

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

**Part Number:** [0876822001](#)  
**Status:** **Active**  
**Overview:** [extreme\\_powerplus\\_ssi](#)  
**Description:** 6.35mm (.250") Pitch EXTreme PowerPlus™ Header, All Power, Press fit, Right Angle, 2 Circuits, Lead-free

**Documents:**

[3D Model](#) [Product Specification PS-87680-006 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

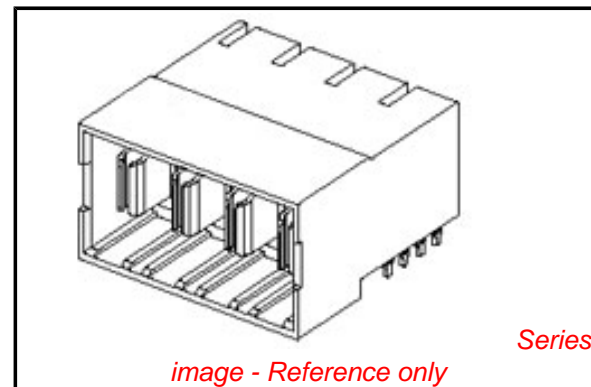
CSA LR19980  
 UL E29179

**General**

Product Family PCB Headers  
 Series [87682](#)  
 Application Board-to-Board  
 Overview [extreme\\_powerplus\\_ssi](#)  
 Product Name EXTreme PowerPlus™

**Physical**

Breakaway No  
 Circuits (Loaded) 2  
 Circuits (maximum) 2  
 Circuits Detail All Power  
 Color - Resin Black  
 Durability (mating cycles max) 100  
 First Mate / Last Break No  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Guide to Mating Part No  
 Keying to Mating Part N/A  
 Lock to Mating Part Yes  
 Material - Metal Copper Alloy  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 1  
 Orientation Right Angle  
 PC Tail Length (in) 0.135 In  
 PC Tail Length (mm) 3.43 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) 0.250 In  
 Pitch - Mating Interface (mm) 6.35 mm  
 Plating min: Mating (µin) 30  
 Plating min: Mating (µm) 0.76  
 Plating min: Termination (µin) 101.6  
 Plating min: Termination (µm) 2.54  
 Polarized to Mating Part Yes  
 Polarized to PCB No  
 Shrouded Fully



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC**  
 Not Reviewed  
**Halogen-Free Status**

**China RoHS**



**Halogen-Free**

**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**

[87682Series](#)

**Mates With**

[87691](#) EXTreme PowerPlus™ all Power Receptacle

Stackable	No
Surface Mount Compatible (SMC)	N/A
Temperature Range - Operating	-20°C to +70°C
Termination Interface: Style	Through Hole - Compliant Pin

**Electrical**

Current - Maximum per Contact	30A
Voltage - Maximum	50V DC

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

Application Specification	AS-87631-018, AS-87682-009
Product Specification	PS-87680-006
Sales Drawing	SD-87682-011

This document was generated on 05/25/2010

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

10 9 8 7 6 5 4 3 2 1

F

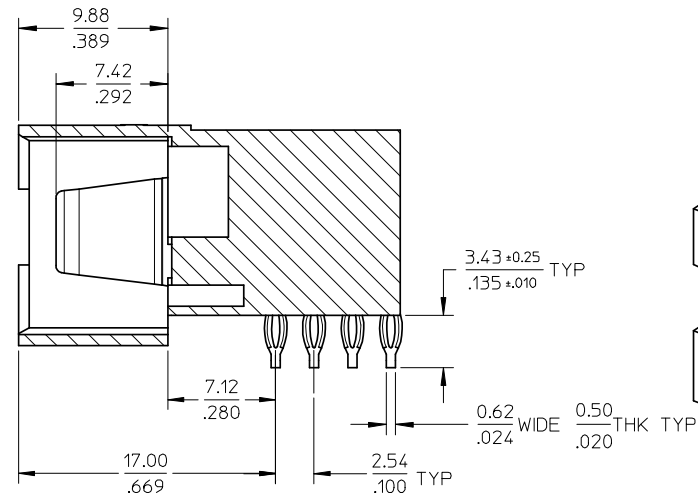
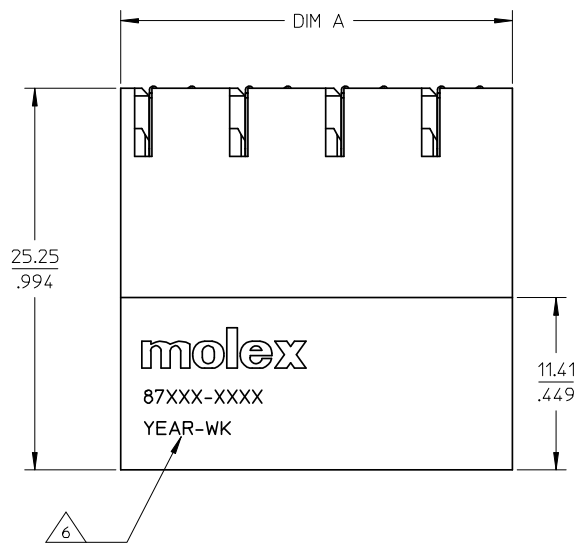
E

D

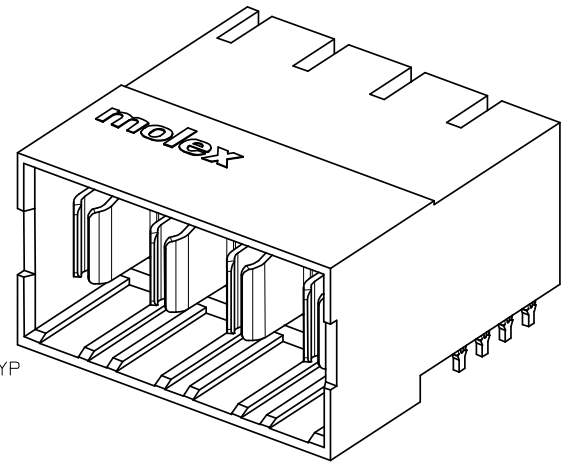
C

B

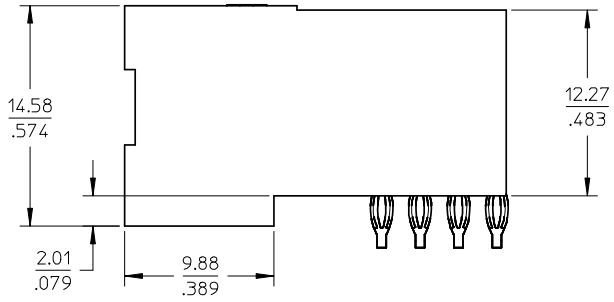
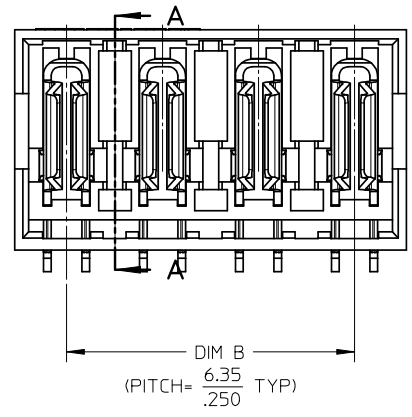
A



SECTION A-A



ISOMETRIC VIEW

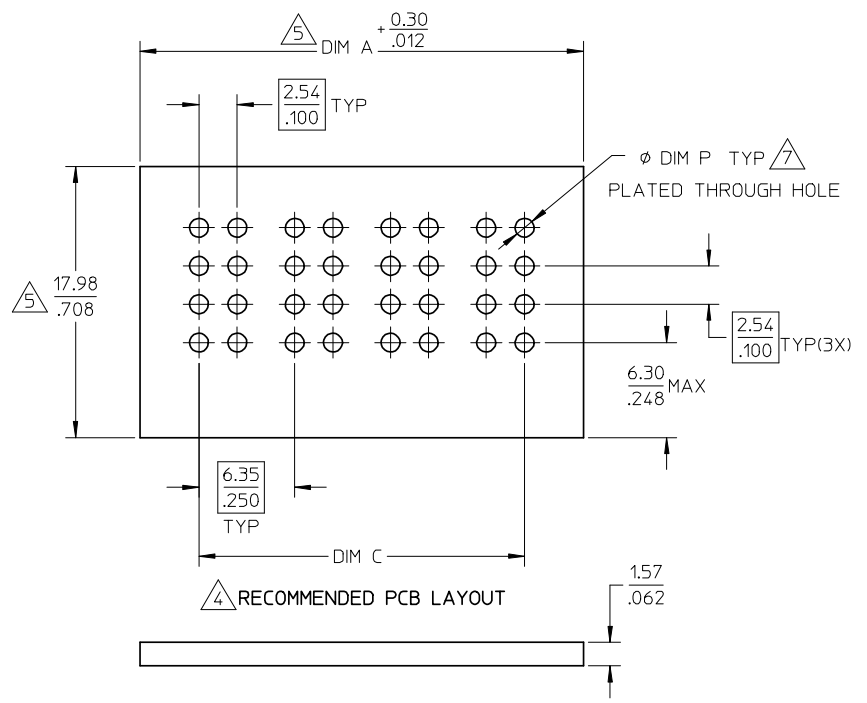


REVISED OSP HOLE SIZE EC NO: S2008-0551 DRWN:SKANG 2007/12/19 CHYK:ATSEE 2007/12/19 APPR:MLONG 2007/12/19 D1	QUALITY SYMBOLS ▽=0 Ⓢ=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	DIMENSION STYLE MM/IN DRAWN BY DATE BHOW 2002/11/27 CHECKED BY DATE PTL IM 2002/12/03 APPROVED BY DATE SKTOH 2002/12/03 MATERIAL NO.	SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION	TITLE HEADER, POWER CONN ALL BLADES POWER CONFIG. PRESS-FIT, R/A MOLEX INCORPORATED DOCUMENT NO. SD-87682-011	SHEET NO. 1 OF 2
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
	SIZE A3					

9 8 7 6 5 4 3 2 1

10	9	8	7	6	5	4	3	2	1	
PART NUMBER	NO OF POWER PINS	DIM A	DIM B	DIM C	PACKAGING	PLATING OPTION (SOLDERTAIL)		△7 TYPE OF PCB		
87682-0001	2	$\frac{13.20}{.520}$	$\frac{6.35}{.250}$	$\frac{8.89}{.350}$	TRAY	TIN/LEAD		TIN/LEAD OR TIN	OSP	
87682-0003	4	$\frac{25.90}{1.020}$	$\frac{19.05}{.750}$	$\frac{21.59}{.850}$	TRAY			DRILLED HOLE SIZE	1.40mm/.055in	1.33mm/.052in
87682-2001	2	$\frac{13.20}{.520}$	$\frac{6.35}{.250}$	$\frac{8.89}{.350}$	TRAY	TIN		PLATING THICKNESS	0.007mm/.0003in MIN OVER 0.03mm/.001in TO 0.08mm/.003in COPPER	0.25µm/.001in MIN COPPER
87682-2003	4	$\frac{25.90}{1.020}$	$\frac{19.05}{.750}$	$\frac{21.59}{.850}$	TRAY			PLATED HOLE SIZE △7 (DIM P)	$\frac{1.25 \pm 0.08}{.049 \pm .003}$	$\frac{1.25 + 0.025 / - 0.050}{.049 + .001 / - .002}$

△7 TYPE OF PCB	
TIN/LEAD OR TIN	OSP
DRILLED HOLE SIZE	1.40mm/.055in
PLATING THICKNESS	0.007mm/.0003in MIN OVER 0.03mm/.001in TO 0.08mm/.003in COPPER
PLATED HOLE SIZE △7 (DIM P)	$\frac{1.25 \pm 0.08}{.049 \pm .003}$



- NOTES:
- MATERIALS: HOUSING - HIGH TEMPERATURE, THERMO-PLASTIC  
GLASS FILLED, UL94V-0, COLOUR: BLACK  
POWER BLADES - COPPER ALLOY
  - FINISHES: POWER - SELECTIVE GOLD IN CONTACT AREA  
THICKNESS=0.76 µm / 30 µm MINIMUM  
SELECTIVE TIN/LEAD OR TIN IN THE PC TAIL AREA  
THICKNESS= 2.54 µm / 100 µm MINIMUM WITH  
1.27µm MINIMUM NICKEL UNDERPLATE OVERALL.
  - PRODUCT SPECIFICATION: PS-87680-006.  
APPLICATION SPECIFICATION: AS-87682-009.

- △4 SEE SHEET 2 FOR RECOMMENDED PCB LAYOUT.
- △5 COMPONENT STAY AWAY ZONE FROM CONNECTOR.
- △6 MANUFACTURER LOGO, PART NUMBER AND YEAR-WK CODE.
- △7 REFER TO RECOMMENDED PCB TABLE.

REVISED OSP HOLE SIZE EC NO: S2008-0551 DRWN:SKANG 2007/12/19 CHKD:ATSEE 2007/12/19 APPR:MLONG 2007/12/19	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION			
		▽=0 ∇=0	mm	INCH	MM/IN	NTS	METRIC					
			4 PLACES ± --- ± ---	BHLOW	DATE	TITLE						
			3 PLACES ± --- ± .010	CHECKED BY	DATE	HEADER, POWER CONN ALL BLADES POWER CONFIG. PRESS-FIT, R/A						
	2 PLACES ± 0.25 ± ---	PTL IM	DATE	MOLEX INCORPORATED								
	1 PLACE ± --- ± ---	APPROVED BY	DATE	MATERIAL NO. DOCUMENT NO. SHEET NO.								
	ANGULAR ± 3 °	SKTOH	DATE	SEE TABLE SD-87682-011 2 OF 2								
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								