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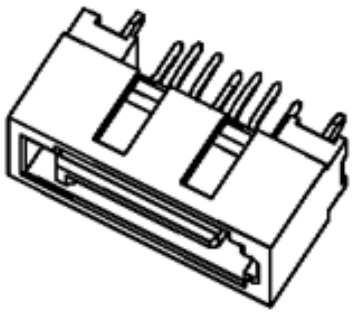
# PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

**Part Number:** 0678008235
**Status:** Active
**Overview:** serial_ata_products
**Description:** 1.27mm (.050") Pitch Serial ATA High Speed Header, Vertical, Through Hole, with Locking Latch, 7 Circuits, 0.38µm (15µ") Gold (Au) Plating, for 1.60mm (.063") PCB, High Temperature, Blue, Footprint A, with PCB Locator Tabs, Lead-free



*Series image - Reference only*

**Documents:**
3D Model
Drawing (PDF)
RoHS Certificate of Compliance (PDF)

## Agency Certification

| | |
|---|---|
| CSA | LR 19980 |

## General

| | |
|---|---|
| Product Family | PCB Headers |
| Series | 67800 |
| Application | Board-to-Board, Wire-to-Board |
| Comments | In-line Solder Pin\|Footprint A |
| Overview | serial_ata_products |
| Product Name | Serial ATA |

## Physical

| | |
|---|---|
| Breakaway | No |
| Circuits (Loaded) | 7 |
| Circuits (maximum) | 7 |
| Color - Resin | Blue |
| 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 |
| Number of Rows | 1 |
| Orientation | Vertical |
| PC Tail Length (in) | 0.083 In |
| PC Tail Length (mm) | 2.10 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) | 0.050 In |
| Pitch - Mating Interface (mm) | 1.27 mm |
| Pitch - Term. Interface (in) | 0.050 In |
| Pitch - Term. Interface (mm) | 1.27 mm |
| Polarized to Mating Part | Yes |
| Shrouded | Fully |
| Stackable | No |
| Surface Mount Compatible (SMC) | Yes |
| Temperature Range - Operating | -55°C to +85°C |
| Termination Interface: Style | Through Hole |

**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**
67800Series

## Electrical

| | |
|---|---|
| Current - Maximum per Contact | 1.5A |
| Voltage - Maximum | 15V |

## Solder Process Data

| | |
|---|---|
| Duration at Max. Process Temperature (seconds) | 10 |
| Lead-free Process Capability | Reflow Capable (SMT only) |
| Max. Cycles at Max. Process Temperature | 1 |
| Process Temperature max. C | 255 |

## Material Info

## Reference - Drawing Numbers

| | |
|---|---|
| Packaging Specification | PK-67800-003 |
| Sales Drawing | SD-67800-008 |

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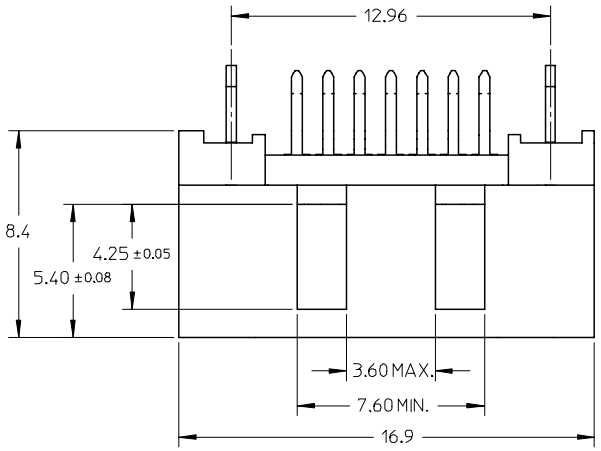
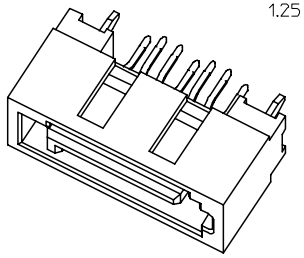
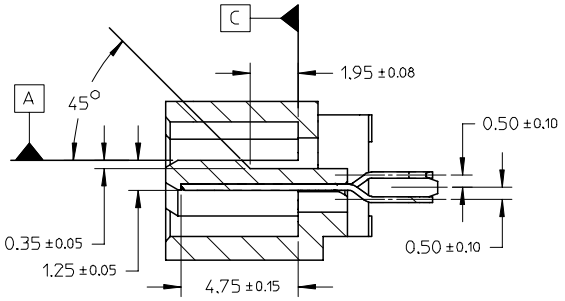
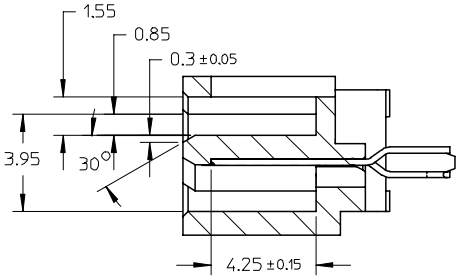


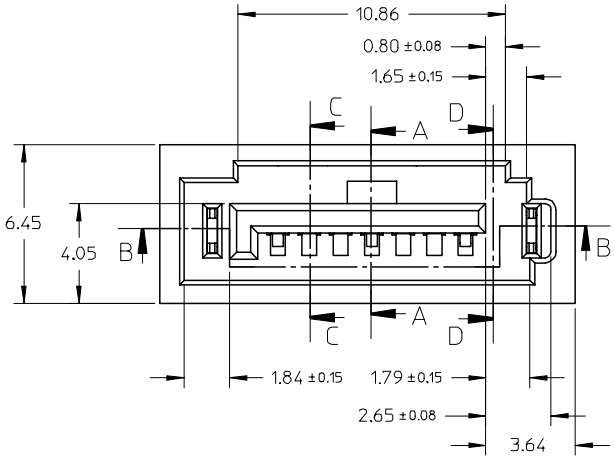



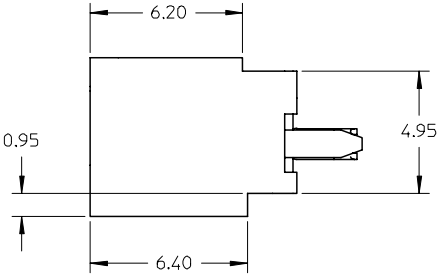


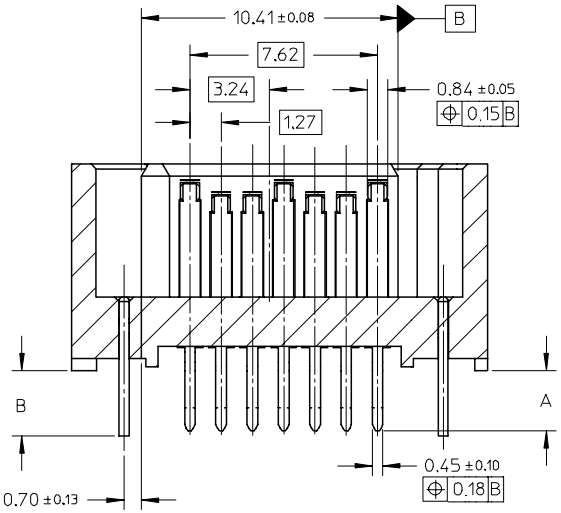

SECTION A-A



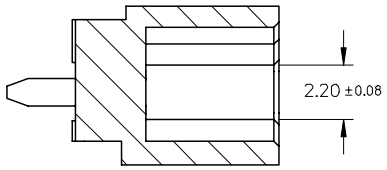

SECTION C-C




SECTION B-B




SECTION D-D

ADD PART NUMBER
EC NO: SH2007-0324 2006/11/06
DRWN:BCHEN26 2006/11/06
CH'KD:JTIAN 2006/11/15
APPR: JNCHEN
DESCRIPTION
REV

QUALITY SYMBOLS
▼=0
▽C=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± 0.15 | ± --- |
| 1 PLACE | ± 0.25 | ± --- |
| ANGULAR ± 1 ° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: 5:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: GRATE DATE: 2004/02/02
CHECKED BY: YAJUN DATE: 2004/02/02
APPROVED BY: SAM DATE: 2004/02/02

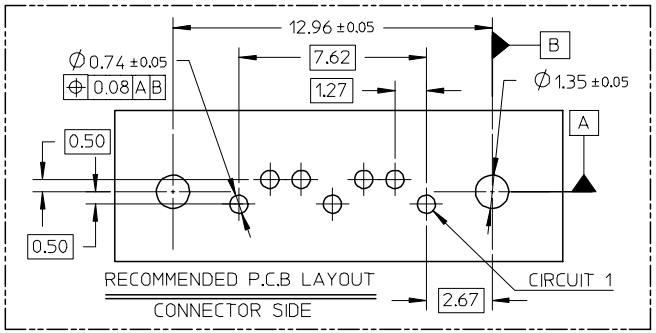
TITLE: HIGH SPEED CONNECTOR 1.27MM PITCH VERTICAL DIP SOLDER TAIL

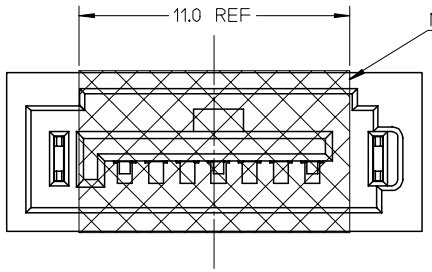
molex MOLEX INCORPORATED

MATERIAL NO.: SEE SHEET2
DOCUMENT NO.: SD-67800-008
SHEET NO.: 1 OF 2

SIZE A3

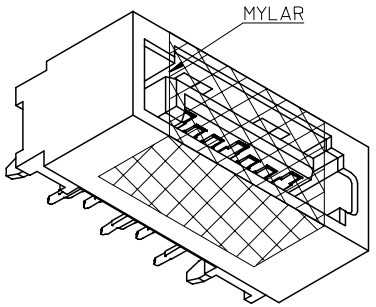
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION




SCHEMATIC DRAWING OF MYLAR
ONLY FOR 678008205
(SCALE 5:1)

NOTES:
1. MATERIAL:
   HOUSING/COLOR: SEE CHART, GLASS FILLED, UL94V-0,
   TERMINAL/PEG: 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 PLATED 1.27 MICRON MINIMUM OVER
   NICKEL PLATED 1.27 MICRON MINIMUM
3. POST PLATING: TIN PLATED 1.27 MICRON MINIMUM OVER
   NICKEL PLATED 1.8 MICRON MINIMUM
4. PACKAGING:
   FOR 678008205: TAPE & REEL, REFER TO PK-67800-003
   FOR OTHER P/N: TRAY, REFER TO PK-67800-001
5. PRODUCT SPECIFICATION REFER TO PS-67491-001
6. RECOMMENDED SOLDERING PROCESS:
   THERMAL PLASTIC FOR WAVE SOLDEING PROCESS
   HIGH TEMPERATURE THERMAL PLASTIC FOR IR SOLDERING PROCESS
7. THE MYLAR STICKED ON THE HOUSING IS JUST USED FOR
   PICK-UP PLACE, PLEASE REMOVE IT AFTER REFLOW




| MATERIAL NUMBER | PLATING TYPE | DIM A | DIM B | P.C.B THICKNESS | PLASTIC TYPE | PLASTIC COLOR | REMARK |
|---|---|---|---|---|---|---|---|
| 678008065 | SEE NOTE2(c) | 3.25 | 3.45 | 2.40+/-0.05 | THERMAL PLASTIC | NATURE COLOR | PURE TIN |
| 678008062 | SEE NOTE2(b) | | | | | | |
| 678008061 | SEE NOTE2(a) | | | | | | |
| 678008055 | SEE NOTE2(c) | 2.85 | 3.05 | 2.00+/-0.05 | | | |
| 678008052 | SEE NOTE2(b) | | | | | | |
| 678008051 | SEE NOTE2(a) | | | | | | |
| 678008245 | SEE NOTE2(c) | 2.10 | 2.65 | 1.60+/-0.05 | | | |
| 678008045 | SEE NOTE2(c) | 2.45 | | | | | |
| 678008042 | SEE NOTE2(b) | | | | | | |
| 678008041 | SEE NOTE2(a) | | | | | | |
| 678008085 | SEE NOTE2(c) | 3.25 | 3.45 | 2.40+/-0.05 | THERMAL PLASTIC | PROCESS BLUE C ΔE<3 | |
| 678008082 | SEE NOTE2(b) | | | | | | |
| 678008081 | SEE NOTE2(a) | | | | | | |
| 678008075 | SEE NOTE2(c) | 2.85 | 3.05 | 2.00+/-0.05 | | | |
| 678008072 | SEE NOTE2(b) | | | | | | |
| 678008071 | SEE NOTE2(a) | | | | | | |
| 678008235 | SEE NOTE2(c) | 2.10 | 2.65 | 1.60+/-0.05 | | | |
| 678008035 | SEE NOTE2(c) | 2.45 | | | | | |
| 678008032 | SEE NOTE2(b) | | | | | | |
| 678008031 | SEE NOTE2(a) | | | | | | |
| 678008025 | SEE NOTE2(c) | 3.25 | 3.45 | 2.40+/-0.05 | THERMAL PLASTIC | BLACK | |
| 678008022 | SEE NOTE2(b) | | | | | | |
| 678008021 | SEE NOTE2(a) | | | | | | |
| 678008015 | SEE NOTE2(c) | 2.85 | 3.05 | 2.00+/-0.05 | | | |
| 678008012 | SEE NOTE2(b) | | | | | | |
| 678008011 | SEE NOTE2(a) | | | | | | |
| 678008305 | SEE NOTE2(c) | 2.10 | 2.65 | 1.60+/-0.05 | | | |
| 678008005 | SEE NOTE2(c) | 2.45 | | | | | |
| 678008002 | SEE NOTE2(b) | | | | | | |
| 678008001 | SEE NOTE2(a) | | | | | | |

| MATERIAL NUMBER | PLATING TYPE | DIM A | DIM B | P.C.B THICKNESS | PLASTIC TYPE | PLASTIC COLOR | REMARK |
|---|---|---|---|---|---|---|---|
| 678008125 | SEE NOTE2(c) | 3.25 | 3.45 | 2.40+/-0.05 | HIGH TEMPERATURE THERMAL PLASTIC | BLACK | PURE TIN |
| 678008122 | SEE NOTE2(b) | | | | | | |
| 678008121 | SEE NOTE2(a) | | | | | | |
| 678008115 | SEE NOTE2(c) | 2.85 | 3.05 | 2.00+/-0.05 | | | |
| 678008112 | SEE NOTE2(b) | | | | | | |
| 678008111 | SEE NOTE2(a) | | | | | | |
| 678008205 | SEE NOTE2(c) | 2.45 | 2.65 | 1.60+/-0.05 | | | |
| 678008105 | SEE NOTE2(c) | | | | | | |
| 678008102 | SEE NOTE2(b) | | | | | | |
| 678008101 | SEE NOTE2(a) | | | | | | |

ADD PART NUMBER
EC NO: SH2007-0324 2006/11/06
DRWN:BCHEN26 2006/11/06
CH'KD:JTIAN 2006/11/15
APPR: JNCHEN
DESCRIPTION
REV

QUALITY SYMBOLS
▼=0
Ⓒ▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± 0.15 | ± --- |
| 1 PLACE | ± 0.25 | ± --- |
| ANGULAR ± 1 ° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

| | | DATE |
|---|---|---|
| DRAWN BY | GRATE | 2004/02/02 |
| CHECKED BY | YAJUN | 2004/02/02 |
| APPROVED BY | SAM | 2004/02/02 |

TITLE: HIGH SPEED CONNECTOR
1.27MM PITCH VERTICAL
DIP SOLDER TAIL

molex MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-67800-008
SHEET NO.: 2 OF 2
SIZE: A3

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