

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

**Part Number:** [0878763001](#)  
**Status:** **Active**  
**Overview:** [extreme\\_powerplus\\_ssi](#)  
**Description:** 5.08mm (.200") Pitch, Power, 2.54mm (.100") Pitch, Signal, EXTreme PowerPlus™ P-S-P Receptacle, Press-fit, Vertical, 36 Circuits, Power Beta 4, Signal 28, Power Alpha 4, No Recessed Power Circuit, with Guide Post, Leadfree

**Documents:**

[3D Model](#) [Product Specification PS-87633-006 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family	PCB Receptacles
Series	<a href="#">87876</a>
Application	Board-to-Board
Comments	No Recessed Power Circuit
Overview	<a href="#">extreme_powerplus_ssi</a>
Product Name	EXTreme PowerPlus™

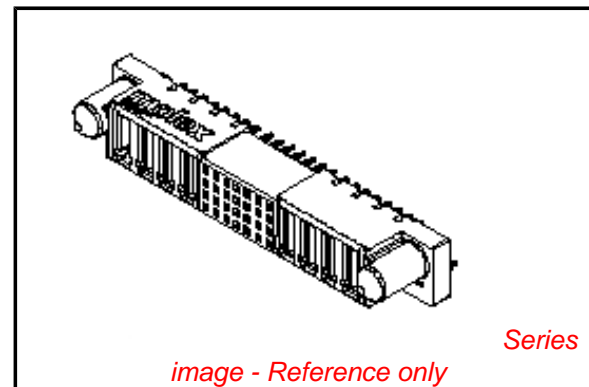
**Physical**

Circuits (Loaded)	36
Circuits Detail	Power Alpha 4, Signal 28, Power Beta 4
Color - Resin	Black
Durability (mating cycles max)	100
Glow-Wire Compliant	No
Guide to Mating Part	Yes
Keying to Mating Part	Yes
Material - Metal	Copper Alloy
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	4
Orientation	Vertical
PC Tail Length (in)	0.135 In
PC Tail Length (mm)	3.43 mm
PCB Locator	No
PCB Retention	Yes
PCB Thickness Recommended (in)	0.092 In
PCB Thickness Recommended (mm)	2.34 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.100 In, 0.175 In, 0.200 In
Pitch - Mating Interface (mm)	2.54 mm, 4.44 mm, 5.08 mm
Plating min: Mating (µin)	30
Plating min: Mating (µm)	0.76
Plating min: Termination (µin)	100
Plating min: Termination (µm)	2.54
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Temperature Range - Operating	-20°C to +105°C
Termination Interface: Style	Through Hole - Compliant Pin

**Electrical**

Current - Maximum per Contact	2.5A, 50A
Voltage - Maximum	250V DC

**Material Info**



**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**  
[87876Series](#)

**Reference - Drawing Numbers**

Application Specification

Product Specification

Sales Drawing

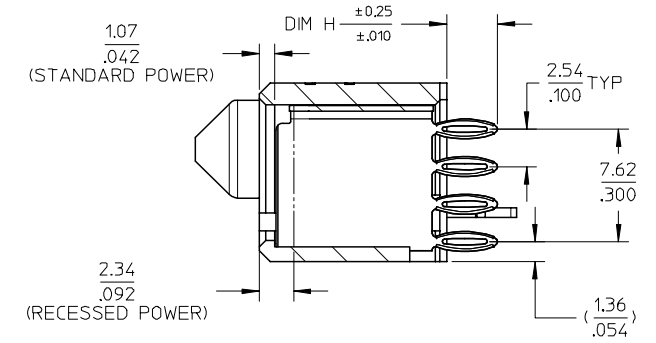
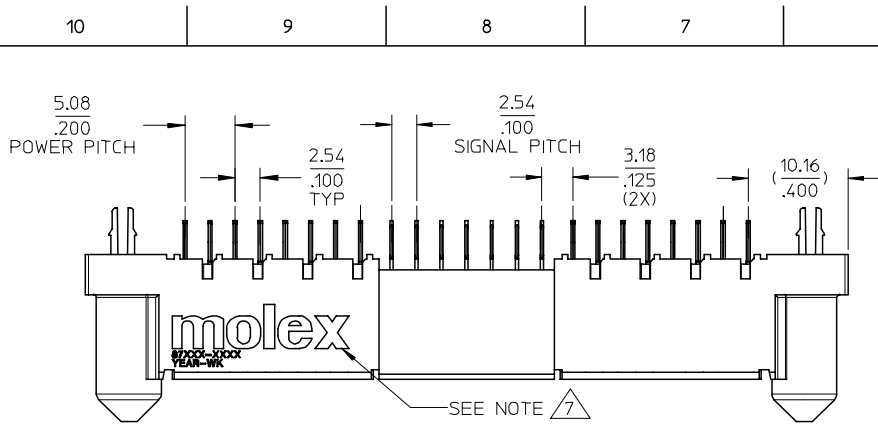
AS-87631-018, AS-87633-007

PS-87633-006

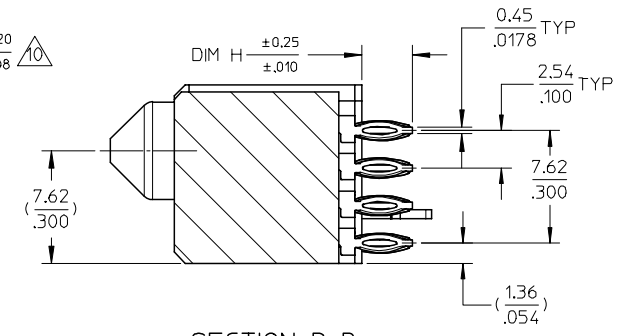
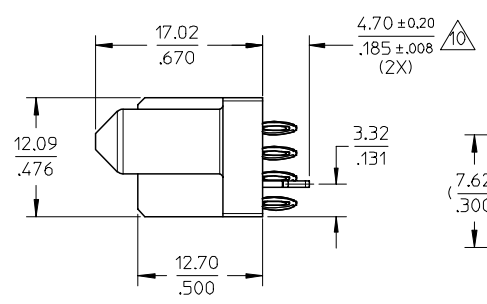
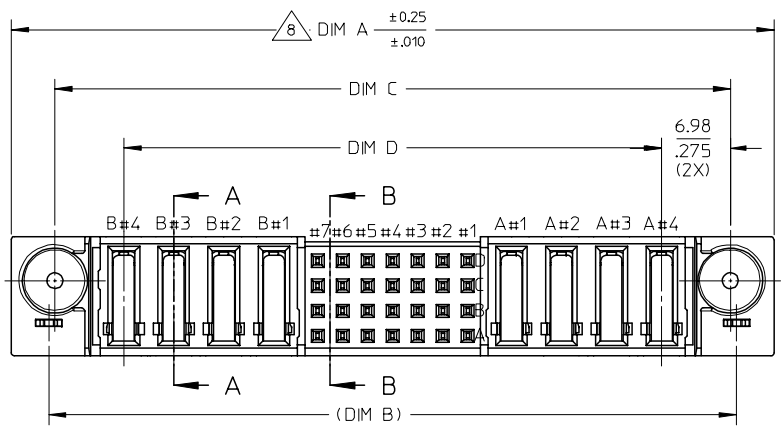
SD-87876-005

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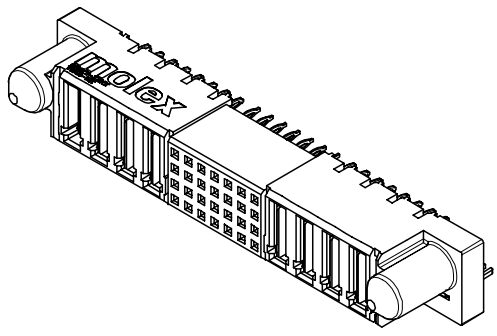


SECTION A-A



SECTION B-B

POWER BETA      SIGNAL      POWER ALPHA



PDR#S-001455-00-00	2006/12/05	2006/12/06
EC NO: S2007-0502	DRWN:KFLM	CHKD:MLONG
	APPR:SKTOH	

REV	DESCRIPTION
▲=0	QUALITY SYMBOLS
▽=0	

GENERAL TOLERANCES (UNLESS SPECIFIED)	
PLACES	TOLERANCE
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
KFL IM	2006/11/20
CHECKED BY	DATE
MLONG	2006/11/29
APPROVED BY	DATE
SKTOH	2006/11/29
MATERIAL NO.	
SEE TABLE	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	
TITLE		
POWER CONN. RECPT P-S-P CONFIG. VERTICAL PRESSFIT, W/GUIDE POST		
MOLEX INCORPORATED		
DOCUMENT NO.		SHEET NO.
SD-87876-005		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					
	PART NUMBER	P-S-P CONFIGURATION			RECESSED	DIMENSIONS							BOARDLOCK OPTION $\triangle 10$	PACKAGING	
		POWER BETA	SIGNAL	POWER ALPHA	POWER CIRCUIT#	A	B	C	D	E	F	G	H		
F	87876-3001	4	28	4	NIL	77.47 3.050	69.85 2.750	68.58 2.700	54.61 2.150	17.78 .700	15.24 .600	17.78 .700	3.43 .135	YES	TRAY

NOTES

1 MATERIALS :-

HOUSING - LCP, GLASS FILLED, UL94V-0,  
COLOR: BLACK.

SIGNAL TERMINAL - COPPER ALLOY  
POWER TERMINAL - COPPER ALLOY

2 FINISH :-

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

3 SPECIFICATIONS :-

PRODUCT SPECIFICATION : PS-87633-006  
APPLICATION SPECIFICATION : AS-87633-007

$\triangle 4$  COMPONENT STAY AWAY ZONE FROM CONNECTOR.

$\triangle 5$  PCB NOTE FOR DIAMETER 1.02/.040 PLATED HOLE.

- DRILLED HOLE SIZE IS 1.151/.0453

- PLATED 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 EXPOSED BASE COPPER.

THIS IS CREATED BY FINAL CUTTING PROCESS AFTER PLATING.

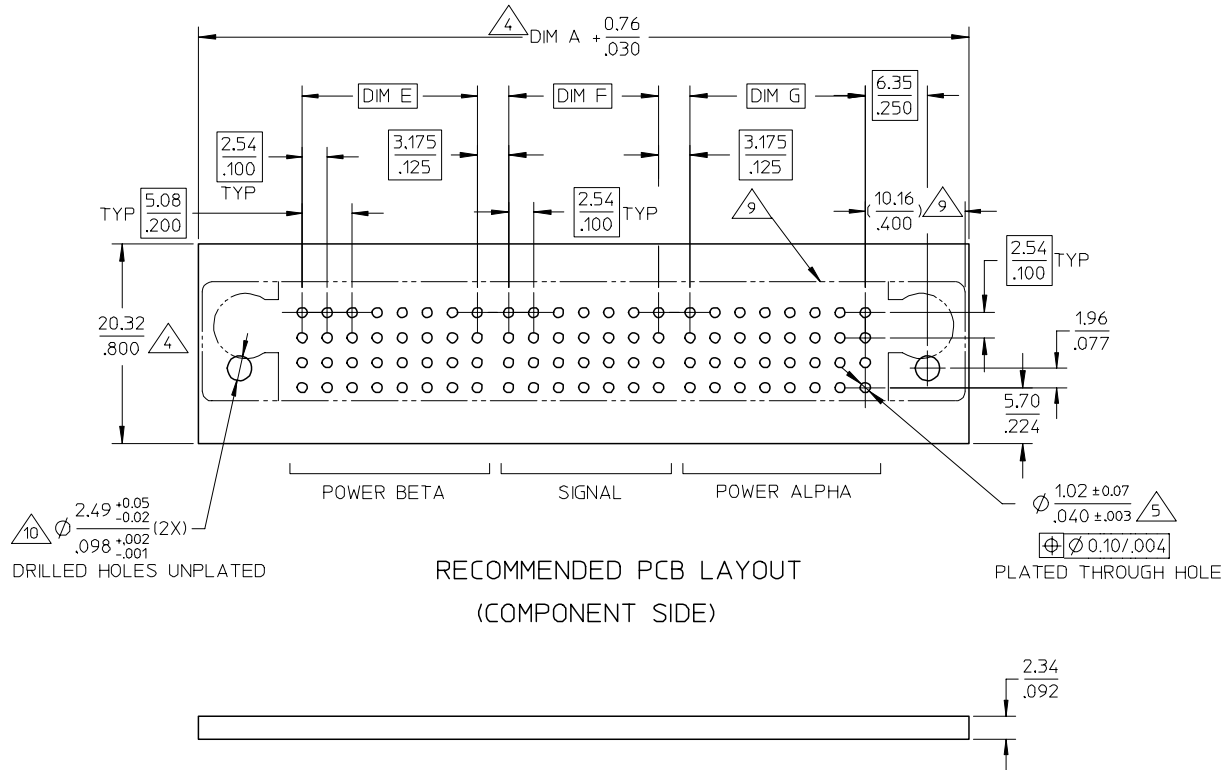
$\triangle$  MANUFACTURER LOGO, PART NUMBER AND YEAR-WEEK CODE.

$\triangle 8$  4Pa-24S-4Pb CONFIGURATION IS SHOWN FOR ILLUSTRATION ONLY.

P-S-P CONFIGURATION IS AVAILABLE UP TO 203MM/8INCH.  
PLEASE CONTACT MOLEX SALES PERSONNEL FOR OTHER  
CONFIGURATION AND OPTION NEEDED.

$\triangle 9$  IMAGINARY LINE AND DIMENSION TO POSITION AND PROVIDE  
CONNECTOR ORIENTATION WITH RESPECT TO PCB LAYOUT.

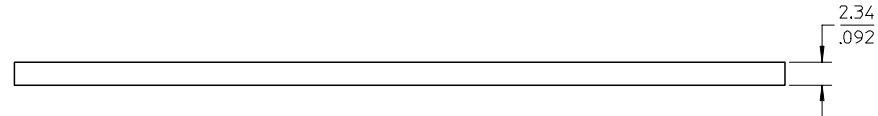
$\triangle 10$  OPTIONAL BOARDLOCK FEATURE FOR SYMETRICAL POWER CONFIG  
FULL PROOFING UPON CUSTOMER REQUEST.



RECOMMENDED PCB LAYOUT  
(COMPONENT SIDE)

$\triangle 10$   $\phi$  2.49<sup>+0.05</sup>/<sub>-0.02</sub> (2X)  
 $\phi$  .098<sup>+0.002</sup>/<sub>-.001</sub>  
DRILLED HOLES UNPLATED

$\phi$  1.02 ± 0.07  
 $\phi$  .040 ± .003  $\triangle 5$   
 $\phi$  .10/.004  
PLATED THROUGH HOLE



PDR#S-001455-00-00 EC NO: S2007-0502 DRWN:KELIM 2006/12/05 CHKD:MLONG 2006/12/06 APPR:SKTOH 2006/12/06	QUALITY SYMBOLS $\nabla = 0$ $\triangle = 0$	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 ± --- ± --- ANGULAR ± 3 °	DRAWN BY KFLIM 2006/11/20 CHECKED BY MLONG 2006/11/29 APPROVED BY SKTOH 2006/11/29	TITLE POWER CONN. RECPT P-S-P CONFIG. VERTICAL PRESSFIT, W/GUIDE POST	MOLEX INCORPORATED	
A	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE A3	SEE TABLE	DOCUMENT NO. SD-87876-005	SHEET NO. 2 OF 2