

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

**Part Number:** [0678005004](#)  
**Status:** **Active**  
**Overview:** serial\_ata\_products  
**Description:** PURE TIN 1.27MM PITCH VERTICLE SMT

**Documents:**

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

**Agency Certification**

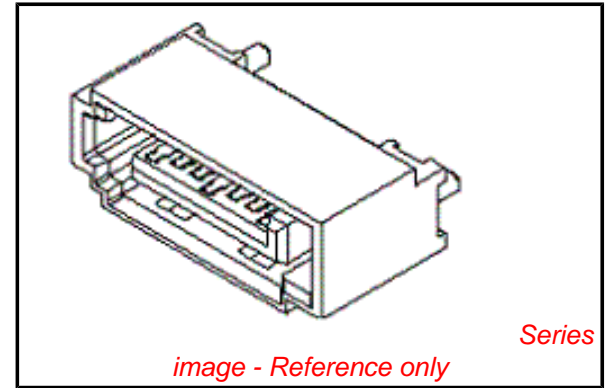
CSA LR 19980  
 UL E29179

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



**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**  
[67800Series](#)

**Electrical**

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

**Solder Process Data**

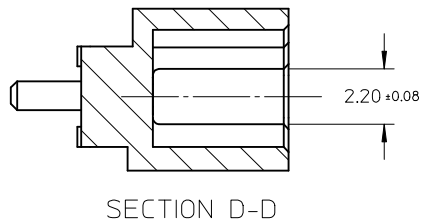
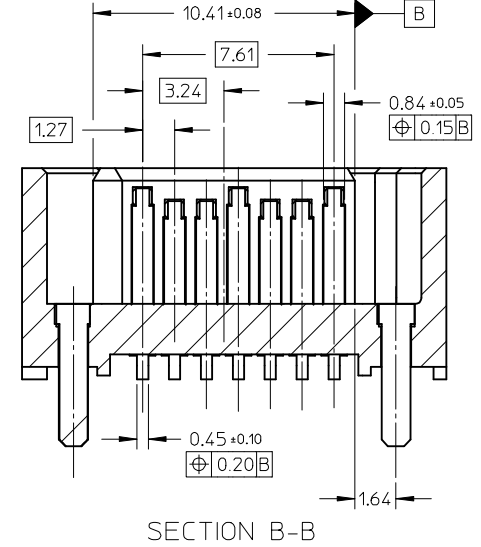
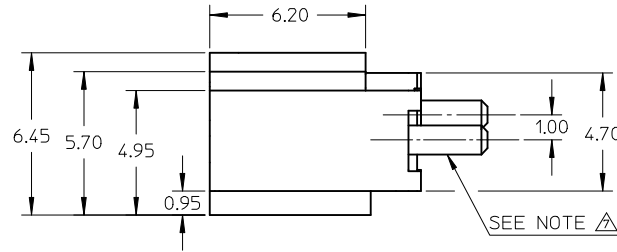
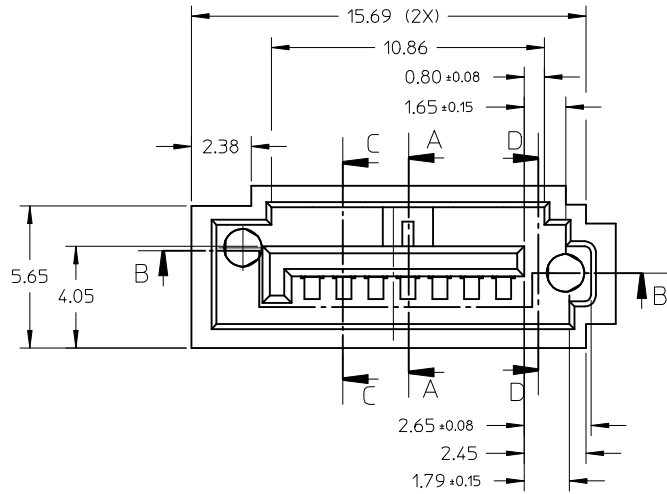
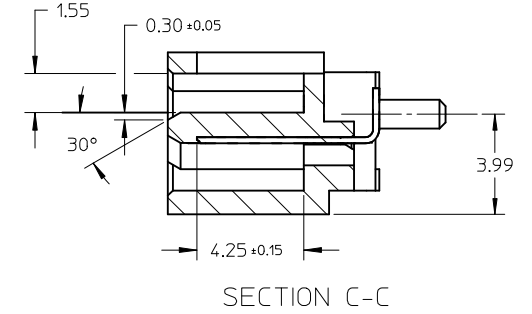
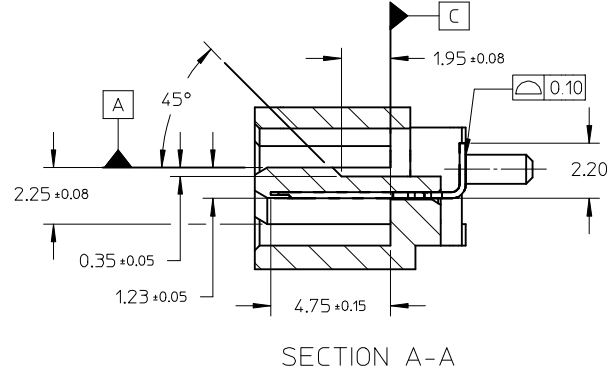
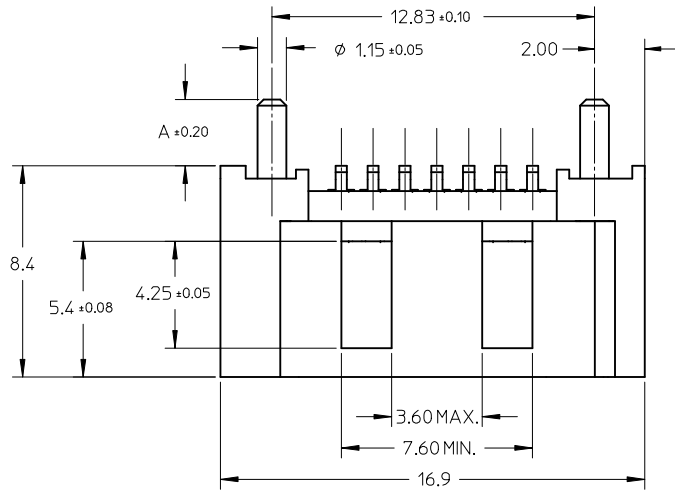
Duration at Max. Process Temperature (seconds)	3
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	255

**Material Info****Reference - Drawing Numbers**

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

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REVISED EC NO: SH2010-0043 DRAWING: 2009/08/07 CHKD: XJSONG 2009/08/10 APPR: RZHANG 2009/09/13	QUALITY SYMBOLS ▽=0 C=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		mm	INCH	DRAWN BY GRATE MA	DATE 2004/02/02	TITLE HIGH SPEED CONNECTOR 1.27MM PITCH VERTICAL SMT SOLDER TAIL			
		4 PLACES ± ---	± ---	CHECKED BY YA JUN	DATE 2004/02/02	MOLEX INCORPORATED			
		3 PLACES ± ---	± ---	APPROVED BY SAM	DATE 2004/02/02				
2 PLACES ± 0.15	± ---	ANGULAR ± 1°		MATERIAL NO.	DOCUMENT NO.	SHEET NO.			
1 PLACE ± 0.25	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 2	SD-67800-005			1 OF 2	
		SIZE A3	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

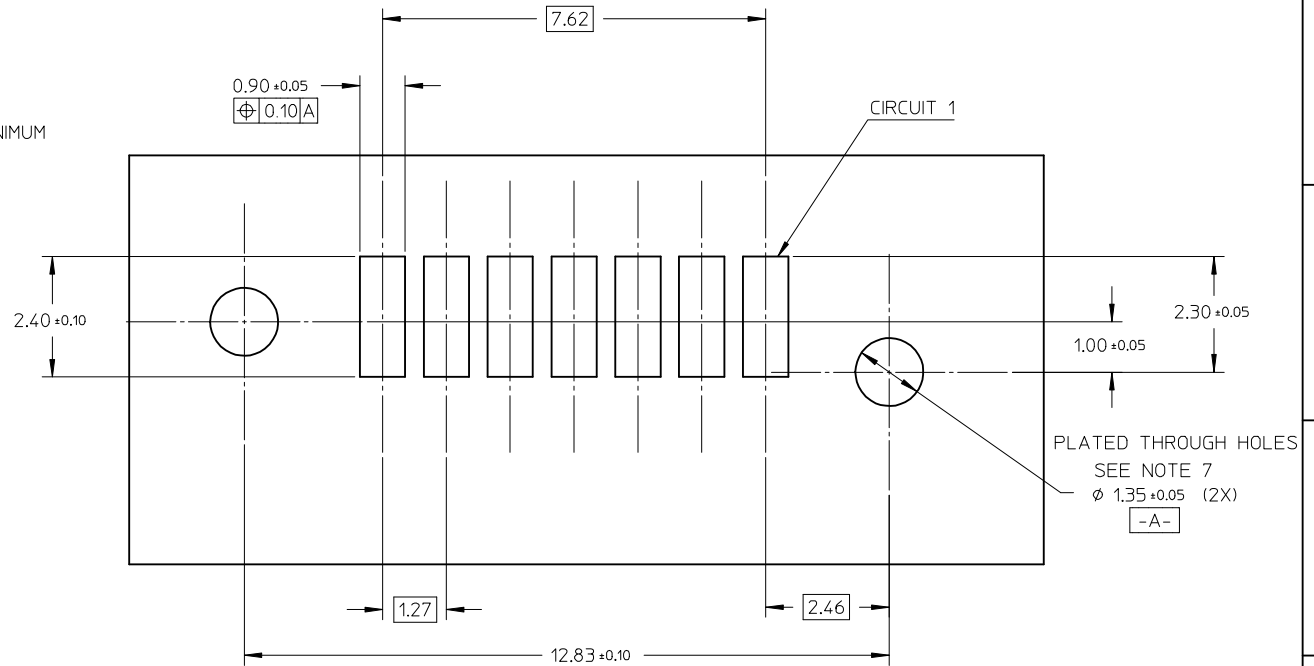
TIN, THICKNESS=1.9 MICRON MINIMUM OVER ALL

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

<b>REVISED</b> EC NO: SH2010-0043 2009/08/07 TIDRWINGLLI CHKD:XJSONG APPR:RZHANG 2009/08/10 2009/09/13	QUALITY SYMBOLS ▽=0 ◻=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 ± --- ± ---	3 PLACES ± --- ± ---	mm	INCH	DRAWN BY GRATE MA	DATE 2004/02/02	TITLE <b>HIGH SPEED CONNECTOR 1.27MM PITCH VERTICAL SMT SOLDER TAIL</b>			
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		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				APPROVED BY SAM	DATE 2004/02/02	MATERIAL NO. <b>SEE CHART</b>	DOCUMENT NO. <b>SD-67800-005</b>	SHEET NO. <b>2 OF 2</b>	

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