

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

**Part Number:** [0878083001](#)  
**Status:** **Active**  
**Overview:** [extreme\\_powerplus\\_ssi](#)  
**Description:** 5.08mm (.200") Pitch Power, 2.54mm (.100") Pitch Signal, EXTreme PowerPlus™ S-P(B) Receptacle, Through Hole, Right Angle, Beveled Metal Pins, 0.76µm (30µ") Gold(Au) Plating, 22 Circuits, Power Beta 6, Signal 16, No Recessed Power Circuit, Lead-free

**Documents:**

[3D Model](#) [Product Specification PS-87805-006 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

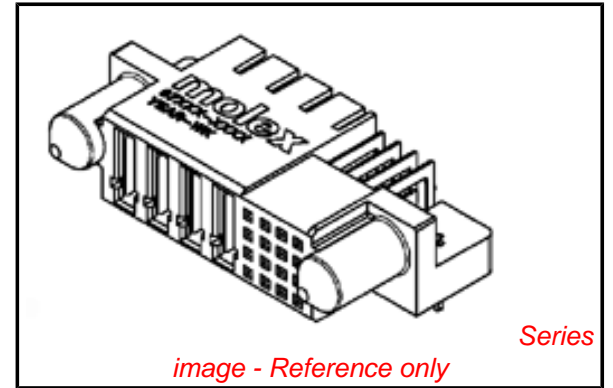
CSA LR19980  
 UL E29179

**General**

Product Family PCB Receptacles  
 Series [87808](#)  
 Application Board-to-Board  
 Comments Recessed Power Circuit Position: NIL  
 Overview [extreme\\_powerplus\\_ssi](#)  
 Product Name EXTreme PowerPlus™

**Physical**

Circuits (Loaded) 22  
 Circuits (maximum) 22  
 Circuits Detail Power Beta 6, Signal 16  
 Color - Resin Black  
 Durability (mating cycles max) 100  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Guide to Mating Part Yes  
 Lock to Mating Part Yes  
 Material - Metal High Performance Alloy (HPA), Phosphor Bronze  
 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) 1.57 mm  
 Packaging Type Tray  
 Pitch - Mating Interface (in) 0.100 In, 0.200 In  
 Pitch - Mating Interface (mm) 2.54 mm, 5.08 mm  
 Pitch - Term. Interface (in) 0.100 In, 0.200 In  
 Pitch - Term. Interface (mm) 2.54 mm, 5.08 mm  
 Plating min: Mating (µin) 30.4  
 Plating min: Mating (µm) 0.76  
 Plating min: Termination (µin) 101.6  
 Plating min: Termination (µm) 2.54  
 Polarized to Mating Part Yes



Series

**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**

[87808Series](#)

**Mates With**

[878072002](#)

Polarized to PCB	Yes
Stackable	No
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-20°C to +105°C
Termination Interface: Style	Through Hole

### **Electrical**

Current - Maximum per Contact	30A
Voltage - Maximum	250V AC (RMS)

### **Solder Process Data**

Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	260

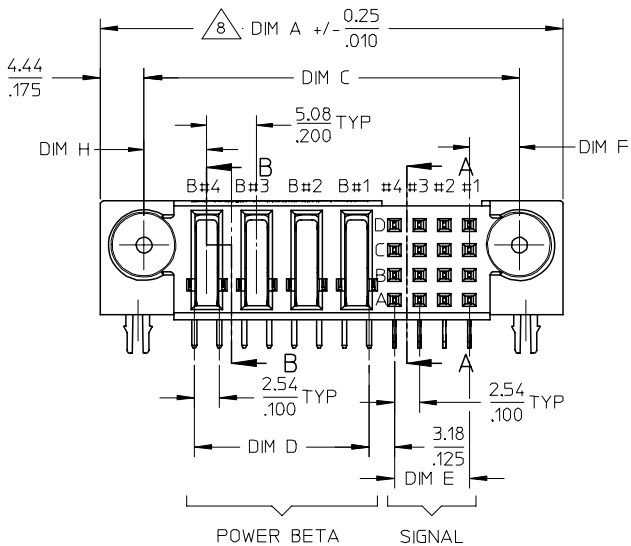
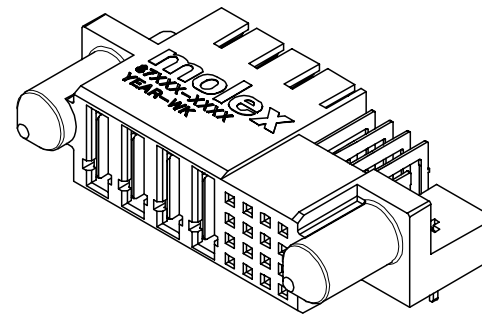
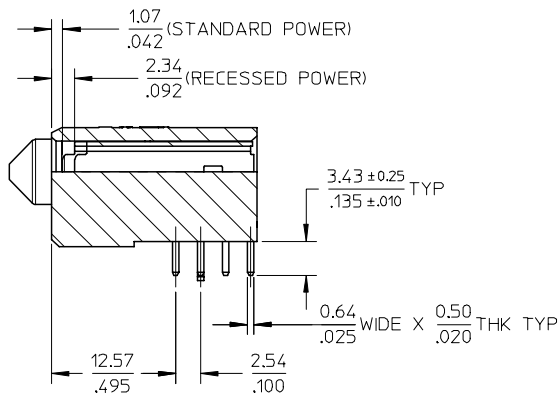
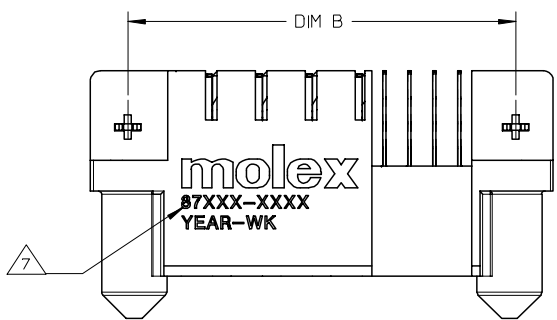
### **Material Info**

### **Reference - Drawing Numbers**

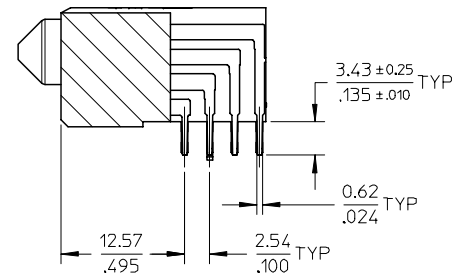
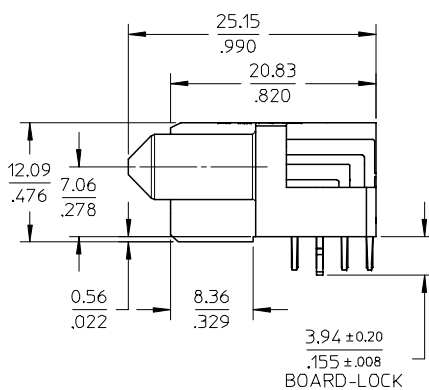
Application Specification	AS-87631-018
Product Specification	PS-87805-006
Sales Drawing	SD-87808-001

This document was generated on 05/22/2010

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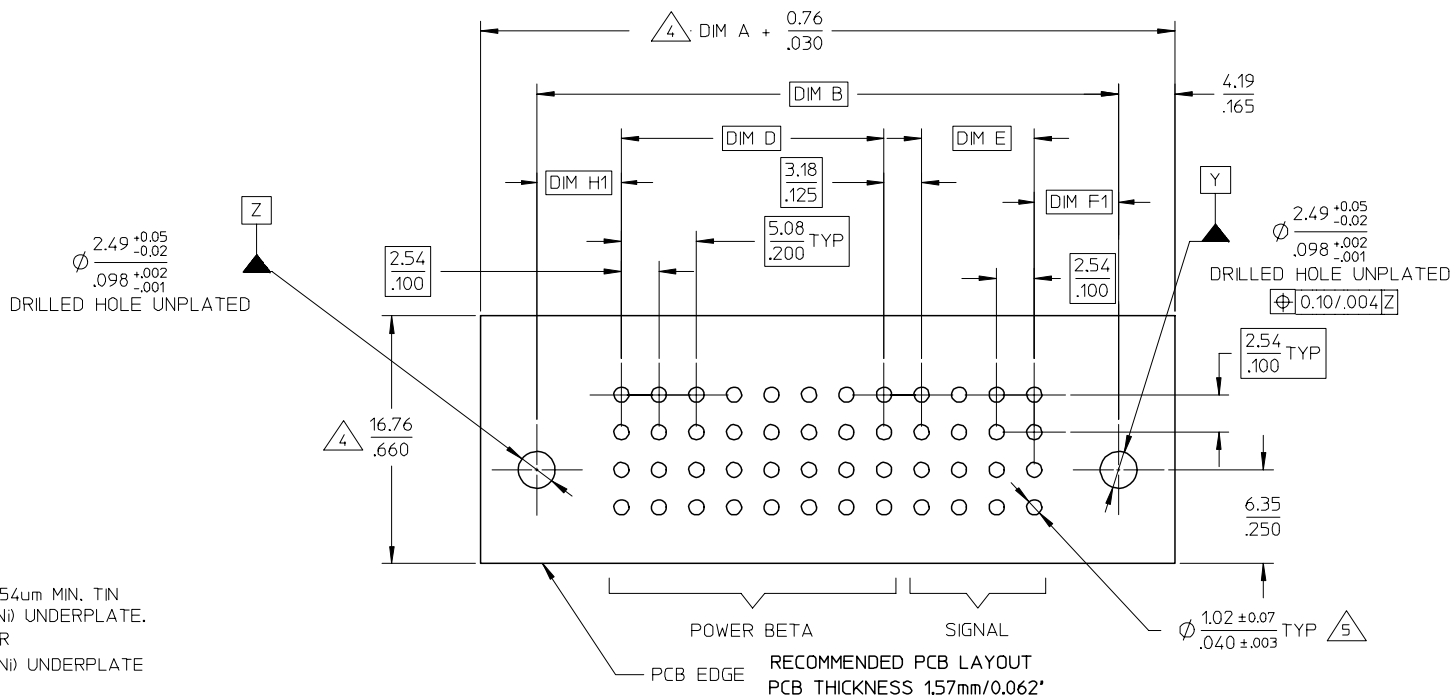
SECTION B-B



SECTION A-A

OBS TIN/LEAD P/N EC NO: S2006-0807 DRWN:MLONG CHKD:CGOH APPR:PTLIM	REV DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION															
		$\nabla=0$ $\triangle=0$	<table border="1"> <thead> <tr> <th></th> <th>MM</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± .010</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </tbody> </table>		MM	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± .010	2 PLACES	± 0.25	± ---	1 PLACE	± ---	± ---	MM/IN	NTS	METRIC	
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		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	MATERIAL NO.	DOCUMENT NO.	SHEET NO.																

ASSEMBLY PART NUMBER	P-S CONFIGURATION		RECESSED POWER CIRCUIT #	DIM A	DIM B	DIM C	DIM D	DIM E	DIM H	DIM H1	DIM F	DIM F1	PACKAGING
	POWER BETA	SIGNAL											
87808-3001	6	16	NIL	58.42 2.300	50.80 2.000	49.53 1.950	27.94 1.100	7.62 .300	6.98 .275	6.35 .250	5.08 .200	5.72 .225	TRAY
87808-3003	6	24	NIL	63.51 2.500	55.81 2.200	54.61 2.150	27.94 1.100	12.70 .500	6.98 .275	6.35 .250	5.08 .200	5.72 .225	TRAY



NOTES

1. MATERIALS :

HOUSING - LCP, GLASS FILLED, UL94V-0,  
 COLOR : BLACK.  
 SIGNAL TERMINAL - COPPER ALLOY  
 POWER TERMINAL - COPPER ALLOY  
 BOARD-LOCK - COPPER ALLOY

2. FINISH :-

SIGNAL & POWER CONTACTS  
 0.76um MIN. GOLD (Au) AT CONTACT AREA AND 2.54um MIN. TIN AT SOLDER TAIL AREA OVER 1.27um MIN. NICKEL (Ni) UNDERPLATE.  
 BOARD-LOCK - 2.54 MICROMETER MINIMUM TIN OVER 1.27 MICROMETER MINIMUM NICKEL (Ni) UNDERPLATE

3. PRODUCT SPECIFICATION : PS-87805-006

△ COMPONENT STAY AWAY ZONE FROM CONNECTOR.

△ PCB NOTE FOR DIAMETER 1.02/040 PLATED HOLE

- DRILLED HOLE SIZE IS 1.151/0453  
 - PLATE WITH 0.007/0003 MINIMUM TIN OVER 0.03/001 TO 0.08/003 COPPER PLATING TO ACHIEVE 1.02±0.08/040±.003 HOLE.

6. ALL TERMINAL TIPS ARE DESIGNED WITH EXPOSE BASE COPPER.

THIS IS CREATED BY FINAL CUTTING PROCESS.

△ MANUFACTURER LOGO, PART NUMBER AND YEAR-WEEK CODE.

△ 4 POWER BETA - 16 SIGNAL IS SHOWN FOR ILLUSTRATION.

POWER-SIGNAL CONFIGURATION IS AVAILABLE UP TO 203MM/8INCH.

PLEASE CONTACT MOLEX SALES PERSONNEL FOR OTHER CONFIGURATION AND OPTION NEEDED.

OBS TIN/LEAD P/N	EC NO: S2006-0807	2006/03/31
	DRWN:MLONG	2006/03/31
	CHKD:CGOH	2006/04/03
	APPR:PTLIM	2006/04/03
REV	DESCRIPTION	

QUALITY SYMBOLS	▽=0
	△=0

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	MM
	INCH
4 PLACES	± ---
3 PLACES	± ---
2 PLACES	± 0.25
1 PLACE	± ---
ANGULAR ± 3°	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE	
MM/IN	
DRAWN BY	DATE
DATE	TITLE
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SKTOH	2003/05/07
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DATE	TITLE
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SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	
POWER CONN RECEPTACLE		
5.08MM VERSION		
S-P(B), R/A, T/H		
MOLEX INCORPORATED		
MATERIAL NO.	DOCUMENT NO.	SHEET NO.
DATE	TITLE	2 OF 2
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