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Part Number: [0877156306](#)
Status: **Planned for Obsolescence**
Description: 1.00mm (.039") Pitch, PCI Express* Connector, 164 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 16 lanes
Component Type Edgecard to PCB
Product Name PCI Express*

Physical

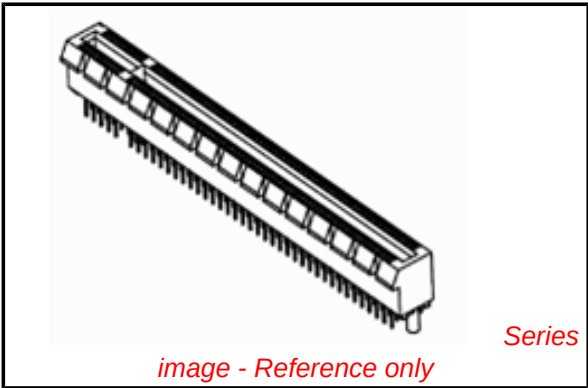
Circuits (Loaded) 164
Circuits (maximum) 164
Circuits Detail All Signal
Durability (mating cycles max) 50
Entry Angle Vertical (Top Entry)
Flammability 94V-0
Keying to Mating Part Yes
Material - Plating Mating Gold
Material - Plating Termination Tin
PC Tail Length (in) 0.100 In
PC Tail Length (mm) 2.54 mm
PCB Locator Yes
PCB Retention Yes
PCB Thickness Recommended (in) 0.062 In
PCB Thickness Recommended (mm) 1.58 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) 0.75
Plating min: Termination (µin) 100
Plating min: Termination (µm) 2.54
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



EU RoHS
ELV and RoHS
Compliant
REACH SVHC
Not Reviewed
Halogen-Free
Status
Not Reviewed



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](#)

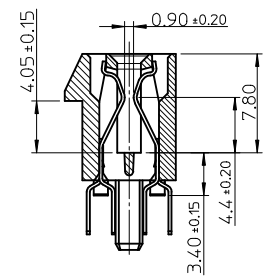
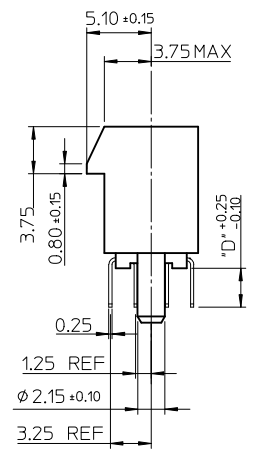
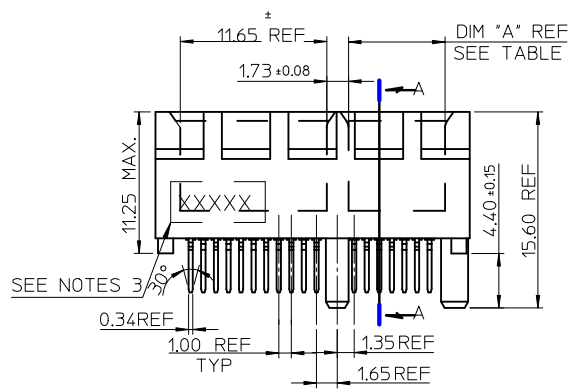
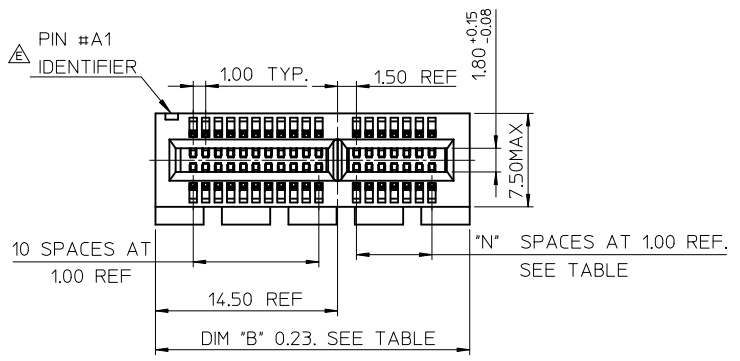
Mates With
PCI Express Card

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

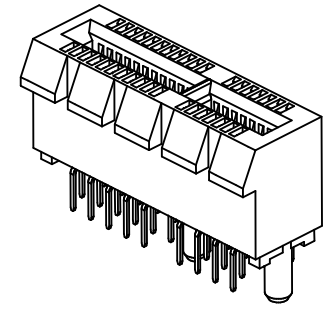
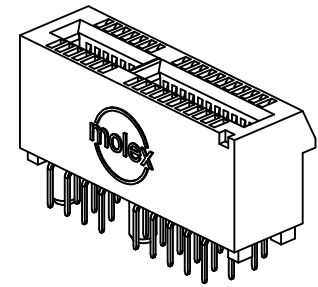
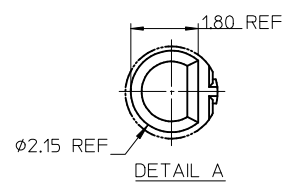
* PCI Express is a registered trademark of PCI-SIG®

This document was generated on 06/01/2010

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SECTION A-A



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) XX(WEEK) X(LOCATION).

4.PRODUCT SPECIFICATION REFER TO PS-87715-200.

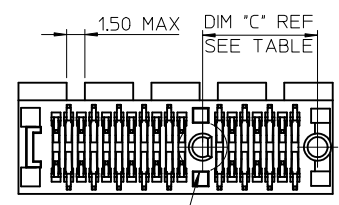
5.PACKAGING SPECIFICATION REFER TO PK-87715-207.

6.TEST SUMMARY:REFER TO TS-87715-207.

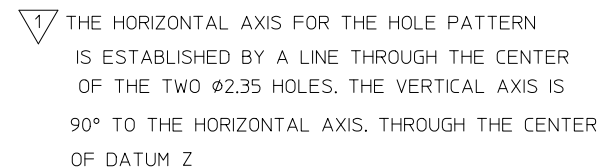
7.LEAD FREE AND ROHS COMPLIANCE PRODUCT.

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 EC NO: SH2010-0425 G DRAWNR:ZHANG CHKD:ALLEN LIN APPR:X.J.SONG	DESCRIPTION REV	QUALITY SYMBOLS F _A =0 F _B =0 F _P =0	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
						MM ONLY			METRIC		
				mm	INCH	DRAWN BY	DATE	TITLE PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION) MOLEX INCORPORATED			
			4 PLACES	± ---	± ---	TOM	2004/07/20				
			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	molex			
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NO.			DOCUMENT NO.	SHEET NO.	
						SEE SHEET 4			SD-87715-207		1 OF 4
			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							



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

10 9 8 7 6 5 4 3 2 1

F

E

D

C

B

A

F

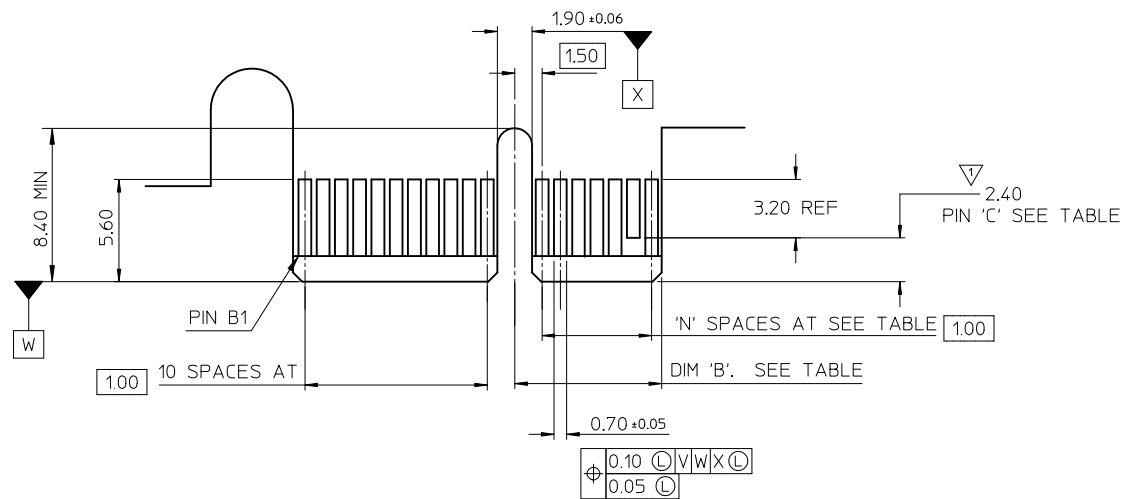
E

D

C

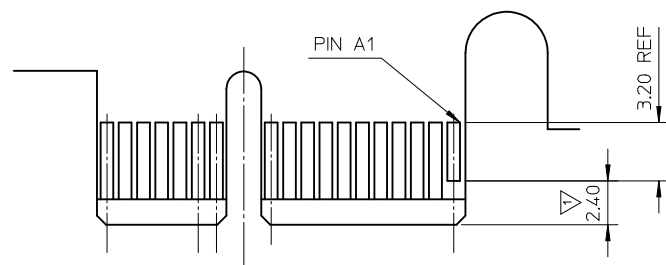
B

A



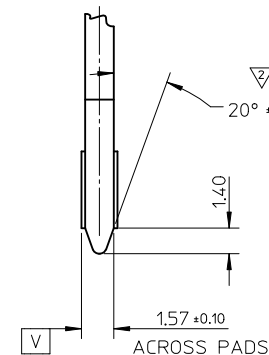
← I/O PANEL DIRECTION

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 DRAWN:ZHANG CHK'D:ALLEN LIN APPR:XJSONG			2010/05/14 2010/07/10 2010/06/03	DESCRIPTION	REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
										MM ONLY			METRIC		
							 =0		mm	INCH	DRAWN BY	DATE	PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION)  MOLEX INCORPORATED		
							 =0	4 PLACES	± ---	± ---	TOM	2004/07/20			
							 =0	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			
										MATERIAL NO.		DOCUMENT NO.		SHEET NO.	
							DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE SHEET 4		SD-87715-207		3 OF 4	
										SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
										A3					

F

F

E

E

D

D

C

C

B

B

A

A

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	3.00

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	3.00

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

DRWN:RZHANG

CHKD:ALLEN LIN

APPR:XJ.SONG

2010/05/14

2004/07/20

2010/06/03

DESCRIPTION

REV

QUALITY SYMBOLS

F_A

=0

F_G

=0

F_P

=0

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

MM ONLY

DRAWN BY

DATE

TOM

2004/07/20

CHECKED BY

DATE

ALLEN LIN

2004/07/20

APPROVED BY

DATE

WILSON

2004/07/20

MATERIAL NO.

SEE TABLE

SIZE

A3

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SCALE

DESIGN UNITS

METRIC

THIRD ANGLE PROJECTION

TITLE

PCI EXPRESS

EDGE CARD CONNECTOR

(LEAD FREE VERSION)

molex

MOLEX INCORPORATED

DOCUMENT NO.

SD-87715-207

SHEET NO.

4 OF 4