

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0678005022

Status:

Active

Overview:

serial\_ata\_products

Description:

1.27mm (.050") Pitch Serial ATA High Speed Header, Vertical, Surface Mount, with Locking Latch, 7 Circuits, 0.76µm (30µ") Gold (Au) Plating, for 2.40mm (.094") PCB, with PCB Locator Pegs, Lead-free

Documents:

3D Model

Drawing (PDF)

RoHS Certificate of Compliance (PDF)

Agency Certification

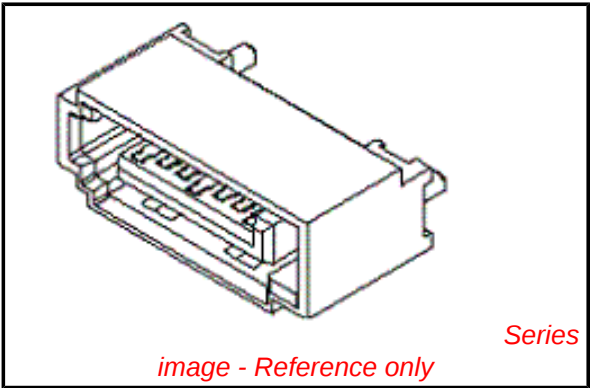
|     |          |
|-----|----------|
| CSA | LR 19980 |
| UL  | E29179   |

General

|                |                                                       |
|----------------|-------------------------------------------------------|
| Product Family | PCB Headers                                           |
| Series         | 67800                                                 |
| Application    | Board-to-Board, Wire-to-Board                         |
| Comments       | Staggered Solder Pin Metal Post Length 3.45mm (.136") |
| Overview       | serial_ata_products                                   |
| Product Name   | Serial ATA                                            |

Physical

|                                |                                |
|--------------------------------|--------------------------------|
| Breakaway                      | No                             |
| Circuits (Loaded)              | 7                              |
| Circuits (maximum)             | 7                              |
| Color - Resin                  | Black                          |
| Durability (mating cycles max) | 50                             |
| First Mate / Last Break        | Yes                            |
| Flammability                   | 94V-0                          |
| Glow-Wire Compliant            | No                             |
| Guide to Mating Part           | No                             |
| Keying to Mating Part          | Yes                            |
| Lock to Mating Part            | Yes                            |
| Material - Metal               | Brass                          |
| Material - Plating Mating      | Gold                           |
| Material - Plating Termination | Tin                            |
| Material - Resin               | High Temperature Thermoplastic |
| Number of Rows                 | 1                              |
| Orientation                    | Vertical                       |
| PCB Locator                    | Yes                            |
| PCB Retention                  | Yes                            |
| 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)      | 30                             |
| Plating min: Mating (µm)       | 0.76                           |
| Plating min: Termination (µin) | 75                             |
| Plating min: Termination (µm)  | 1.9                            |
| Polarized to Mating Part       | Yes                            |
| Polarized to PCB               | Yes                            |
| Shrouded                       | Fully                          |
| Stackable                      | No                             |



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](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

67800Series

Temperature Range - Operating  
Termination Interface: Style

-35°C to +85°C  
Surface Mount

Electrical

Current - Maximum per Contact  
Voltage - Maximum

1.5A  
15V DC

Solder Process Data

Lead-free Process Capability

Reflow Capable (SMT only)

Material Info

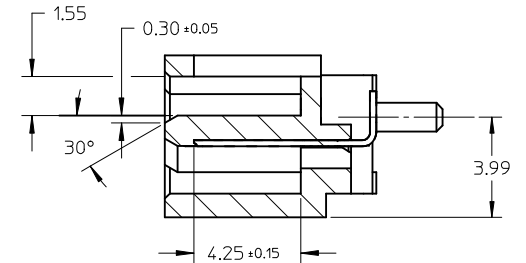
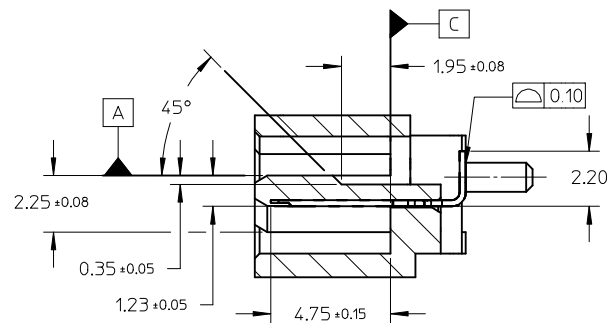
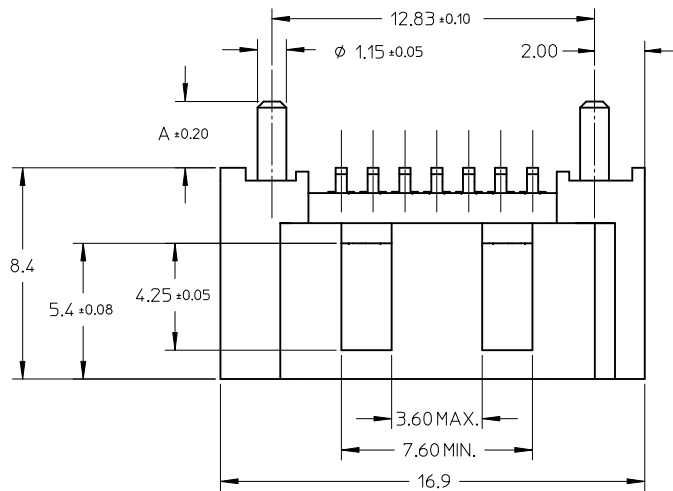
Reference - Drawing Numbers

Packaging Specification  
Sales Drawing

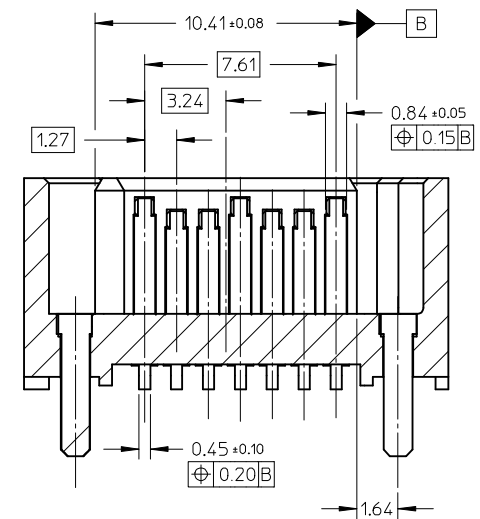
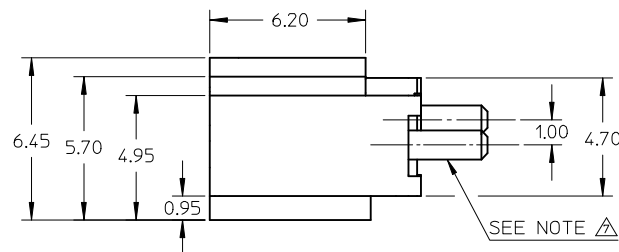
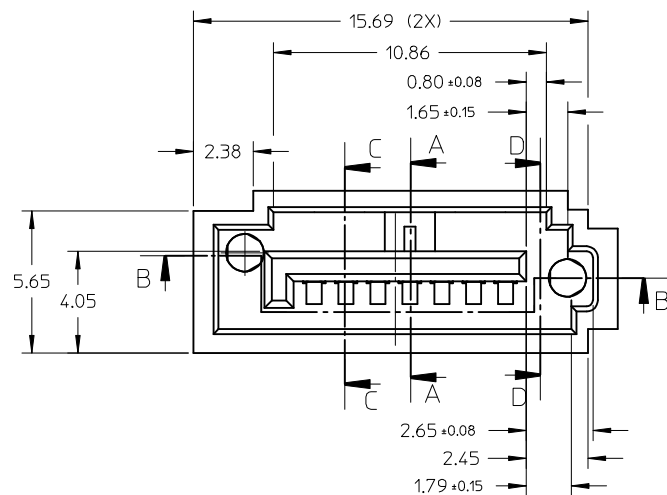
PK-67800-001  
SD-67800-005

This document was generated on 05/26/2010

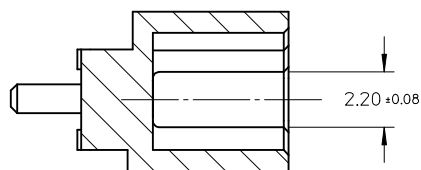
PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION



SECTION C-C



SECTION B-B



SECTION D-D

|                                                                                                                               |                    |                                                                                    |             |                                                                                                                                                                                    |                                                                                                          |                     |                            |                    |                                                                           |                        |                        |  |
|-------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|---------------------|----------------------------|--------------------|---------------------------------------------------------------------------|------------------------|------------------------|--|
| REVISED                                                                                                                       | EC NO: SH2010-0043 | 2009/08/07<br>DRAWN:GLLI<br>2009/08/10<br>CHK'D:XJONG<br>2009/09/13<br>APPR:RZHANG | DESCRIPTION | QUALITY SYMBOLS                                                                                                                                                                    | GENERAL TOLERANCES (UNLESS SPECIFIED)                                                                    |                     | DIMENSION STYLE<br>MM ONLY |                    | SCALE<br>5:1                                                              | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION |  |
|                                                                                                                               |                    |                                                                                    |             |  =0<br> =0 |                                                                                                          |                     | DRAWN BY<br>GRATE MA       | DATE<br>2004/02/02 | TITLE<br>HIGH SPEED CONNECTOR<br>1.27MM PITCH VERTICAL<br>SMT SOLDER TAIL |                        |                        |  |
|                                                                                                                               |                    |                                                                                    |             |                                                                                                                                                                                    | 4 PLACES                                                                                                 | ± ---               | ± ---                      | CHECKED BY         |                                                                           | DATE                   |                        |  |
|                                                                                                                               |                    |                                                                                    |             |                                                                                                                                                                                    | 3 PLACES                                                                                                 | ± ---               | ± ---                      | YAJUN              |                                                                           | 2004/02/02             |                        |  |
|                                                                                                                               |                    |                                                                                    |             |                                                                                                                                                                                    | 2 PLACES                                                                                                 | ± 0.15              | ± ---                      | APPROVED BY        |                                                                           | DATE                   |                        |  |
| 1 PLACE                                                                                                                       | ± 0.25             | ± ---                                                                              | SAM         | 2004/02/02                                                                                                                                                                         |  MOLEX INCORPORATED |                     |                            |                    |                                                                           |                        |                        |  |
| ANGULAR ± 1 °                                                                                                                 |                    | MATERIAL NO.                                                                       |             | DOCUMENT NO.                                                                                                                                                                       |                                                                                                          | SHEET NO.<br>1 OF 2 |                            |                    |                                                                           |                        |                        |  |
|                                                                                                                               |                    |                                                                                    | REV         | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                                                                                                                         | SEE SHEET 2                                                                                              |                     | SD-67800-005               |                    |                                                                           |                        |                        |  |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                    |                                                                                    |             |                                                                                                                                                                                    |                                                                                                          |                     |                            |                    |                                                                           |                        |                        |  |

1. MATERIAL:

TERMINAL: BRASS

POST: BRASS

## 2. TERMINAL PLATING:

CONTACT AREA: (a) GOLD FLASH

(b) GOLD, THICKNESS=0.76 MICRON MINIMUM

(C) GOLD, THICKNESS=0.38 MICRON MINIMUM

SOLDER TAIL: TIN, THICKNESS=1.27 MICRON MINIMUM

UNDER PLATE: NICKEL PLATED, THICKNESS=1.27 MICRON MINIMUM

3. POST PLATING: UNDER PLATE: NICKEL, THICKNESS=1.25 MICRON MINIMUM

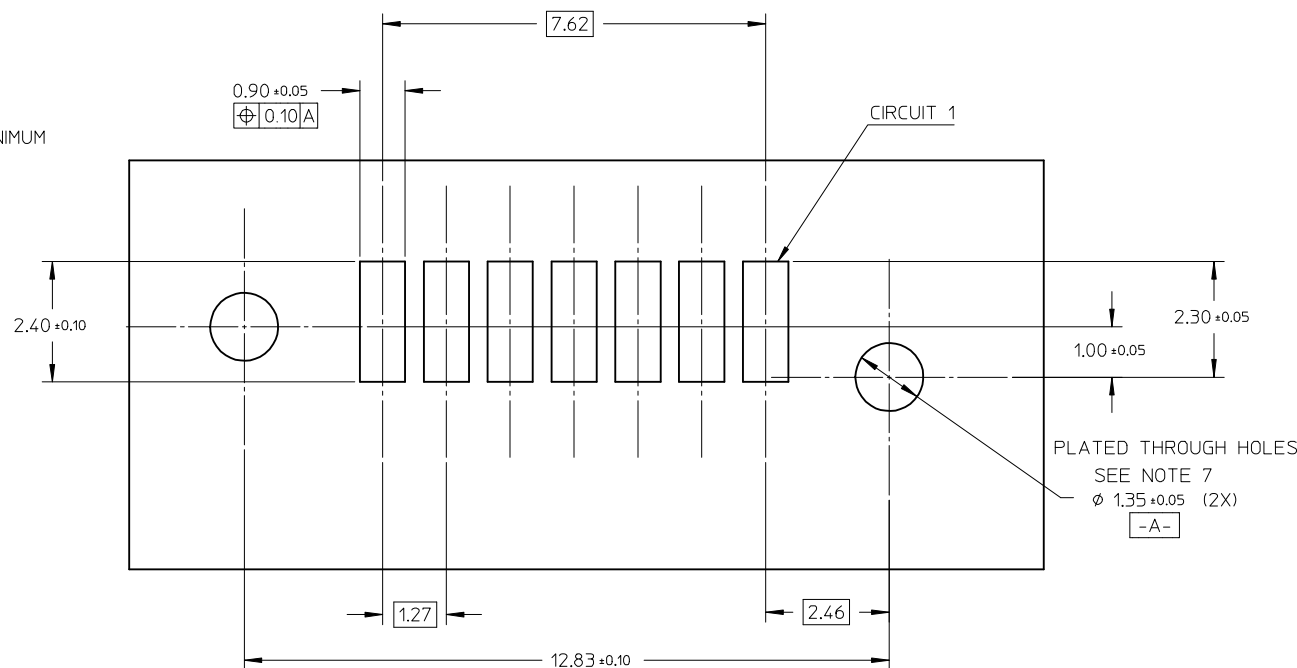
TIN, THICKNESS=1.9 MICRON MINIMUM OVER ALL

4. PACKAGING: PK-67800-001

5. PRODUCT SPECIFICATION REFER TO PS-67491-001

## 6. RECOMMENDED SOLDERING PROCESS: IR PROCESS

△ METAL POSTS TO BE SOLDERED TO PCB



RECOMMENDED P.C.B LAYOUT

---

---

CONNECTOR SIDE

|             |              |                  |       |          |
|-------------|--------------|------------------|-------|----------|
| 678005025   | SEE NOTE2(c) | BLACK            | 3.45  | PURE TIN |
| 678005022   | SEE NOTE2(b) |                  |       |          |
| 678005021   | SEE NOTE2(a) |                  |       |          |
| 678005015   | SEE NOTE2(c) | BLACK            | 3.05  |          |
| 678005012   | SEE NOTE2(b) |                  |       |          |
| 678005011   | SEE NOTE2(a) |                  |       |          |
| 678005005   | SEE NOTE2(c) | BLACK            | 2.65  |          |
| 678005004   | SEE NOTE2(c) | YELLOW           |       |          |
| 678005003   | SEE NOTE2(c) | BLUE             |       |          |
| 678005002   | SEE NOTE2(b) | BLACK            |       |          |
| 678005001   | SEE NOTE2(a) |                  |       |          |
| MATERIAL NO | PLATING TYPE | HOUSING<br>COLOR | DIM A |          |

|         |                    |            |             |                                       |                                                            |       |                                                                                                                               |             |                                                                               |                             |                           |  |
|---------|--------------------|------------|-------------|---------------------------------------|------------------------------------------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------|-----------------------------|---------------------------|--|
| REVISED | EC NO: SH2010-0043 | 2009/08/07 | DESCRIPTION | QUALITY SYMBOLS<br><br>▽=0<br><br>C=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)                      |       | DIMENSION STYLE<br>MM ONLY                                                                                                    |             | SCALE<br>5:1                                                                  | DESIGN UNITS<br>METRIC      | THIRD ANGLE<br>PROJECTION |  |
|         | DRWN:GLLI          | 2009/08/10 |             |                                       | mm                                                         | INCH  | DRAWN BY                                                                                                                      | DATE        | TITLE<br><br>HIGH SPEED CONNECTOR<br>1.27MM PITCH VERTICAL<br>SMT SOLDER TAIL |                             |                           |  |
|         | CHKD:XJSUNG        | 2009/09/13 |             |                                       | 4 PLACES                                                   | ±---  | ±---                                                                                                                          | GRATE MA    |                                                                               | 2004/02/02                  |                           |  |
|         | APPR:RZHANG        |            |             |                                       | 3 PLACES                                                   | ±---  | ±---                                                                                                                          | CHECKED BY  |                                                                               | DATE                        |                           |  |
|         |                    |            |             |                                       | 2 PLACES                                                   | ±0.15 | ±---                                                                                                                          | YA JUN      |                                                                               | 2004/02/02                  |                           |  |
|         |                    |            |             |                                       | 1 PLACE                                                    | ±0.25 | ±---                                                                                                                          | APPROVED BY | DATE                                                                          | MOLEX<br>MOLEX INCORPORATED |                           |  |
|         |                    |            |             |                                       | ANGULAR ± 1 °                                              |       | SAM                                                                                                                           | 2004/02/02  |                                                                               |                             |                           |  |
|         |                    |            |             |                                       | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |       | MATERIAL NO.                                                                                                                  |             | DOCUMENT NO.                                                                  |                             | SHEET NO.                 |  |
|         |                    |            |             |                                       |                                                            |       | SEE CHART                                                                                                                     |             | SD-67800-005                                                                  |                             | 2 OF 2                    |  |
|         |                    |            |             |                                       |                                                            |       | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |             |                                                                               |                             |                           |  |