

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0674911038](#)  
**Status:** **Active**  
**Overview:** Serial ATA Products  
**Description:** 1.27mm (.050") Pitch Serial ATA High Speed Header, Through Hole, Vertical, 7 Circuits, Gold (Au) Flash, for 2.40mm (.094") PCB, Lead-free

**Documents:**

[3D Model](#) [Product Specification PS-67491-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

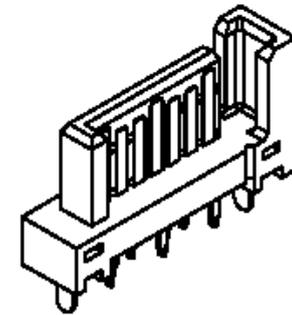
|                |                                     |
|----------------|-------------------------------------|
| Product Family | PCB Headers                         |
| Series         | <a href="#">67491</a>               |
| Application    | Board-to-Board, Wire-to-Board       |
| Overview       | <a href="#">Serial ATA Products</a> |
| Product Name   | Serial ATA                          |

**Physical**

|                                |                |
|--------------------------------|----------------|
| Breakaway                      | No             |
| Circuits (Loaded)              | 7              |
| Color - Resin                  | Black          |
| Durability (mating cycles max) | 50             |
| First Mate / Last Break        | Yes            |
| Glow-Wire Compliant            | No             |
| Guide to Mating Part           | No             |
| Keying to Mating Part          | Yes            |
| Lock to Mating Part            | Yes            |
| Material - Plating Mating      | Gold           |
| Material - Plating Termination | Tin            |
| Number of Rows                 | 1              |
| Orientation                    | Vertical       |
| 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) | 2.40 mm        |
| Packaging Type                 | Tray           |
| Pitch - Mating Interface (in)  | 0.050 In       |
| Pitch - Mating Interface (mm)  | 1.27 mm        |
| Pitch - Term. Interface (in)   | 0.050 In       |
| Pitch - Term. Interface (mm)   | 1.27 mm        |
| Plating min: Mating (µin)      | 2              |
| Plating min: Mating (µm)       | 0.05           |
| Plating min: Termination (µin) | 50.8           |
| Plating min: Termination (µm)  | 1.27           |
| Polarized to Mating Part       | Yes            |
| Polarized to PCB               | Yes            |
| Shrouded                       | No             |
| Stackable                      | No             |
| Surface Mount Compatible (SMC) | No             |
| Temperature Range - Operating  | -35°C to +85°C |
| Termination Interface: Style   | Through Hole   |

**Electrical**

|                               |      |
|-------------------------------|------|
| Current - Maximum per Contact | 1.5A |
|-------------------------------|------|



*Series  
image - Reference only*

**EU RoHS**

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

**China RoHS**



**Need more information on product  
environmental compliance?**

Email [productcompliance@molex.com](mailto: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**

[67491Series](#)

**Mates With**

Serial ATA Signal Connector [67489](#) , [88755](#)

Voltage - Maximum

15V DC

**Material Info**

**Reference - Drawing Numbers**

Product Specification

PS-67491-001

Sales Drawing

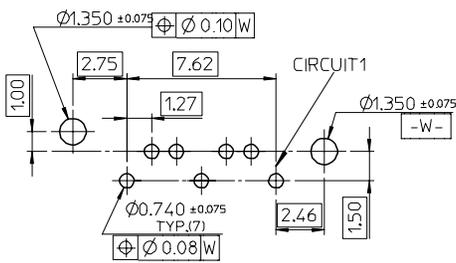
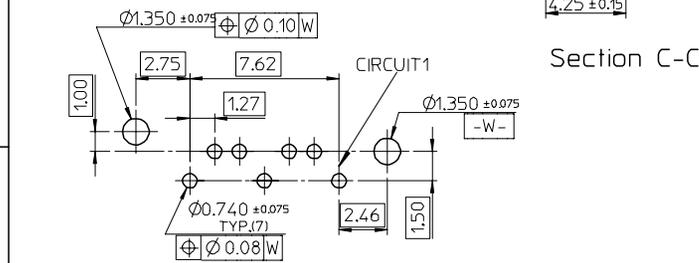
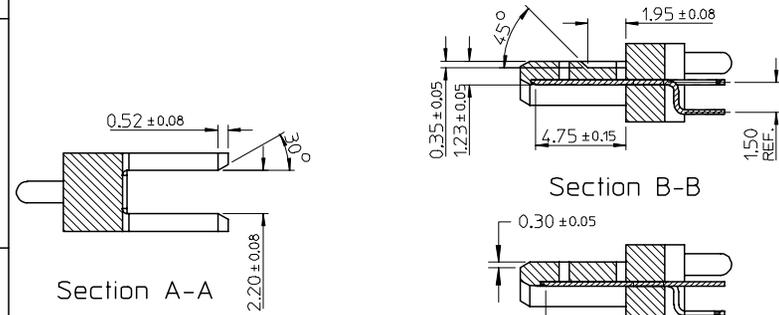
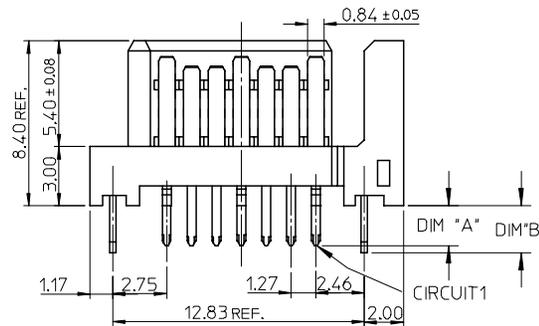
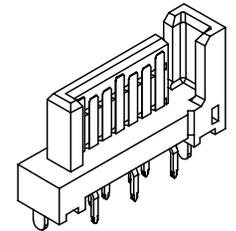
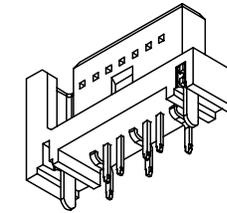
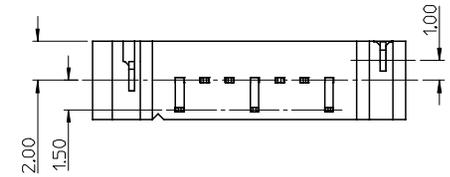
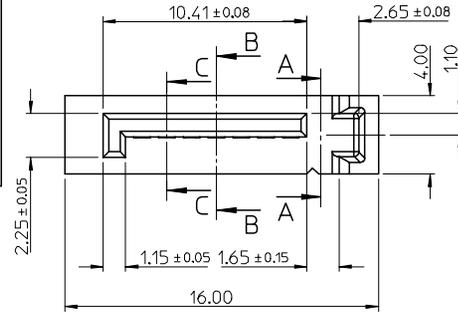
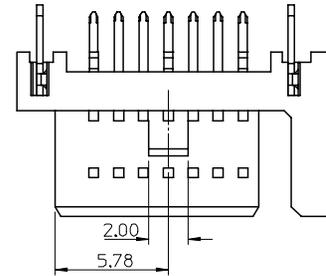
SD-67491-002

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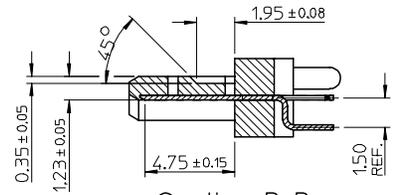
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|---|------------|-------------------------|------|------|---------------|-----------------|
|   | P/N        | CONTACT PLATING TYPE    | "A"  | "B"  | PCB THICKNESS | SOLDERING PLATE |
| F | 67491-0030 | GOLD FLASH              | 2.05 | 2.40 | 1.60          | TIN-LEAD        |
|   | 67491-0031 | 0.76 MICRON GOLD PLATED |      |      |               |                 |
|   | 67491-0032 | 0.38 MICRON GOLD PLATED |      |      |               |                 |
| E | 67491-0035 | GOLD FLASH              | 2.35 | 2.40 | 2.00          |                 |
|   | 67491-0036 | 0.76 MICRON GOLD PLATED |      |      |               |                 |
|   | 67491-0037 | 0.38 MICRON GOLD PLATED |      |      |               |                 |
| D | 67491-0038 | GOLD FLASH              | 3.00 | 3.20 | 2.40          |                 |
|   | 67491-0039 | 0.76 MICRON GOLD PLATED |      |      |               |                 |
|   | 67491-0040 | 0.38 MICRON GOLD PLATED |      |      |               |                 |
| C | 67491-1030 | GOLD FLASH              | 2.05 | 2.40 | 1.60          | PURE TIN        |
|   | 67491-1031 | 0.76 MICRON GOLD PLATED |      |      |               |                 |
|   | 67491-1032 | 0.38 MICRON GOLD PLATED |      |      |               |                 |
| B | 67491-1035 | GOLD FLASH              | 2.35 | 2.40 | 2.00          |                 |
|   | 67491-1036 | 0.76 MICRON GOLD PLATED |      |      |               |                 |
|   | 67491-1037 | 0.38 MICRON GOLD PLATED |      |      |               |                 |
| A | 67491-1038 | GOLD FLASH              | 3.00 | 3.20 | 2.40          |                 |
|   | 67491-1039 | 0.76 MICRON GOLD PLATED |      |      |               |                 |
|   | 67491-1040 | 0.38 MICRON GOLD PLATED |      |      |               |                 |

- NOTES:
- MATERIAL :  
HOUSING: THERMAL PLASTIC, UL94V-0, COLOR: BLACK  
TERMINAL/PEG: COPPER ALLOY
  - TERMINAL PLATING :  
CONTACT AREA:  
GOLD PLATED  
SOLDER TAIL:  
1.27 MOICRON MIN. TIN-LEAD OR TIN PLATED  
UNDER PLATE:  
1.27 MOICRON MIN. NICKEL PLATED
  - PEG PLATING:  
1.27 MOICRON MIN. TIN-LEAD OR TIN PLATED  
OVERALL 1.27 MOICRON MIN. TNICKEL UNDER PLATED
  - PACKAGING SPECIFICATION REFER TO PK-67491-001
  - PRODUCT SPECIFICATION REFER TO PS-67491-001
  - MATING PART: 67489
  - RECOMMENDED PROCESS: WAVE SOLDERING

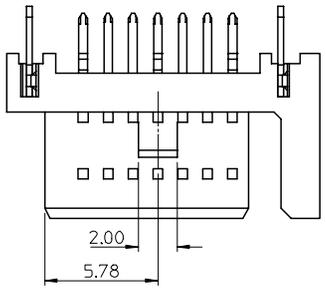


RECOMMENDED P.C.B. LAYOUT t=1.6mm OR 2.0mm

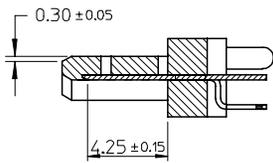
| EC NO: SH2005-0049<br>DRWN:GRMA 2004/09/03<br>CHKD:GRATE M&004/09/07<br>APPR: YTYAP 2004/09/10                                | QUALITY SYMBOLS<br>▽ - 0<br>▽ - 0 | GENERAL TOLERANCES (UNLESS SPECIFIED)  | SCALE 4:1          | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | REVISE ON CAD ONLY        |                  |       |          |       |       |          |        |       |         |        |       |              |  |  |                         |       |
|---|-----------------------------------|--|--------------------|---------------------|------------------------|---------------------------|------------------|-------|----------|-------|-------|----------|--------|-------|---------|--------|-------|--------------|--|--|-------------------------|-------|
|   |                                   | <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.15</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.25</td> <td>± ---</td> </tr> <tr> <td colspan="3">ANGULAR ± 3°</td> </tr> </tbody> </table> |                    | mm                  | INCH                   | 4 PLACES                  | ± ---            | ± --- | 3 PLACES | ± --- | ± --- | 2 PLACES | ± 0.15 | ± --- | 1 PLACE | ± 0.25 | ± --- | ANGULAR ± 3° |  |  | DIMENSION STYLE MM ONLY | TITLE |
|   | mm                                | INCH   |                    |                     |                        |                           |                  |       |          |       |       |          |        |       |         |        |       |              |  |  |                         |       |
| 4 PLACES  | ± ---                             | ± ---  |                    |                     |                        |                           |                  |       |          |       |       |          |        |       |         |        |       |              |  |  |                         |       |
| 3 PLACES  | ± ---                             | ± ---  |                    |                     |                        |                           |                  |       |          |       |       |          |        |       |         |        |       |              |  |  |                         |       |
| 2 PLACES  | ± 0.15                            | ± ---  |                    |                     |                        |                           |                  |       |          |       |       |          |        |       |         |        |       |              |  |  |                         |       |
| 1 PLACE   | ± 0.25                            | ± ---  |                    |                     |                        |                           |                  |       |          |       |       |          |        |       |         |        |       |              |  |  |                         |       |
| ANGULAR ± 3°  |                                   |  |                    |                     |                        |                           |                  |       |          |       |       |          |        |       |         |        |       |              |  |  |                         |       |
| C   | REV                               | DRAFT WHERE APPLICABLE   | DRAWN BY RICHARD   | DATE '01/06/21      | MOLEX INCORPORATED     |                           |                  |       |          |       |       |          |        |       |         |        |       |              |  |  |                         |       |
|   |                                   | MUST REMAIN WITHIN DIMENSIONS  | CHECKED BY VINCENT | DATE '01/06/21      | MATERIAL NO. SEE TABLE | DOCUMENT NO. SD-67491-002 | SHEET NO. 1 OF 1 |       |          |       |       |          |        |       |         |        |       |              |  |  |                         |       |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                   |  | APPROVED BY ERIC   | DATE '01/06/21      | A3                     |                           |                  |       |          |       |       |          |        |       |         |        |       |              |  |  |                         |       |



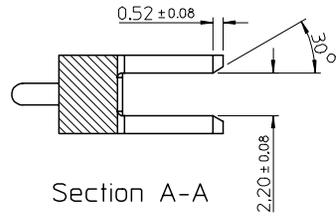
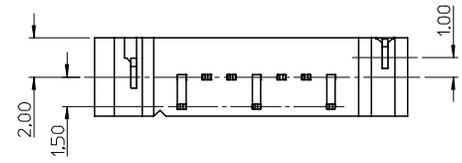
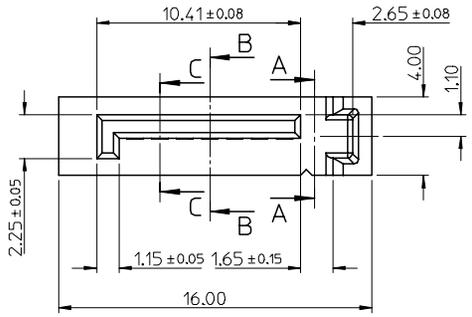
Section B-B



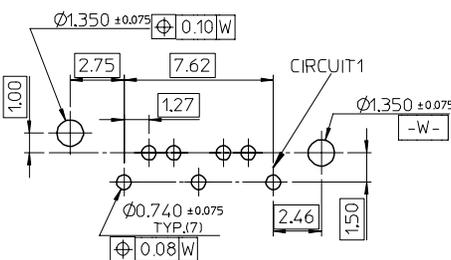
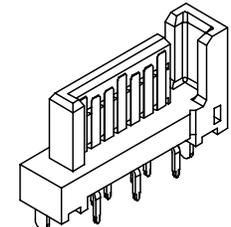
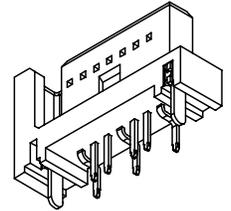
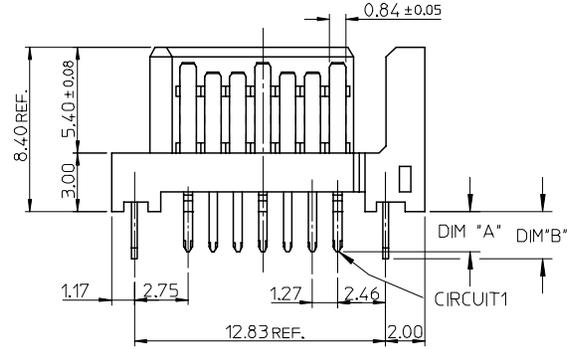
- NOTES:
- MATERIAL:
    - HOUSING: SEE TABLE, UL94V-0, COLOR: BLACK OR BULE (SEE P/N TABLE)
    - TERMINAL/PEG: COPPER ALLOY
  - TERMINAL PLATING :
    - CONTACT AREA: GOLD PLATED
    - SOLDER TAIL: 1.27 MICRON MIN. TIN PLATED
    - UNDER PLATE: 1.27 MICRON MIN. NICKEL PLATED
  - PEG PLATING:
    - 1.27 MICRON MIN. TIN PLATED
    - OVERALL 1.27 MICRON MIN. NICKEL UNDER PLATED
  - PACKAGING SPECIFICATION REFER TO PK-67491-001
  - PRODUCT SPECIFICATION REFER TO PS-67491-001
  - MATING PART: 67489
  - RECOMMENDED PROCESS: WAVE SOLDERING
  - PRODUCT COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV DIRECTIVE 2000/53/EC"



Section C-C



Section A-A



RECOMMENDED P.C.B. LAYOUT t=1.6mm OR 2.0mm

|   |                               |  |                      |                            |                      |                       |                        |  |                   |                              |                     |
|---|-------------------------------|--|----------------------|----------------------------|----------------------|-----------------------|------------------------|--|-------------------|------------------------------|---------------------|
| ADD PART NUMBER<br>EC NO: SH2007-0134<br>DRWN: BCHENZ6<br>CHKD: JTIAN<br>APPR: JNCHEN | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)                |                      | DIMENSION STYLE<br>MM ONLY |                      | SCALE<br>4:1          | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION                               |                   |                              |                     |
|   |                               | 4 PLACES ± --- ± ---                                 | 3 PLACES ± --- ± --- | 2 PLACES ± 0.15 ± ---      | 1 PLACE ± 0.25 ± --- | ANGLUAR ± 3 °         |                        | TITLE<br>1.27MM HIGH SPEED SERIAL PLUG VERTICAL TYPE |                   |                              |                     |
|   |                               | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |                      |                            |                      | DRAWN BY<br>RICHARD   | DATE<br>'01/06/21      | MOLEX INCORPORATED                                   |                   |                              |                     |
|   |                               | SEE SHEET 2  |                      |                            |                      | CHECKED BY<br>VINCENT | DATE<br>'01/06/21      | APPROVED BY<br>ERIC                                  | DATE<br>'01/06/21 | DOCUMENT NO.<br>SD-67491-002 | SHEET NO.<br>1 OF 2 |

|            | 10                      | 9                       | 8    | 7    | 6             | 5               | 4                                   | 3                                   | 2  | 1 |
|------------|-------------------------|-------------------------|------|------|---------------|-----------------|-------------------------------------|-------------------------------------|----|---|
|            | P/N                     | CONTACT PLATING TYPE    | "A"  | "B"  | PCB THICKNESS | SOLDERING PLATE | COLOR                               | PLASTIC TYPE                        |    |   |
| F          | 67491-1030              | GOLD FLASH              | 2.05 | 2.40 | 1.60          | PURE TIN        | BLACK                               | THERMAL PLASTIC                     | ▽F |   |
|            | 67491-1031              | 0.76 MICRON GOLD PLATED |      |      |               |                 |                                     |                                     |    |   |
|            | 67491-1032              | 0.38 MICRON GOLD PLATED |      |      |               |                 |                                     |                                     |    |   |
| 67491-1035 | GOLD FLASH              |                         |      |      |               |                 |                                     |                                     |    |   |
| 67491-1036 | 0.76 MICRON GOLD PLATED |                         |      |      |               |                 |                                     |                                     |    |   |
| 67491-1037 | 0.38 MICRON GOLD PLATED |                         |      |      |               |                 |                                     |                                     |    |   |
| E          | 67491-1038              | GOLD FLASH              | 3.00 | 3.20 | 2.40          |                 | BLUE<br>PENTONE<br>NO.293C<br>ΔE<3  | THERMAL PLASTIC                     |    |   |
|            | 67491-1039              | 0.76 MICRON GOLD PLATED |      |      |               |                 |                                     |                                     |    |   |
|            | 67491-1040              | 0.38 MICRON GOLD PLATED |      |      |               |                 |                                     |                                     |    |   |
| D          | 67491-2030              | GOLD FLASH              | 2.05 | 2.40 | 1.60          |                 | BLACK                               | HIGH TEMPERATURE<br>THERMAL PLASTIC |    |   |
|            | 67491-2031              | 0.76 MICRON GOLD PLATED |      |      |               |                 |                                     |                                     |    |   |
|            | 67491-2032              | 0.38 MICRON GOLD PLATED |      |      |               |                 |                                     |                                     |    |   |
| C          | 67491-2035              | GOLD FLASH              | 2.35 | 2.40 | 2.00          | BLACK           | HIGH TEMPERATURE<br>THERMAL PLASTIC |                                     |    |   |
|            | 67491-2036              | 0.76 MICRON GOLD PLATED |      |      |               |                 |                                     |                                     |    |   |
|            | 67491-2037              | 0.38 MICRON GOLD PLATED |      |      |               |                 |                                     |                                     |    |   |
| B          | 67491-2038              | GOLD FLASH              | 3.00 | 3.20 | 2.40          | BLACK           | HIGH TEMPERATURE<br>THERMAL PLASTIC |                                     |    |   |
|            | 67491-2039              | 0.76 MICRON GOLD PLATED |      |      |               |                 |                                     |                                     |    |   |
|            | 67491-2040              | 0.38 MICRON GOLD PLATED |      |      |               |                 |                                     |                                     |    |   |
| A          | 67491-1130              | GOLD FLASH              | 2.05 | 2.40 | 1.60          | BLACK           | HIGH TEMPERATURE<br>THERMAL PLASTIC |                                     |    |   |
|            | 67491-1131              | 0.76 MICRON GOLD PLATED |      |      |               |                 |                                     |                                     |    |   |
|            | 67491-1132              | 0.38 MICRON GOLD PLATED |      |      |               |                 |                                     |                                     |    |   |
| A          | 67491-1135              | GOLD FLASH              | 2.35 | 2.40 | 2.00          | BLACK           | HIGH TEMPERATURE<br>THERMAL PLASTIC |                                     |    |   |
|            | 67491-1136              | 0.76 MICRON GOLD PLATED |      |      |               |                 |                                     |                                     |    |   |
|            | 67491-1137              | 0.38 MICRON GOLD PLATED |      |      |               |                 |                                     |                                     |    |   |
| A          | 67491-1138              | GOLD FLASH              | 3.00 | 3.20 | 2.40          | BLACK           | HIGH TEMPERATURE<br>THERMAL PLASTIC |                                     |    |   |
|            | 67491-1139              | 0.76 MICRON GOLD PLATED |      |      |               |                 |                                     |                                     |    |   |
| A          | 67491-1140              | 0.38 MICRON GOLD PLATED |      |      |               |                 |                                     |                                     |    |   |

|  |                                      |  |             |                                   |   |              |  |                        |                     |  |
|--|--------------------------------------|--|-------------|-----------------------------------|---|--------------|--|------------------------|---------------------|--|
| <b>ADD PART NUMBER</b><br>EC NO: SH2007-0134<br>DRWN: B. CHENZ<br>CHKD: J. TIAN<br>APPR: J. CHEN | <b>QUALITY SYMBOLS</b><br>▽=0<br>▽=0 | <b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b> |             | <b>DIMENSION STYLE</b><br>MM ONLY |   | SCALE<br>4:1 | DESIGN UNITS<br>METRIC                               | THIRD ANGLE PROJECTION |                     |  |
|  |                                      |  | mm          | INCH                              | DRAWN BY  | DATE         | TITLE<br>1.27MM HIGH SPEED SERIAL PLUG VERTICAL TYPE |                        |                     |  |
|  |                                      | 4 PLACES                                     | ± ---       | ± ---                             | RICHARD   | '01/06/21    |  |                        |                     |  |
|  |                                      | 3 PLACES                                     | ± ---       | ± ---                             | CHECKED BY  | DATE         | Molex MOLEX INCORPORATED                             |                        |                     |  |
| 2 PLACES   | ± 0.15                               | ± ---  | VINCENT     | '01/06/21                         |   |              |  |                        |                     |  |
| 1 PLACE  | ± 0.25                               | ± ---  | APPROVED BY | DATE                              | MATERIAL NO.<br>SEE TABLE   |              | DOCUMENT NO.<br>SD-67491-002                         |                        | SHEET NO.<br>2 OF 2 |  |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS   |                                      |  | SIZE<br>A3  |                                   | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |              |  |                        |                     |  |