

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

**Part Number:** [0678008121](#)  
**Status:** **Active**  
**Overview:** [serial\\_ata\\_products](#)  
**Description:** 1.27mm (.050") Pitch Serial ATA High Speed Header, Vertical, Through Hole, with Locking Latch, 7 Circuits, Gold (Au) Flash, for 2.40mm (.094") PCB, High Temperature, Black, Footprint A, with PCB Locator Tabs, Lead-free

**Documents:**

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

**Agency Certification**

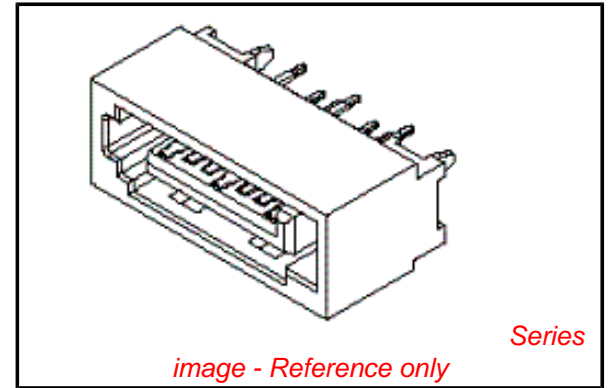
CSA LR19980  
 UL E29179

**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 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  
 PC Tail Length (in) 0.128 In  
 PC Tail Length (mm) 3.25 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) 76  
 Plating min: Termination (µm) 1.9



**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](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](#)

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

**Electrical**

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

**Solder Process Data**

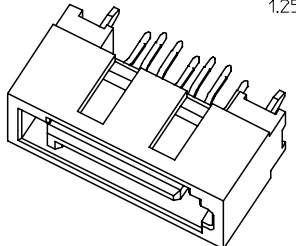
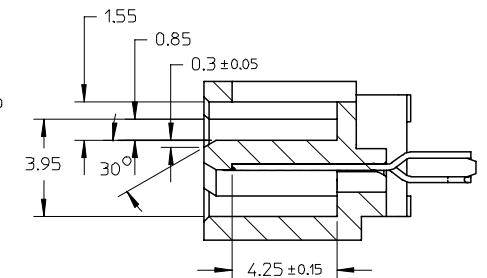
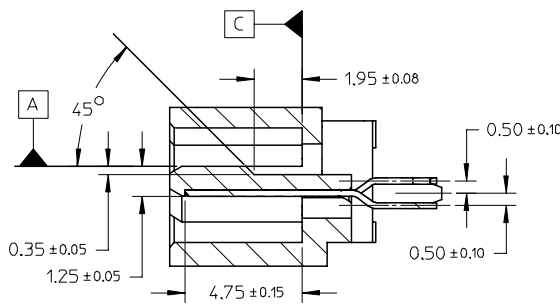
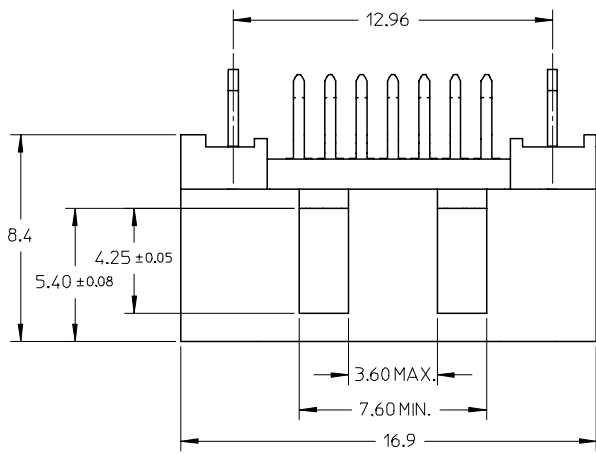
Lead-free Process Capability	SMC & Wave Capable (TH only)
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**Material Info****Reference - Drawing Numbers**

Packaging Specification	PK-67800-001
Sales Drawing	SD-67800-008

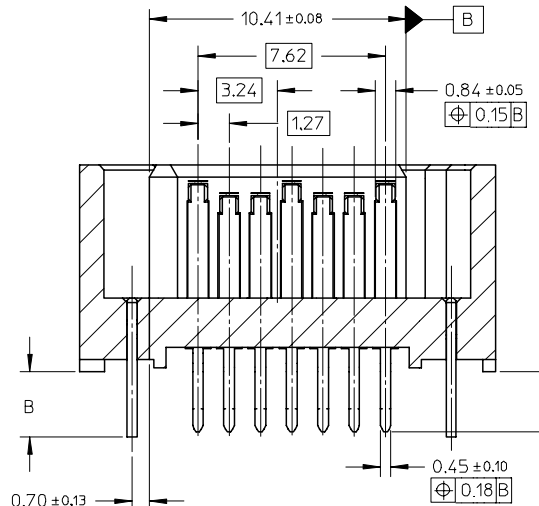
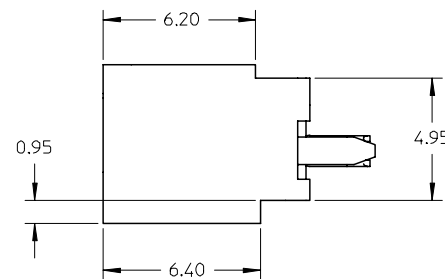
This document was generated on 05/26/2010

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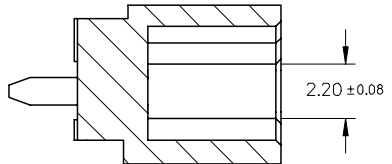
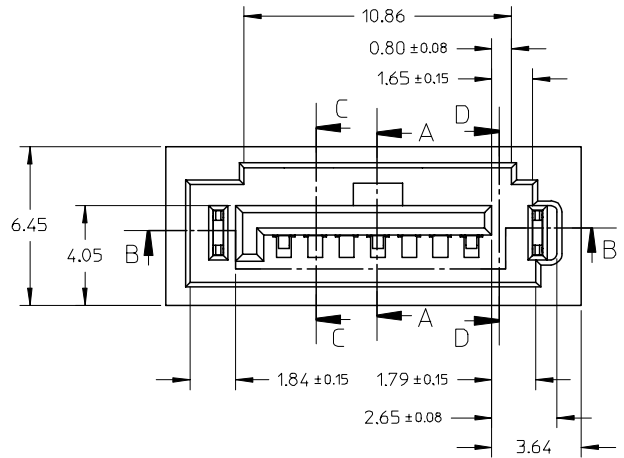


SECTION A-A

SECTION C-C



SECTION B-B



SECTION D-D

ADD PART NUMBER EC NO: SH2007-0324 DRWN: BCHENZ6 CHKD: JTIAN APPR: JNCHEN	DESCRIPTION REV
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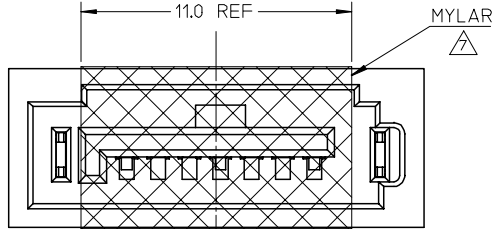
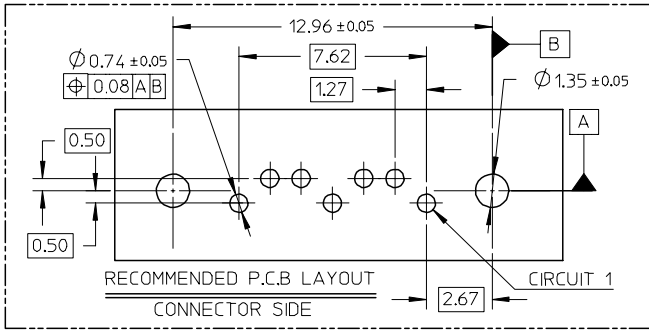
QUALITY SYMBOLS	▽=0
	∇=0

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	
DRAWN BY	DATE
GRATE	2004/02/02
CHECKED BY	DATE
YA JUN	2004/02/02
APPROVED BY	DATE
SAM	2004/02/02
MATERIAL NO.	
SEE SHEET 2	

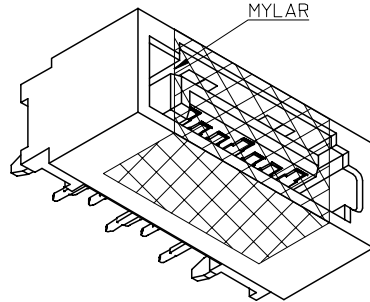
SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
TITLE HIGH SPEED CONNECTOR 1.27MM PITCH VERTICAL DIP SOLDER TAIL		
MOLEX INCORPORATED		
DOCUMENT NO. SD-67800-008	SHEET NO. 1 OF 2	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

10 9 8 7 6 5 4 3 2 1



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

- NOTES:
- MATERIAL:  
HOUSING/COLOR: SEE CHART, GLASS FILLED, UL94V-0,  
TERMINAL/PEG: BRASS
  - 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
  - POST PLATING: TIN PLATED 1.27 MICRON MINIMUM OVER  
NICKEL PLATED 1.8 MICRON MINIMUM
  - PACKAGING:  
FOR 678008205: TAPE & REEL, REFER TO PK-67800-003  
FOR OTHER P/N: TRAY, REFER TO PK-67800-001
  - PRODUCT SPECIFICATION REFER TO PS-67491-001
  - 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



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



QUALITY SYMBOLS  
 ▽=0  
 ▽C=0

ADD PART NUMBER  
 EC NO: SH2007-0324  
 DRWN: BCHENZ6  
 CHKD: JTIAN  
 APPR: JNCHEN

2006/11/06  
 2006/11/06  
 2006/11/15

DESCRIPTION  
 REV

GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
PLACES	TOLERANCE	MM	INCH	1:1	METRIC		
4 PLACES	± ---	± ---	± ---				
3 PLACES	± ---	± ---	± ---				
2 PLACES	± 0.15	± ---	± ---				
1 PLACE	± 0.25	± ---	± ---				
		ANGULAR ± 1 °					

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

DRAWN BY	DATE	TITLE
GRATE	2004/02/02	HIGH SPEED CONNECTOR 1.27MM PITCH VERTICAL DIP SOLDER TAIL
CHECKED BY	DATE	
YA JUN	2004/02/02	
APPROVED BY	DATE	
SAM	2004/02/02	
MATERIAL NO.	DOCUMENT NO.	SHEET NO.
SEE CHART	SD-67800-008	2 OF 2
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