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Part Number: **0877156100**
Status: **Planned for Obsolescence**
Description: 1.00mm (.039") Pitch, PCI Express* Connector, 64 Circuits, Nylon6/6 Glass-filled, Black Housing, Phosphor Bronze, Gold (Au) Flash, 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 4 lanes
 Component Type Edgecard to PCB
 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
 Polarized to Mating Part Yes
 Temperature Range - Operating -55°C to +85°C
 Termination Interface: Style Through Hole

Electrical

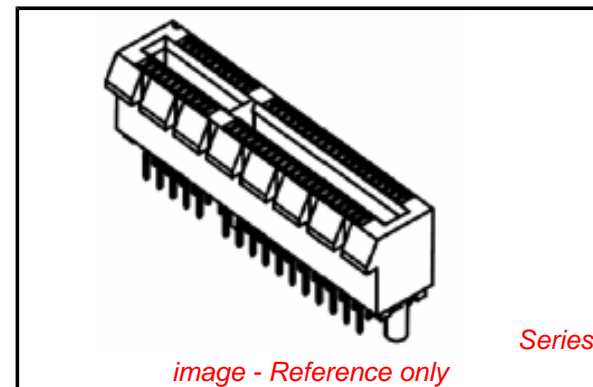
Current - Maximum per Contact 1.1A
 Voltage - Maximum 50V AC (RMS)/DC

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
 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

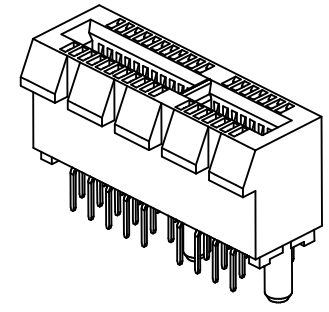
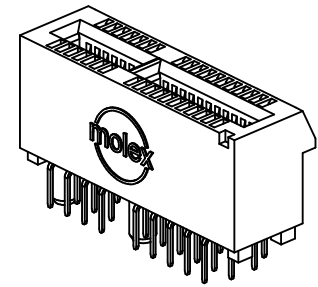
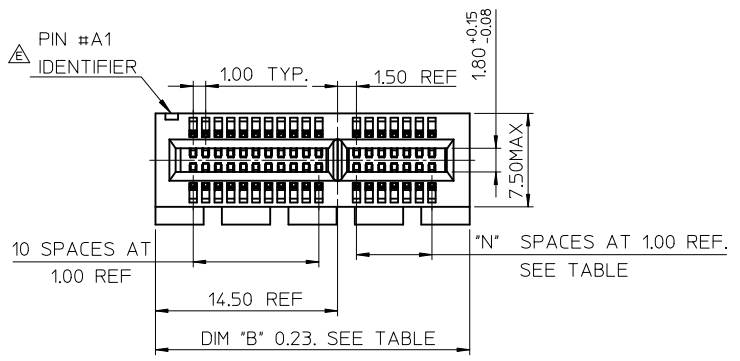
Packaging Specification
Product Specification
Sales Drawing
Test Summary

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

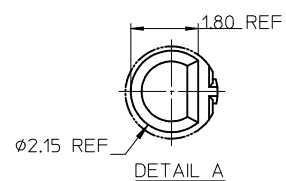
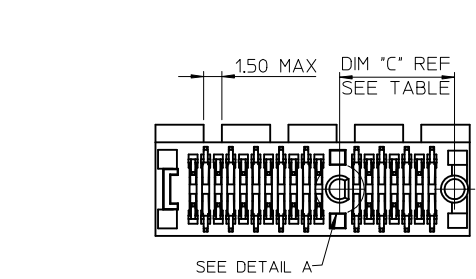
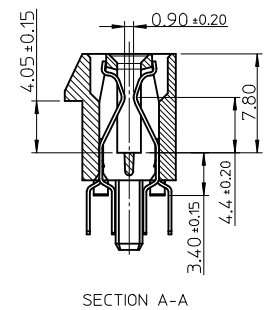
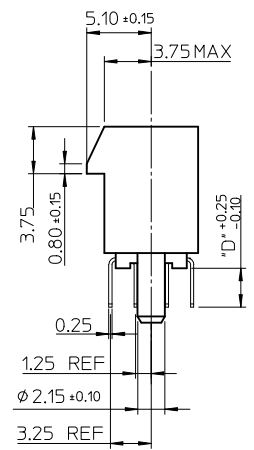
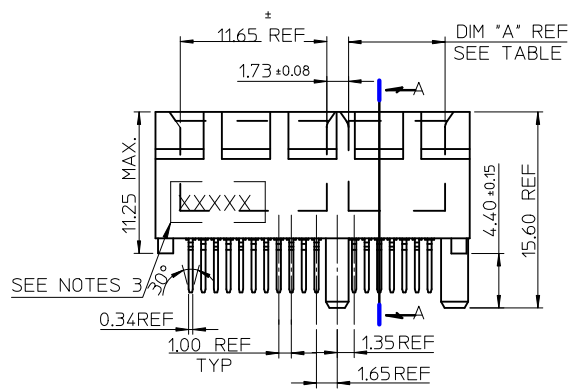
* PCI Express is a registered trademark of PCI-SIG®

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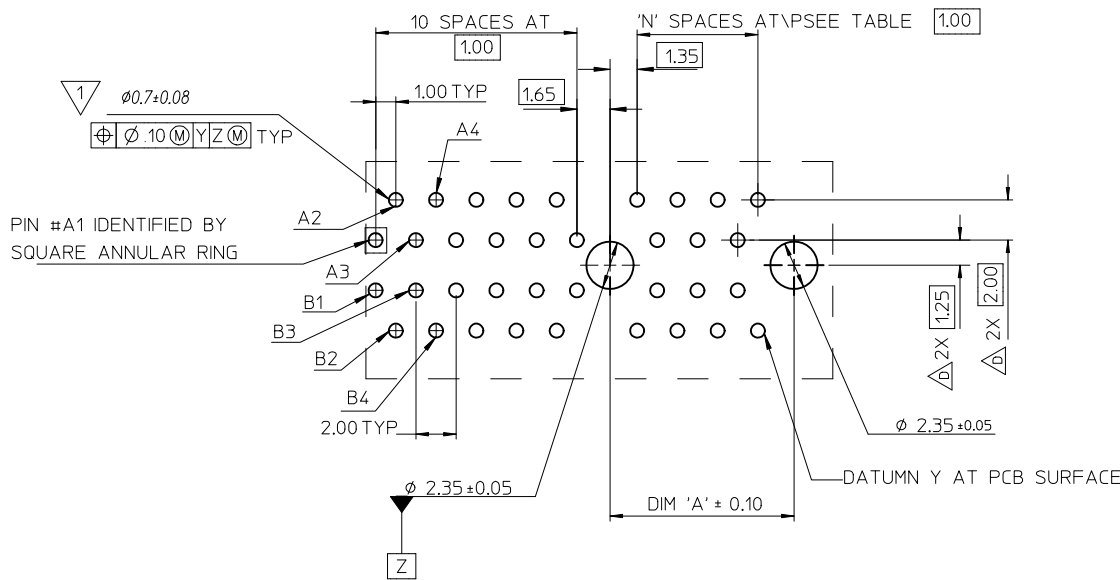
- NOTES:
- 1.MATERIALS:
1-1.HOUSING: SEE TABLE ,GLASS FIBER FILLED UL94V-0, COLOR: SEE TABLE.
1-2.CONTACT: SEE TABLE
 - 2.PLATING:
2-1.CONTACT AREA: GOLD, THICKNESS : SEE TABLE .
2-2.SOLDER TAIL: 100 MICRINCH MIN. TIN PLATING.
2-3.UNDER PLATING: NICKEL PLATING OVERALL.
 - 3.WEEK CODE: XX(YEAR) XXI(WEEK)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

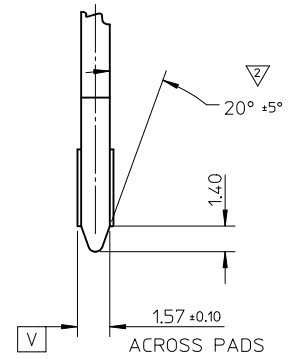
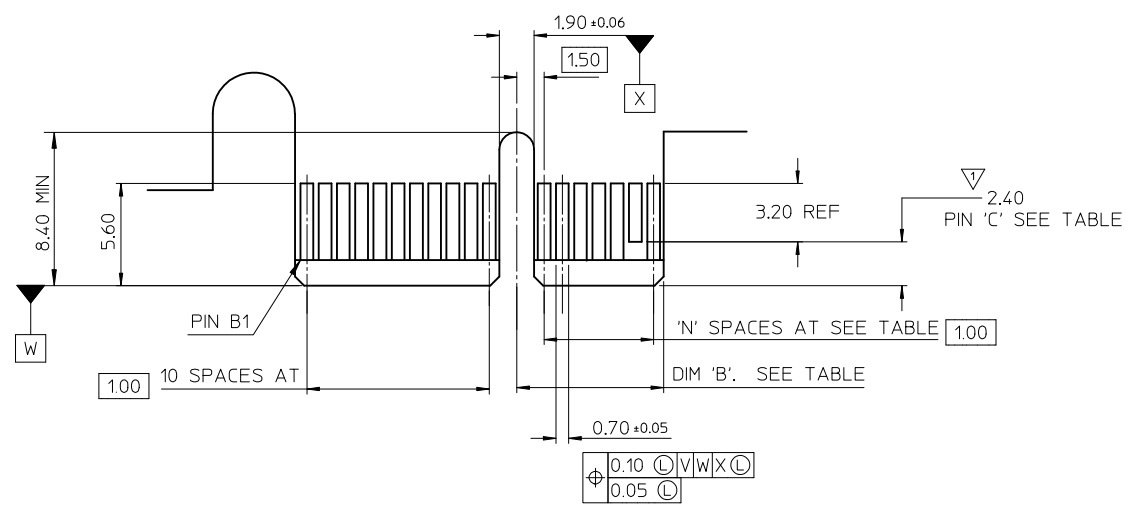
| | | | | | | | |
|---|--|--|-----------------------------|--------------------|---|------------------------|---|
| REVISED IEC NO: SH2010-0425 DRW:RZHANG 2010/05/14 CHKD:ALLEN L IN 2004/07/20 APPR:X.J.SONG 2010/06/03 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | 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 | METRIC | 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) |
| | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | SEE SHEET 4 | MATERIAL NO. SEE SHEET 4 | MOLEX INCORPORATED | DOCUMENT NO. 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

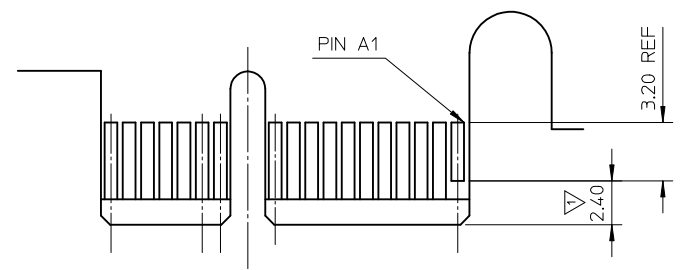
| CONNECTOR LINK WIDTH | # POS REF | N | DIM 'A' |
|----------------------|-----------|----|---------|
| X4 | 64 | 20 | 23.15 |
| X8 | 98 | 37 | 40.15 |

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