

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

**Part Number:** [0678005005](#)  
**Status:** **Active**  
**Overview:** [serial\\_ata\\_products](#)  
**Description:** 1.27mm (.050") Pitch Serial ATA High Speed Header, Vertical, Surface Mount, with Locking Latch, 7 Circuits, 0.38µm (15µ") Gold (Au) Plating, for 1.60mm (.063") PCB, with PCB Locator Pegs, Lead-free

**Documents:**

[3D Model](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Drawing \(PDF\)](#)

**Agency Certification**

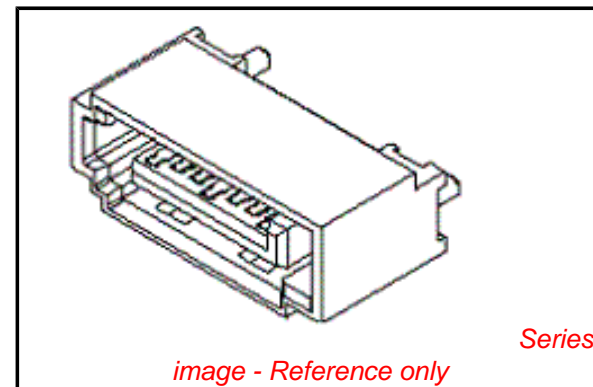
CSA LR 19980  
 UL E29179

**General**

Product Family PCB Headers  
 Series [67800](#)  
 Application Board-to-Board, Wire-to-Board  
 Comments Staggered Solder Pin|Metal Post Length 2.65mm (.104")  
 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) 15  
 Plating min: Mating (µm) 0.38  
 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 Contains SVHC: No**  
**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**  
[67800Series](#)

Temperature Range - Operating -35°C to +85°C  
Termination Interface: Style Surface Mount

**Electrical**

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

**Solder Process Data**

Lead-free Process Capability Reflow Capable (SMT only)

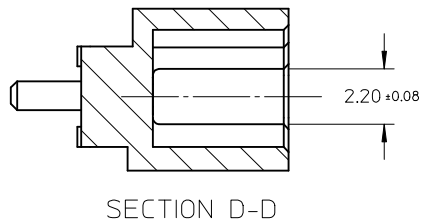
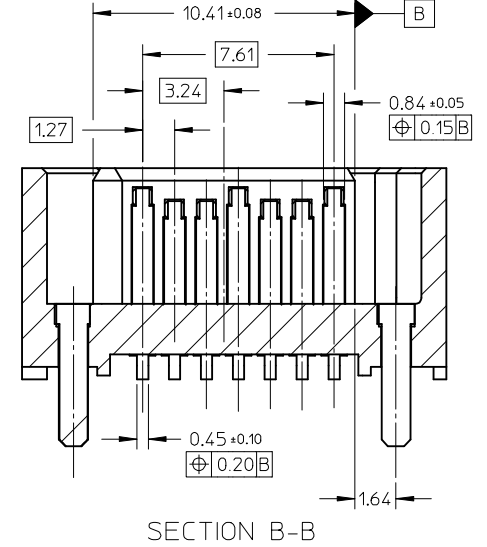
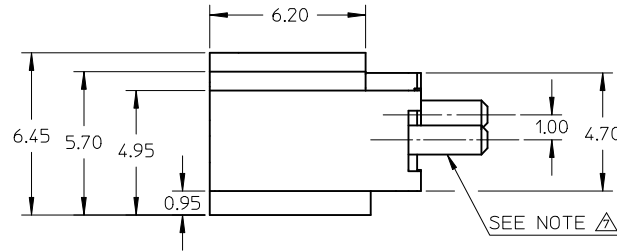
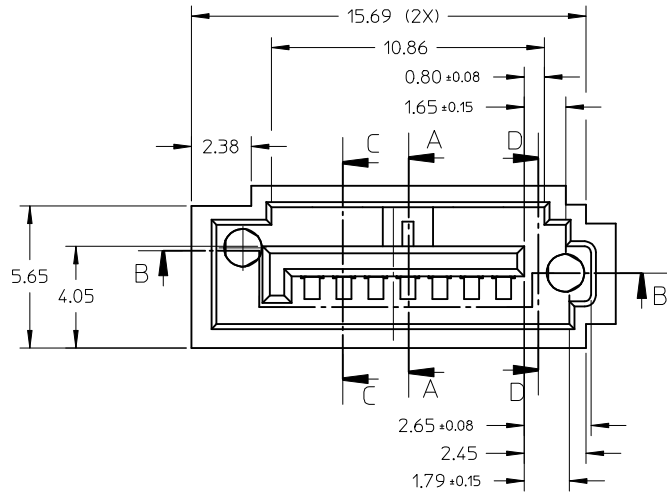
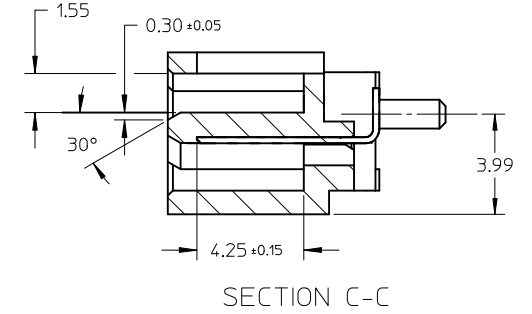
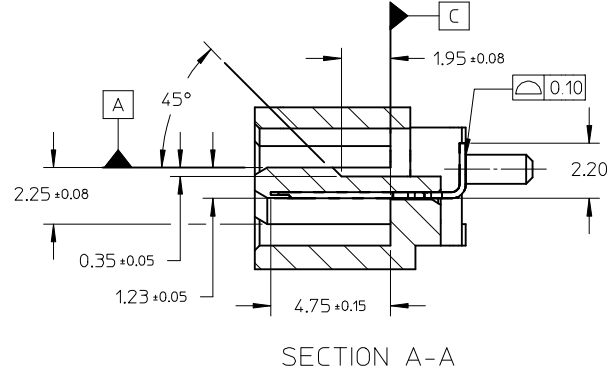
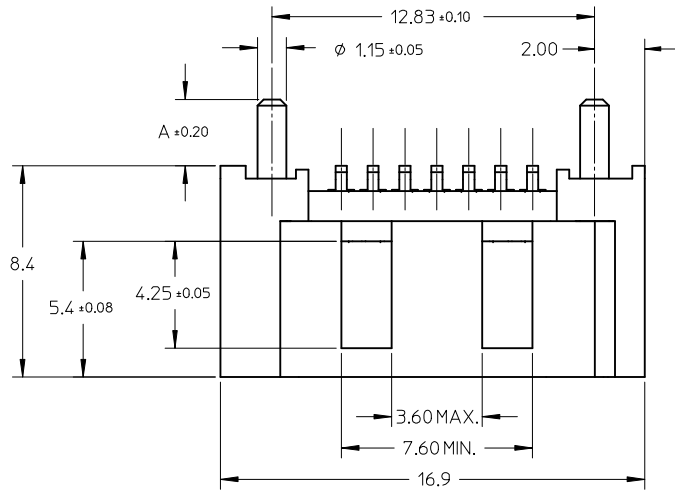
**Material Info**

**Reference - Drawing Numbers**

Packaging Specification PK-67800-001  
Sales Drawing SD-67800-005

This document was generated on 06/02/2010

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<b>REVISED</b> EC NO: SH2010-0043 TDRW:GLL 2009/08/07 CHKD:XJSONG 2009/08/10 APPR:RZHANG 2009/09/13	QUALITY SYMBOLS ▽=0 C=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>		SCALE <b>5:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± ---	mm INCH	DRAWN BY GRATE MA	DATE 2004/02/02	TITLE <b>HIGH SPEED CONNECTOR          1.27MM PITCH VERTICAL          SMT SOLDER TAIL</b>			
		3 PLACES ± --- ± ---		CHECKED BY YA JUN	DATE 2004/02/02	MOLEX INCORPORATED			
		2 PLACES ± 0.15 ± --- 1 PLACE ± 0.25 ± --- ANGULAR ± 1°		APPROVED BY SAM	DATE 2004/02/02	MATERIAL NO. <b>SEE SHEET 2</b>	DOCUMENT NO. <b>SD-67800-005</b>	SHEET NO. <b>1 OF 2</b>	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE <b>A3</b>		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

NOTES:

1. MATERIAL:

HOUSING: HIGH TEMPERATURE THERMAL PLASTIC, GLASS FILLED,  
UL94V-0, COLOR: REFER TO CHART.

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

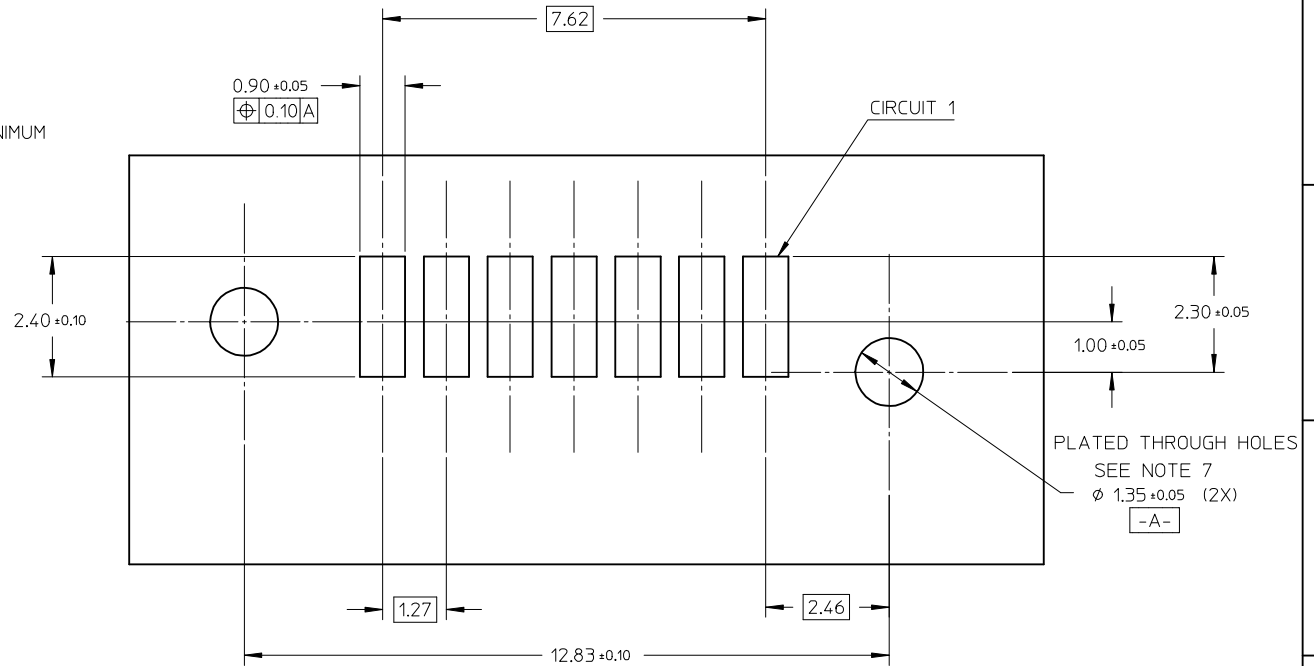
TIN, THICKNESS=1.9 MICRON MINIMUM OVER ALL

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)	BLACK	2.65	
678005005	SEE NOTE2(c)			
678005004	SEE NOTE2(c)			
678005003	SEE NOTE2(c)	BLUE	2.65	
678005002	SEE NOTE2(b)	BLACK		
678005001	SEE NOTE2(a)			
MATERIAL NO	PLATING TYPE	HOUSING COLOR	DIM A	REMARK

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1 PLACE	± 0.25	± ---	APPROVED BY	DATE						
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