

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

**Part Number:** [0878082003](#)  
**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, Screw Mount, 0.76µm (30µ") Gold(Au) Plating, 22 Circuits, Power Beta 6, Signal 16, NoRecessed Power Circuit, Lead-free

**Documents:**

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

**Agency Certification**

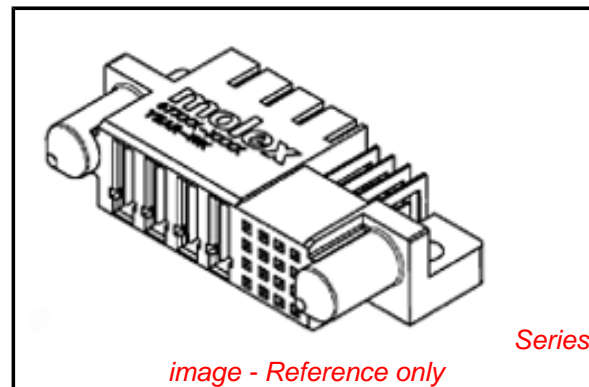
CSA LR19980  
 UL E29179

**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) 30  
 Circuits (maximum) 30  
 Circuits Detail Power Beta 6, Signal 24  
 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)  
 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  
 Polarized to PCB Yes



**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**

[87808Series](#)

**Mates With**

[878072003](#) , [878072004](#) , [878072005](#) , [878072006](#) , [878072007](#)

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

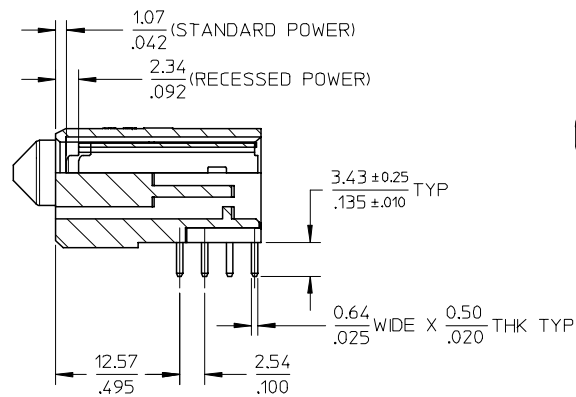
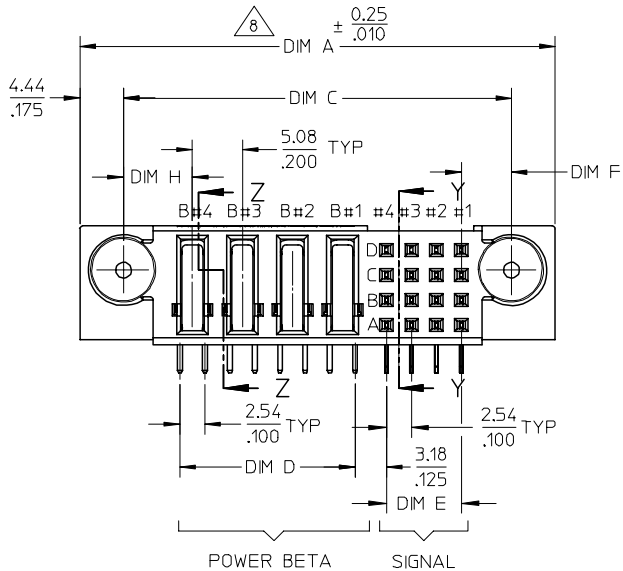
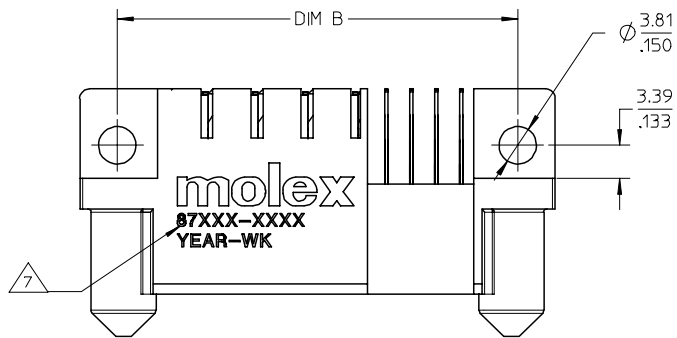
### **Material Info**

#### **Reference - Drawing Numbers**

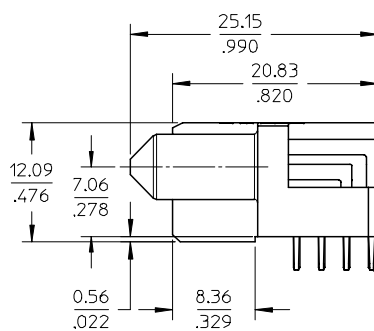
Application Specification	AS-87631-018
Product Specification	PS-87805-006
Sales Drawing	SD-87808-005

This document was generated on 05/22/2010

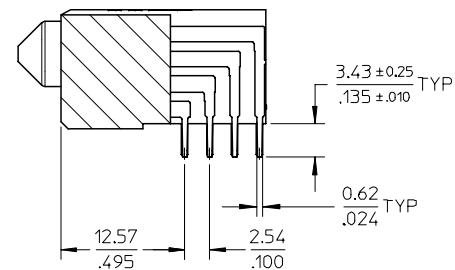
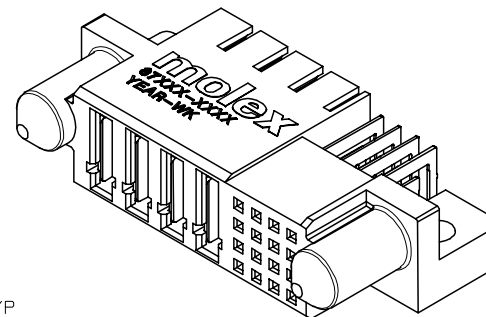
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SECTION Z-Z



SECTION Y-Y



PDR#S-001714-00-00	2007/11/20
EC NO: S2008-0340	2007/11/20
DRWNS:KANG	2007/11/20
CHKD:ATSEE	2007/11/20
APPR:MLONG	2007/11/21

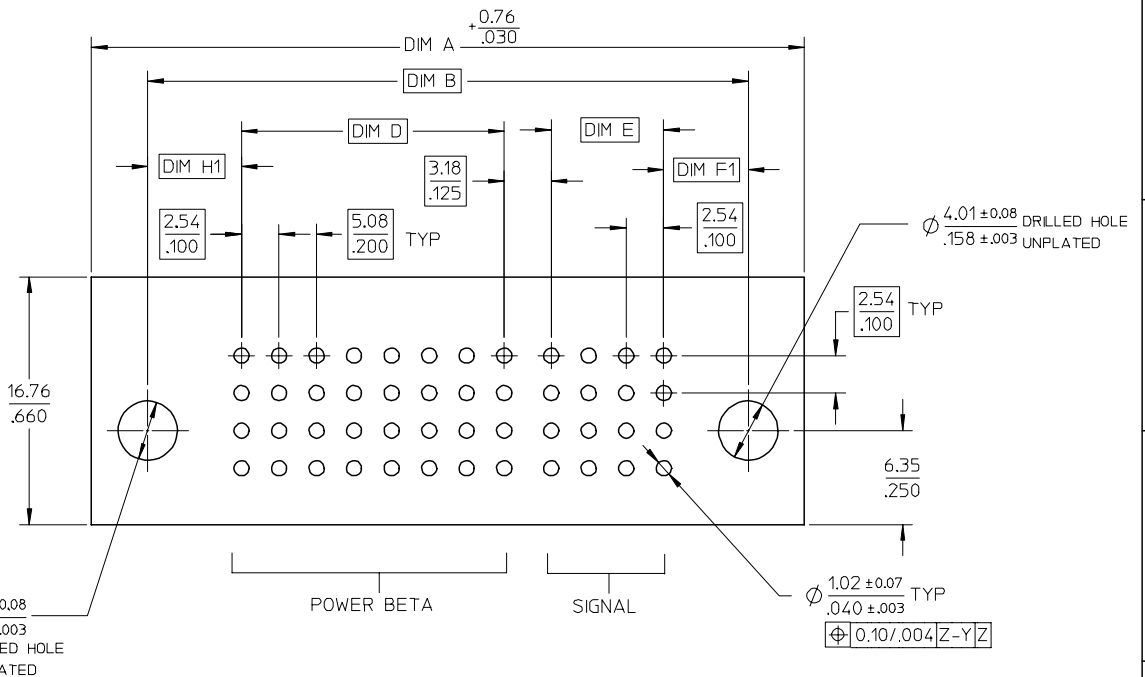
QUALITY SYMBOLS	DESCRIPTION
▽=0	
∇=0	

GENERAL TOLERANCES (UNLESS SPECIFIED)	MM	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± ---
1 PLACE	± ---	± ---
ANGULAR ± 3 °		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

DIMENSION STYLE MM/IN	
DRAWN BY SKANG	DATE 2007/10/23
CHECKED BY ATSEE	DATE 2007/11/20
APPROVED BY MLONG	DATE 2007/11/20
MATERIAL NO. SEE TABLE	
SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
TITLE POWER CONN RECEPTACLE 5.08MM VERSION S-P(B), R/A, T/H, S/M		
MOLEX MOLEX INCORPORATED		
DOCUMENT NO. SD-87808-005	SHEET NO. 1 OF 2	

	10	9	8	7	6	5	4	3	2	1				
	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											
F	87808-2003	6	24	NIL	63.51 2.500	55.88 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

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

RECOMMENDED PCB LAYOUT  
PCB THICKNESS 1.57MM/.062"

PDR#S-001714-00-00 EC NO: S2008-0340 DRWNS:KANG 2007/11/20 CHKD:ATSEE 2007/11/20 APPR:MLONG 2007/11/21	QUALITY SYMBOLS ▽=0 △=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± ---	3 PLACES ± --- ± .010	2 PLACES ± 0.25 ± ---	1 PLACE ± --- ± ---	DRAWN BY SKANG		DATE 2007/10/23		TITLE POWER CONN RECEPTACLE 5.08MM VERSION S-P(B), R/A, T/H, S/M
		ANGULAR ± 3 °				CHECKED BY ATSEE		DATE 2007/11/20		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				APPROVED BY MLONG		DATE 2007/11/20		MOLEX INCORPORATED
A	REV	MATERIAL NO.		SEE TABLE		DOCUMENT NO. SD-87808-005		SHEET NO. 2 OF 2		