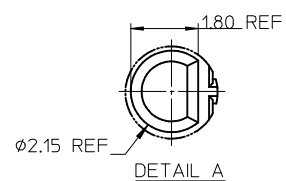
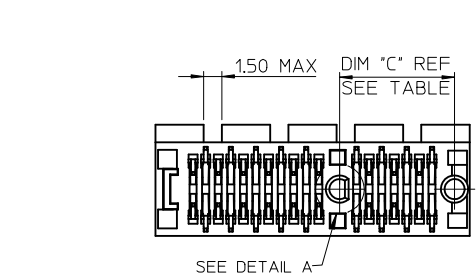
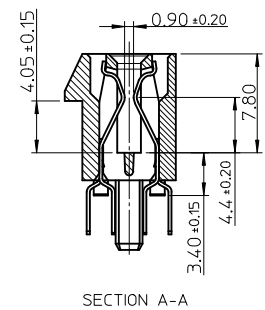
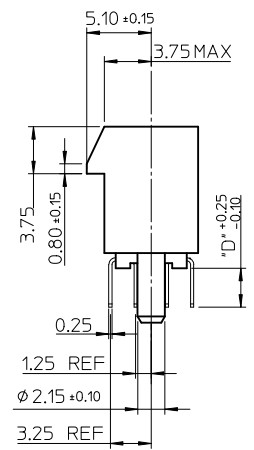
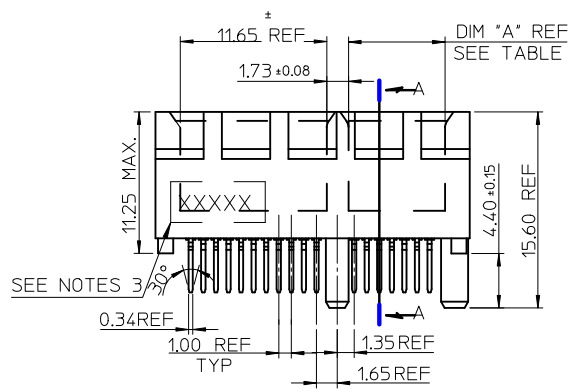
* PCI Express is a registered trademark of PCI-SIG®

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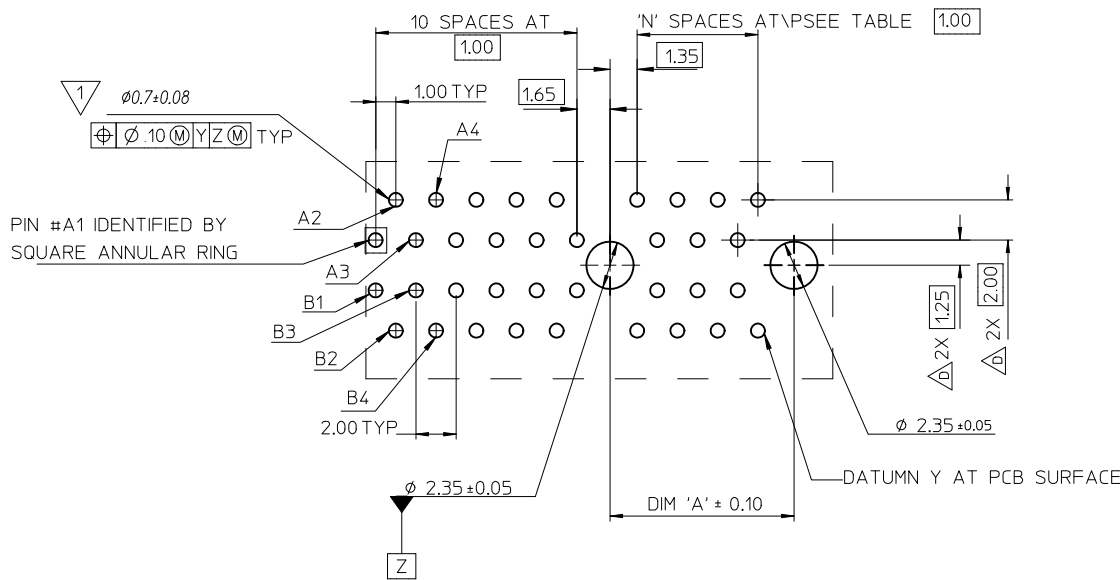
- NOTES:
- 1.MATERIALS:
1-1.HOUSING: SEE TABLE ,GLASS FIBER FILLED UL94V-0, COLOR: SEE TABLE.
1-2.CONTACT: SEE TABLE
 - 2.PLATING:
2-1.CONTACT AREA: GOLD, THICKNESS : SEE TABLE .
2-2.SOLDER TAIL: 100 MICRINCH MIN. TIN PLATING.
2-3.UNDER PLATING: NICKEL PLATING OVERALL.
 - 3.WEEK CODE: XX(YEAR) XXI(WEEK)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

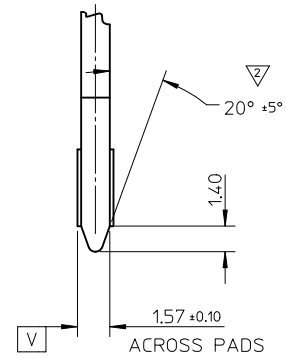
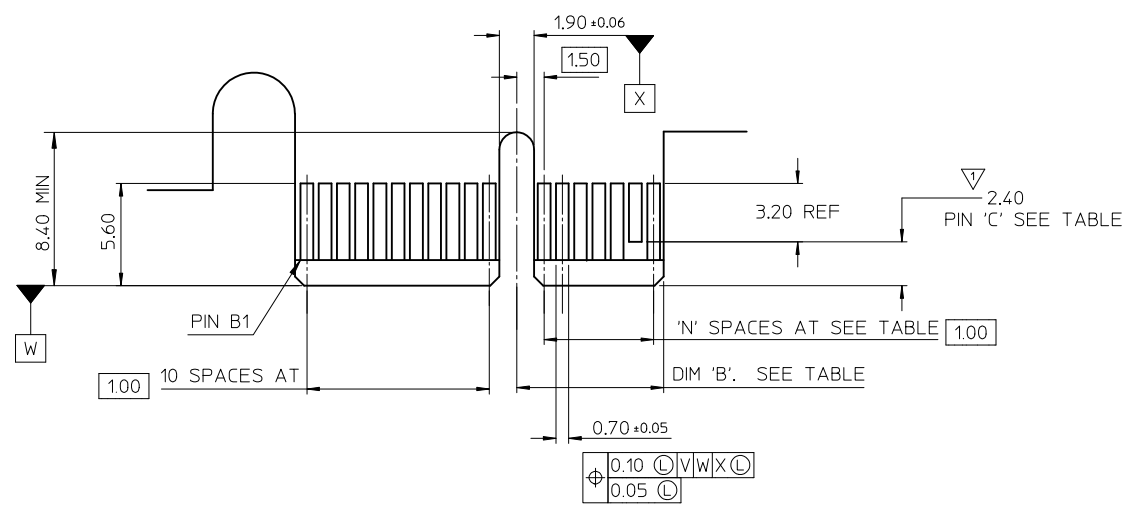
REVISED IEC NO: SH2010-0425 DR:WNRZHHANG 2010/05/14 CHYKD:ALLEN L IN 2004/07/20 APPR:X.J.SONG 2010/06/03	QUALITY SYMBOLS F=0 E=0 E=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± 0.25 ± --- ANGULAR ± 3 °	DIMENSION STYLE MM ONLY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



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

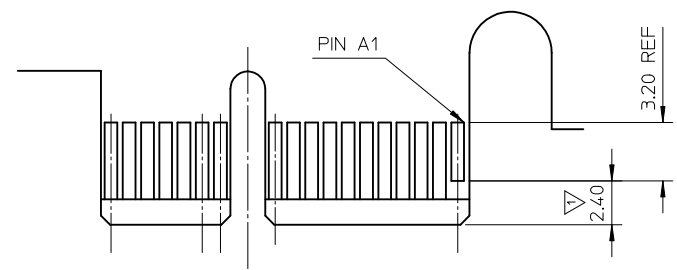
CONNECTOR LINK WIDTH	# POS REF	N	DIM 'A'
X4	64	20	23.15
X8	98	37	40.15

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 MM ONLY		SCALE METRIC	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				
				ANGULAR ± 3°	APPROVED BY WILSON		DATE 2004/07/20		MATERIAL NO. SEE SHEET 4		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							



← 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

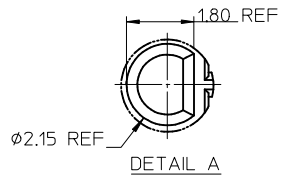
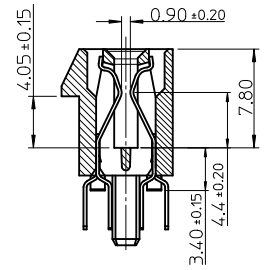
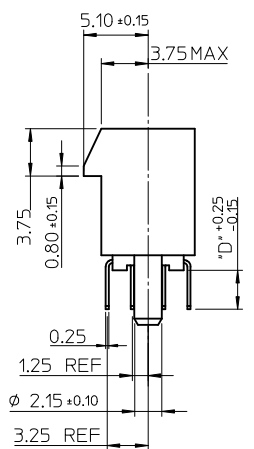
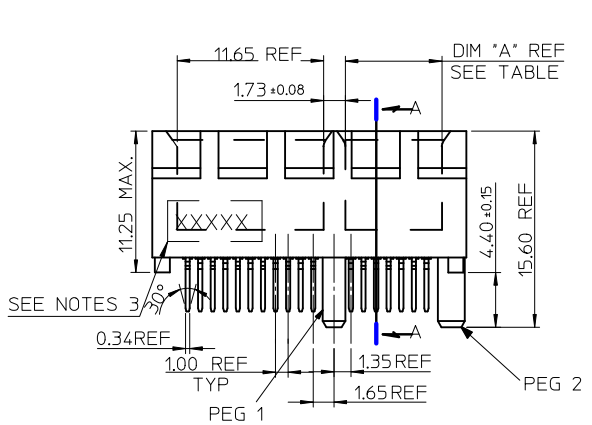
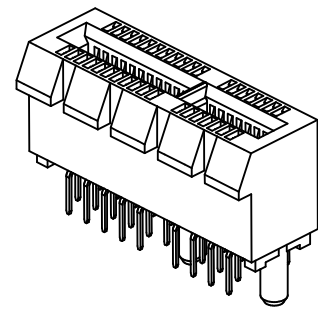
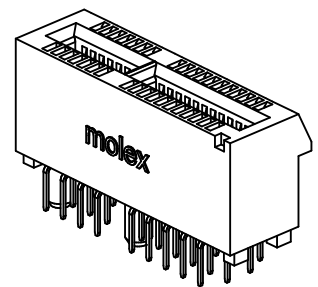
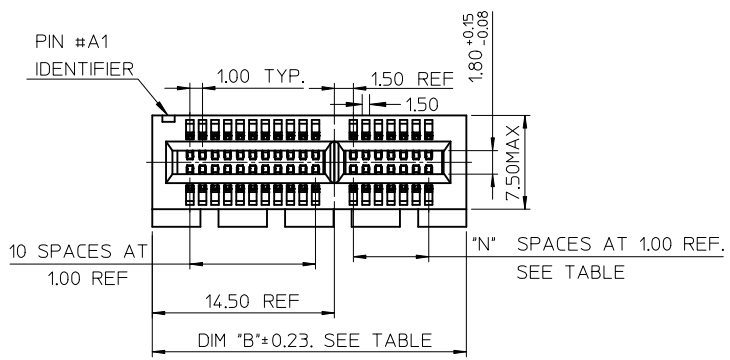
SEE SHEET 1 EC NO: SH2010-0425 DR: WNRZhang 2010/05/14 CH: KD-Allen LIN 2004/07/20 APPR: XJ.SONG 2010/06/03	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	$F_s = 0$	mm	INCH	MM ONLY		METRIC		
	$F_e = 0$	4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.25 ± ---	1 PLACE ± 0.25 ± ---	ANGULAR ± 3°	DRAWN BY: TOM DATE: 2004/07/20 CHECKED BY: ALLEN LIN DATE: 2004/07/20 APPROVED BY: WILSON DATE: 2004/07/20 MATERIAL NO. SEE SHEET 4 DOCUMENT NO. SD-87715-207 SHEET NO. 3 OF 4	
	$F_p = 0$	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

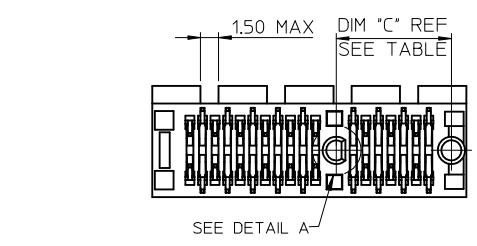
SEE SHEET 1 EC NO: SH2010-0425 DRWNR:ZHANG 2010/05/14 CHKD:ALLEN LIN 2004/07/20 APPR:XJ.SONG 2010/06/03	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	$F_A=0$ $F_C=0$ $F_P=0$	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 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	DOCUMENT NO.		
			APPROVED BY DATE	SD-87715-207		
			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		



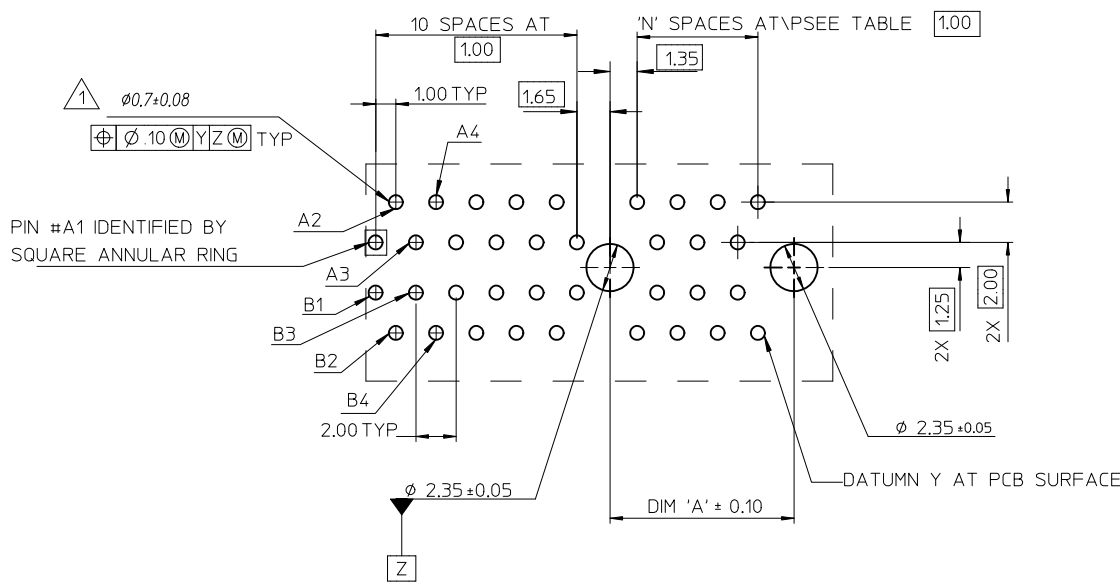
- NOTES:
 1.MATERIALS:
 1-1.HOUSING: SEE TABLE ,GLASS FIBER FILLED UL94V-0, COLOR: SEE TABLE.
 1-2.CONTACT: SEE TABLE
 2.PLATING:
 2-1.CONTACT AREA: GOLD, THICKNESS : SEE TABLE .
 2-2.SOLDER TAIL: 100 MICRINCH MIN. TIN PLATING.
 2-3.UNDER PLATING: NICKEL PLATING OVERALL.
 3.DATE CODE: YY MM DD.
 4.PRODUCT SPECIFICATION REFER TO PS-87715-200.
 5.TEST SUMMARY:REFER TO TS-87715-207.

CONNECTOR LINK WIDTH	# POS REF	N	DIM 'A'	DIM 'B'	DIM 'C'
X1	36	6	7.65	25.00	9.15
X16	164	70	71.65	89.00	73.15

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



REVISED EC NO: SH2010-0425 DRWNR:ZHANG 2010/05/14 CHKD:HARVEY 2007/05/14 APPR:X.JSUNG 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	DRAWN BY DATE DAVID HU 2007/05/14 CHECKED BY DATE HARVEY 2007/05/14 APPROVED BY DATE JENNY CHEN 2007/05/14	METRIC		
	DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE SHEET 4	TITLE		PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION)	
	REV		SIZE A3	MATERIAL NO. DOCUMENT NO.	MOLEX INCORPORATED SD-87715-901	SHEET NO. 1 OF 4	



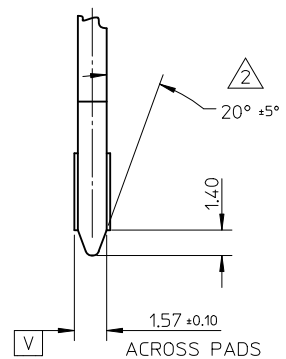
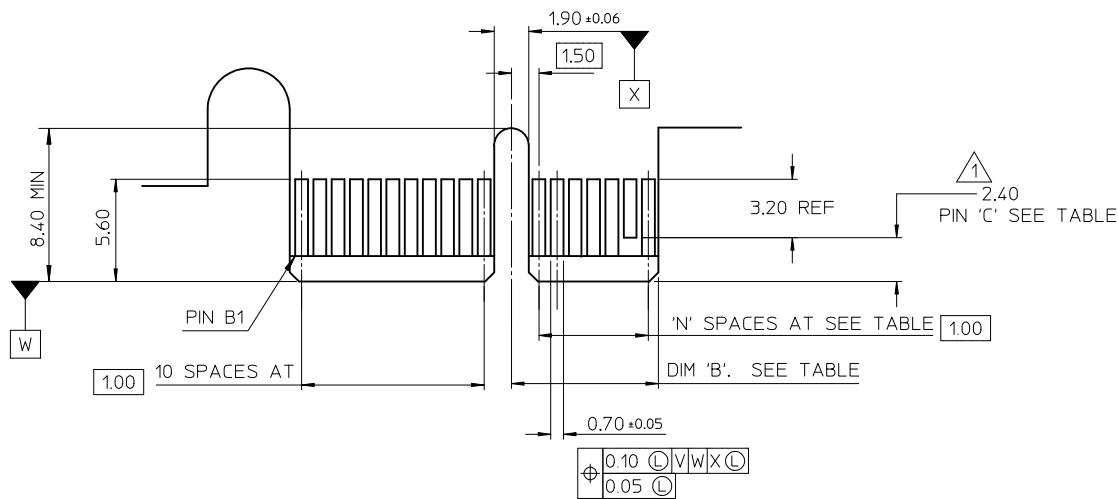
1 THE HORIZONTAL AXIS FOR THE HOLE PATTERN IS ESTABLISHED BY A LINE THROUGH THE CENTER OF THE TWO $\phi 2.35$ HOLES. THE VERTICAL AXIS IS 90° TO THE HORIZONTAL AXIS, THROUGH THE CENTER OF DATUM Z

PIN #A1 IDENTIFIED BY SQUARE ANNULAR RING

CONNECTOR LINK WIDTH	# POS REF	N	DIM 'A'
X1	36	6	9.15
X16	164	70	73.15

SEE SHEET 1 EC NO: SH2010-0425 DRW:RZHANG 2010/05/14 CH:KD-HARVEY 2007/05/14 APPR:XJ.SONG 2010/06/03	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	$F_A=0$	4 PLACES	mm	MM ONLY			
	$F_C=0$	3 PLACES	INCH				
	$F_P=0$	2 PLACES					
		1 PLACE					
		ANGULAR $\pm 3^\circ$					
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					
		SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
		A3					
			SEE SHEET 1	DRAWN BY		DATE	
				DAVID HU		2007/05/14	
				CHECKED BY		DATE	
				HARVEY		2007/05/14	
				APPROVED BY		DATE	
				JENNY CHEN		2007/05/14	
				MATERIAL NO.		DOCUMENT NO.	
				SD-87715-901		SHEET NO.	
				2 OF 4			

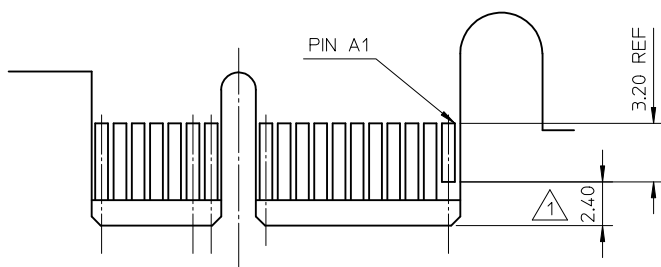
10 9 8 7 6 5 4 3 2 1



← I/O PANEL DIRECTION

PRIMARY (COMPONENT) 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



I/O PANEL DIRECTION →

SECONDARY (SOLDER) SIDE

CONNECTOR LINK WIDTH	# POS REF	N	DIM 'B'	'C' 1
X1	36	6	8.15	B17
X16	164	70	72.15	B17, B31 B48,B81

SEE SHEET 1 EC NO: SH2010-0425 DRW:RZHANG 2010/05/14 CHKD:HARVEY 2007/05/14 APPR:XJ.SONG 2010/06/03	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	$F_A=0$	mm	INCH	DRAWN BY	DATE	TITLE		
	$F_C=0$	4 PLACES ± ---	± ---	DAVID HU	2007/05/14	PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION)		
	$F_B=0$	3 PLACES ± ---	± ---	CHECKED BY	DATE			
	2 PLACES ± 0.25	± ---	HARVEY	2007/05/14	MOLEX INCORPORATED			
	1 PLACE ± 0.25	± ---	APPROVED BY	DATE				
	ANGULAR ± 3°	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		JENNY CHEN	2007/05/14	DOCUMENT NO.	SHEET NO.	
				SEE SHEET 1		SD-87715-901		3 OF 4
				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

9 8 7 6 5 4 3 2 1

B

MOLEX P/N	CIRCUIT SIZE	HOUSING MATERIAL	HOUSING COLOR	TERMINAL MATERIAL	CONTACT PLATING	SOLDER TAIL 'D' LENGTH	PEG 1	PEG 2	DESCRIPTION
87715-9000	36	NYLON46	BLACK	PHOSPHOR BRONZE	GOLD FLASH	2.54	WITH	WITH	TOOLED
87715-9001					10 MICROINCH				
87715-9002					15 MICROINCH				
87715-9003					GOLD FLASH	3.00			
87715-9004					10 MICROINCH				
87715-9005					15 MICROINCH				
87715-9006					30 MICROINCH	2.54			
87715-9009					30 MICROINCH	3.00			
87715-0001	15 MICROINCH	2.54	WITHOUT						

B

MOLEX P/N	CIRCUIT SIZE	HOUSING MATERIAL	HOUSING COLOR	TERMINAL MATERIAL	CONTACT PLATING	SOLDER TAIL 'D' LENGTH	PEG 1	PEG 2	DESCRIPTION
87715-9300	164	NYLON46	BLACK	PHOSPHOR BRONZE	GOLD FLASH	2.54	WITH	WITH	TOOLED
87715-9301					10 MICROINCH				
87715-9302					15 MICROINCH				
87715-9303					GOLD FLASH	3.00			
87715-9304					10 MICROINCH				
87715-9305					15 MICROINCH				
87715-9306					30 MICROINCH	2.54			
87715-9309					30 MICROINCH	3.00			

SEE SHEET 1 EC NO: SH2010-0425 DRW:RZHANG 2010/05/14 CH:KD HARVEY 2007/05/14 APPR: XJ.SONG 2010/06/03	QUALITY SYMBOLS $F_A=0$ $F_C=0$ $F_P=0$	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± 0.25 ± --- ANGULAR ± 3 °	DIMENSION STYLE MM ONLY DRAWN BY DATE DAVID HU 2007/05/14 CHECKED BY DATE HARVEY 2007/05/14 APPROVED BY DATE JENNY CHEN 2007/05/14	SCALE DESIGN UNITS METRIC THIRD ANGLE PROJECTION	TITLE PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION)	MATERIAL NO. SEE SHEET 1	DOCUMENT NO. SD-87715-901	SHEET NO. 4 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					