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Part Number: [0877159100](#)

Status: **Active**

Overview:

Description: 1.00mm (.039") Pitch, PCI Express* Connector, 64 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 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) | 0.100 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 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

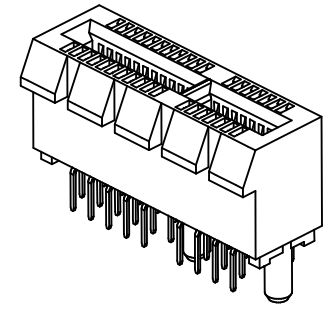
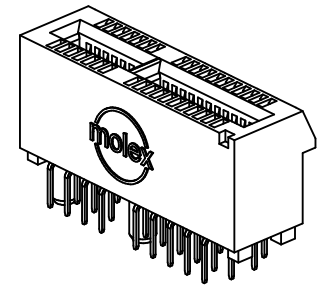
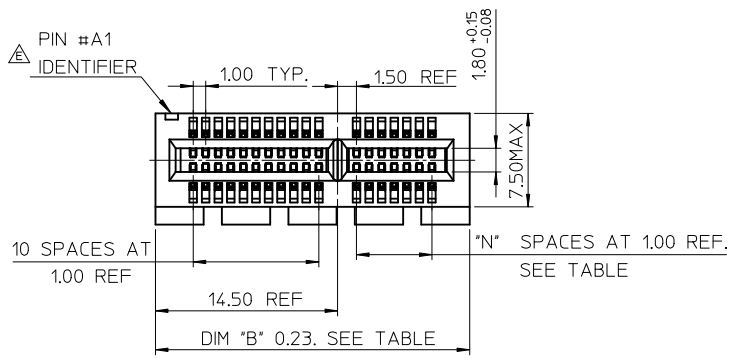
Sales Drawing
Test Summary

SD-87715-207
TS-87715-207

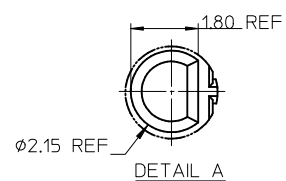
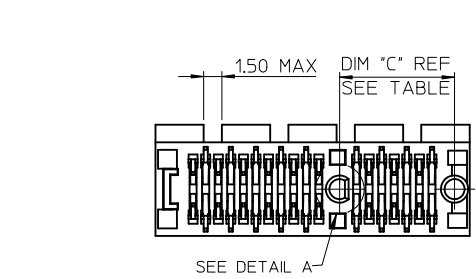
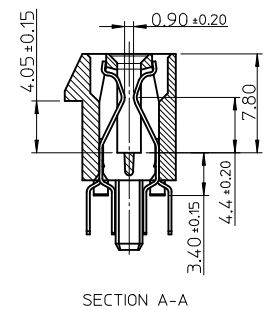
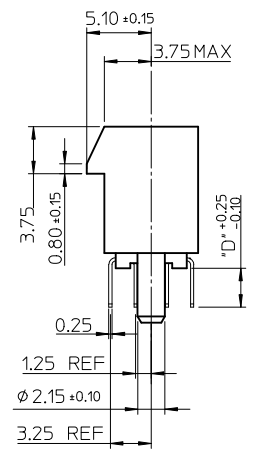
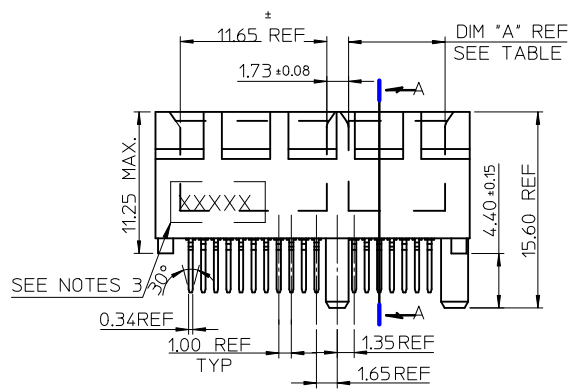
* PCI Express is a registered trademark of PCI-SIG®

This document was generated on 06/04/2010

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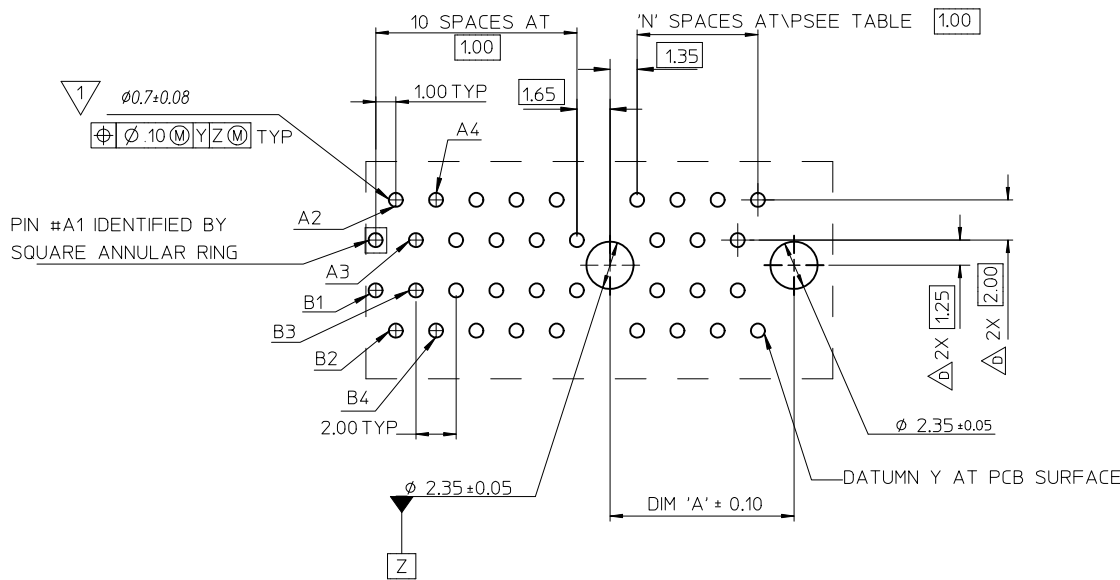
- NOTES:
- 1.MATERIALS:
1-1.HOUSING: SEE TABLE ,GLASS FIBER FILLED UL94V-0, COLOR: SEE TABLE.
1-2.CONTACT: SEE TABLE
 - 2.PLATING:
2-1.CONTACT AREA: GOLD, THICKNESS : SEE TABLE .
2-2.SOLDER TAIL: 100 MICRINCH MIN. TIN PLATING.
2-3.UNDER PLATING: NICKEL PLATING OVERALL.
 - 3.WEEK CODE: XX(YEAR) XXI(WEEK)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

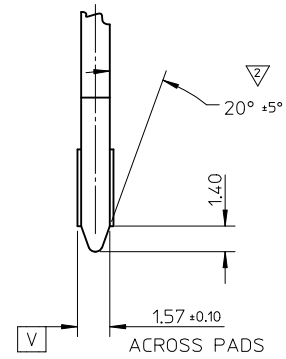
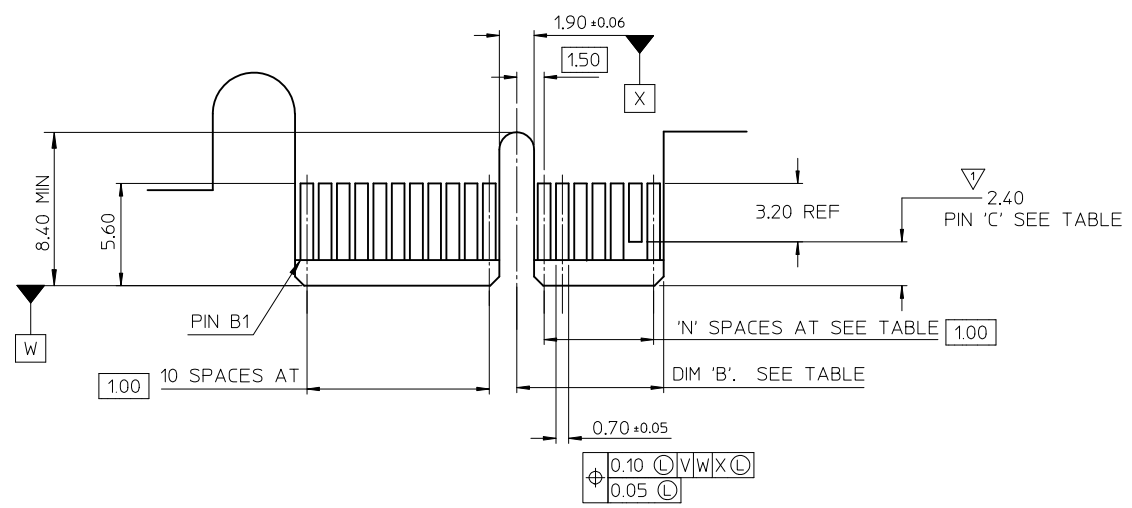
| | | | | | | | | | |
|---|-------------------|--|--------------|---|---|-------|------------------------|------------------------|--|
| REVISED IEC NO: SH2010-0425 DRW:RZHANG 2010/05/14 CHKD:ALLEN L IN 2004/07/20 APPR:X.J.SONG 2010/06/03 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | |
| | F=0 E=0 D=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 | | | |
| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | SEE SHEET 4 | | PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION) | | | | |
| | | | MATERIAL NO. | | MOLEX INCORPORATED DOCUMENT NO. SD-87715-207 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

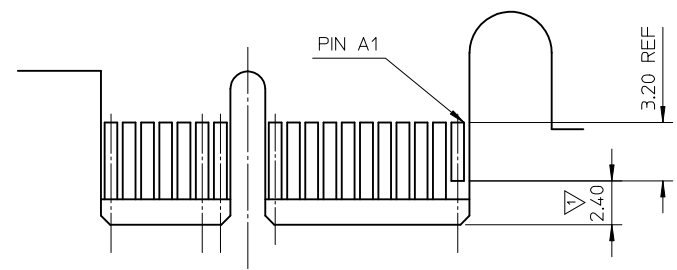
| CONNECTOR LINK WIDTH | # POS REF | N | DIM 'A' |
|----------------------|-----------|----|---------|
| X4 | 64 | 20 | 23.15 |
| X8 | 98 | 37 | 40.15 |

| | | | | | | | | | | | |
|-------------|--------------------|------------|------------|--|---------------------------------------|--------|--|-------------|---|------------------------|---|
| SEE SHEET 1 | EC NO: SH2010-0425 | 2010/05/14 | 2010/05/14 | QUALITY SYMBOLS $F_A=0$ $F_G=0$ $F_P=0$ | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION |
| | DRWR:ZHANG | 2004/07/20 | 2004/07/20 | | 4 PLACES | ± --- | ± --- | DRAWN BY | DATE | TITLE | PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION) |
| | CHKD:ALLEN LIN | 2004/07/20 | 2004/07/20 | | 3 PLACES | ± --- | ± --- | CHECKED BY | DATE | MOLEX INCORPORATED | |
| | APPR:XJSONG | 2010/06/03 | 2010/06/03 | | 2 PLACES | ± 0.25 | ± --- | APPROVED BY | DATE | | |
| | | | | 1 PLACE | ± 0.25 | ± --- | WILSON | 2004/07/20 | SD-87715-207 | SHEET NO. 2 OF 4 | |
| | | | | | ANGULAR ± 3 ° | | 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 | | |



← 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 ± --- | CHECKED BY | DATE | PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION) | | |
| | ANGULAR ± 3° | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | APPROVED BY | DATE | MOLEX INCORPORATED | | |
| | | | | WILSON | 2004/07/20 | MATERIAL NO. SEE SHEET 4 DOCUMENT NO. SD-87715-207 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 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 | |
| | | 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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