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Part Number: [0877159200](#)
Status: **Active**
Overview:
Description: 1.00mm (.039") Pitch, PCI Express* Connector, 98 Circuits, Nylon 4/6 Glass-filled, Black Housing, Phosphor Bronze, Gold (Au) Flash, 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 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) 0.100 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
 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

Packaging Specification PK-87715-207
 Product Specification PS-87715-200

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
 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

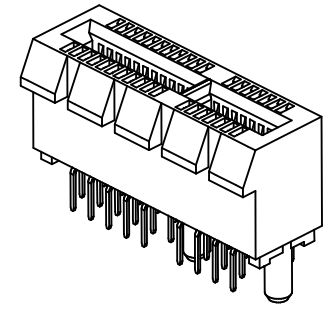
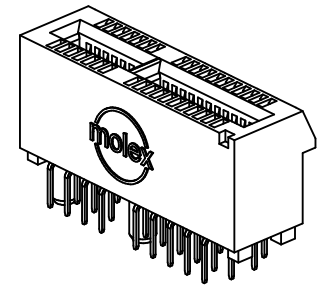
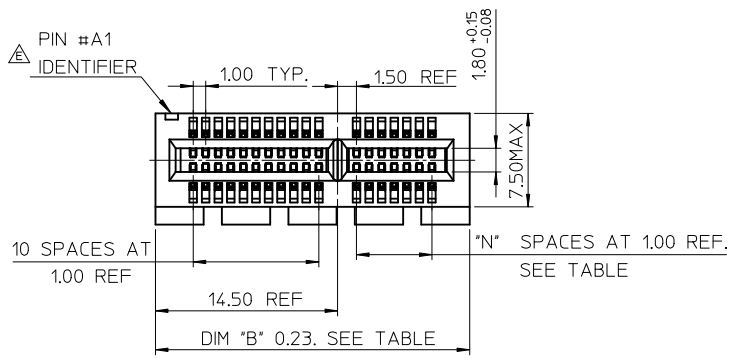
Sales Drawing
Test Summary

SD-87715-207
TS-87715-207

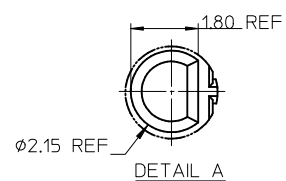
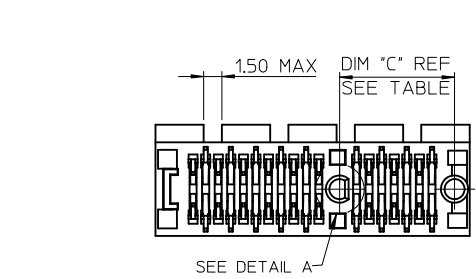
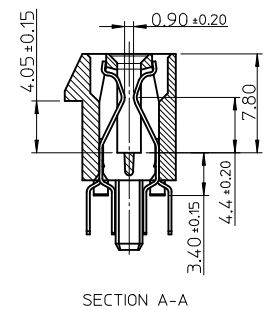
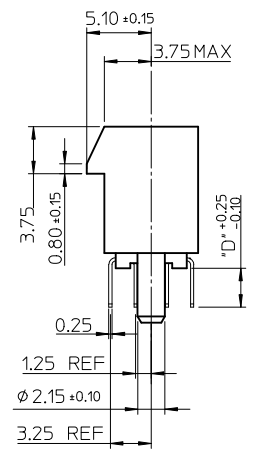
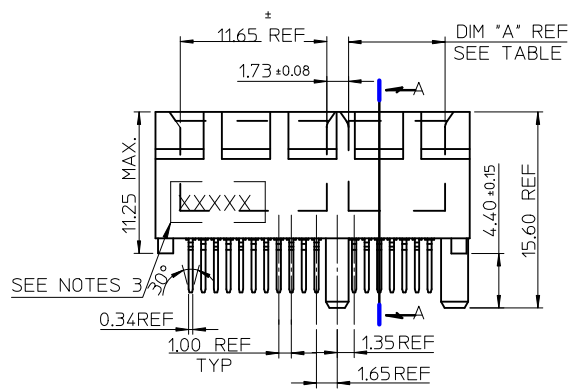
* PCI Express is a registered trademark of PCI-SIG®

This document was generated on 06/04/2010

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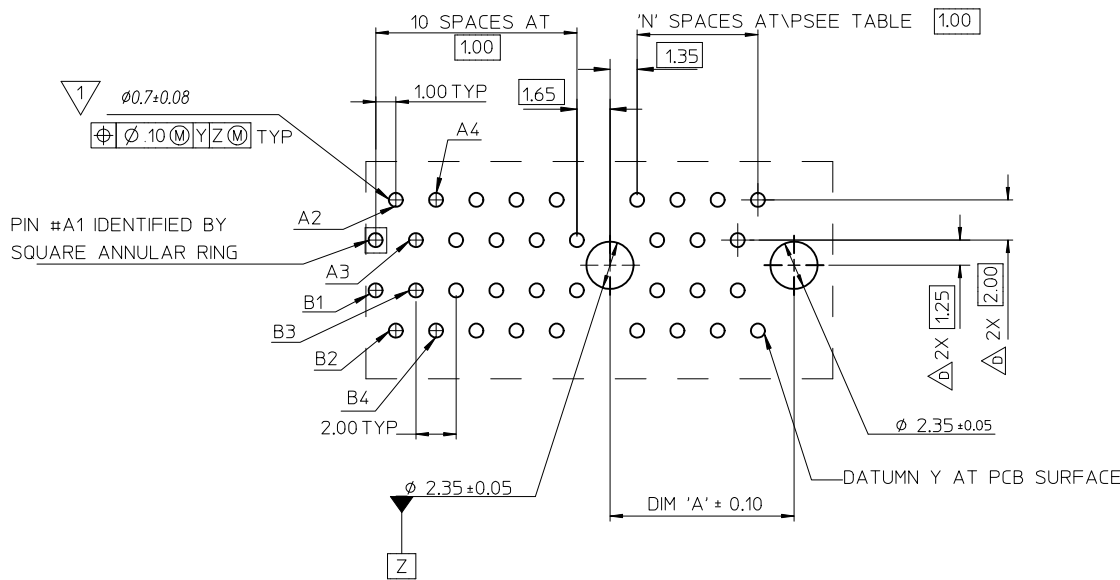
- NOTES:
- 1.MATERIALS:
1-1.HOUSING: SEE TABLE ,GLASS FIBER FILLED UL94V-0, COLOR: SEE TABLE.
1-2.CONTACT: SEE TABLE
 - 2.PLATING:
2-1.CONTACT AREA: GOLD, THICKNESS : SEE TABLE .
2-2.SOLDER TAIL: 100 MICRINCH MIN. TIN PLATING.
2-3.UNDER PLATING: NICKEL PLATING OVERALL.
 - 3.WEEK CODE: XX(YEAR) XXI(WEEK)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

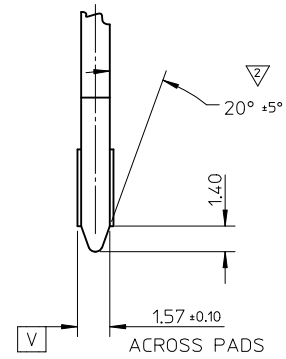
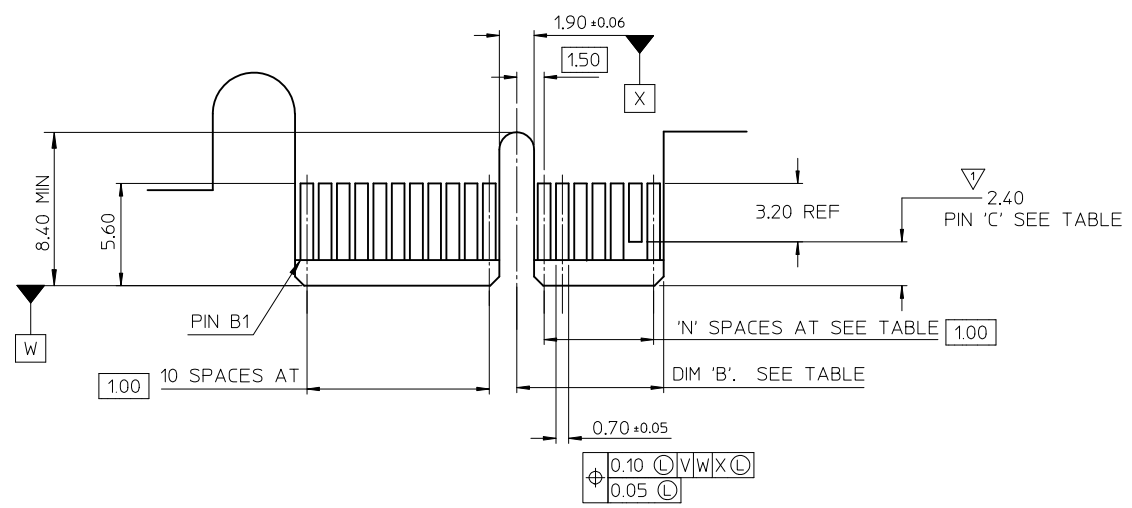
| | | | | | | | | | |
|---|--|--|-------------|---|--|--|------------------------|------------------------|--|
| REVISED IEC NO: SH2010-0425 DRWR:RZHANG 2010/05/14 CHYKD:ALLEN L IN 2004/07/20 APPR:X.J.SONG 2010/06/03 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY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

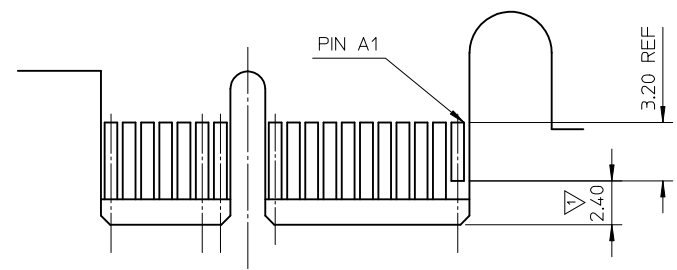
| CONNECTOR LINK WIDTH | # POS REF | N | DIM 'A' |
|----------------------|-----------|----|---------|
| X4 | 64 | 20 | 23.15 |
| X8 | 98 | 37 | 40.15 |

| | | | | | | | | | |
|---|-----------------|--|-------------|---|--------------------------|---|------------------------|------------------------|--|
| SEE SHEET 1 EC NO: SH2010-0425 DRWR:ZHANG 2010/05/14 CHKD:ALLEN LIN 2004/07/20 APPR:XJSONG 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 | | | |
| | $F_G=0$ | 4 PLACES ± --- | ± --- | TOM | 2004/07/20 | PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION) | | | |
| | $F_P=0$ | 3 PLACES ± --- | ± --- | CHECKED BY | DATE | | | | |
| | 2 PLACES ± 0.25 | ± --- | ALLEN LIN | 2004/07/20 | molex MOLEX INCORPORATED | | | | |
| | 1 PLACE ± 0.25 | ± --- | APPROVED BY | DATE | | | | | |
| | ANGULAR ± 3° | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | WILSON | 2004/07/20 | 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 | | | | | |



← 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 ± --- ± --- | 3 PLACES ± --- ± --- | DRAWN BY | DATE | TITLE | |
| | $F_{\text{C}}=0$ | 2 PLACES ± 0.25 ± --- | 1 PLACE ± 0.25 ± --- | TOM | 2004/07/20 | PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION) | |
| | ANGULAR ± 3° | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | CHECKED BY | DATE | MOLEX INCORPORATED | |
| | | | | ALLEN LIN | 2004/07/20 | MATERIAL NO. DOCUMENT NO. | |
| | | | | APPROVED BY | DATE | SEE SHEET 4 SD-87715-207 | |
| | | | | WILSON | 2004/07/20 | 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 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 | MOLEX INCORPORATED SD-87715-207 | | SHEET NO. 4 OF 4 |

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