

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

**Part Number:** [0876674002](#)  
**Status:** **Active**  
**Overview:** [extreme\\_powerplus\\_ssi](#)  
**Description:** 6.35mm (.250") Pitch Power, 2.54mm (.100") Pitch Signal, EXTreme PowerPlus™ S-Pb Header, Through Hole, Right Angle, Screw Mount, Short Blade, 30 Circuits, Signal 24, Power Beta 6, No Recessed Signal Pin, Lead-free

**Documents:**

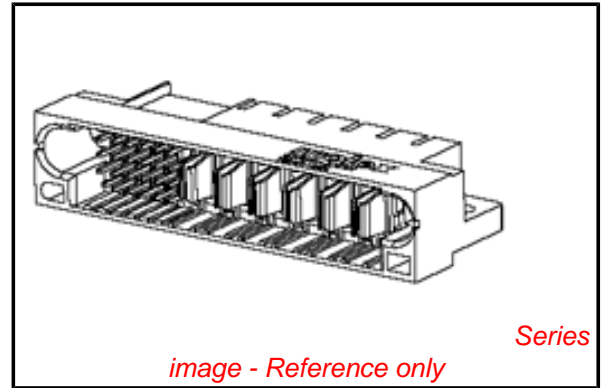
[3D Model](#) [Product Specification PS-87631-006 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family	PCB Headers
Series	<a href="#">87667</a>
Application	Board-to-Board
Comments	<LI>Short Blade<LI>No Recessed Signal Pin
Overview	<a href="#">extreme_powerplus_ssi</a>
Product Literature Order No	987650-3002
Product Name	EXTreme PowerPlus™

**Physical**

Breakaway	No
Circuits (Loaded)	30
Circuits Detail	Signal 24 Power Beta 6
Color - Resin	Black
Durability (mating cycles max)	100
First Mate / Last Break	No
Glow-Wire Compliant	No
Guide to Mating Part	Yes
Keying to Mating Part	Yes
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	4
Orientation	Right Angle
PC Tail Length (in)	0.135 In
PC Tail Length (mm)	3.43 mm
PCB Locator	No
PCB Retention	Yes
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.57 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.100 In, 0.250 In
Pitch - Mating Interface (mm)	2.54 mm, 6.35 mm
Pitch - Term. Interface (in)	0.100 In, 0.125 In, 0.250 In
Pitch - Term. Interface (mm)	2.54 mm, 3.18 mm, 6.35 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
Shrouded	Fully
Stackable	No



**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**

[87667Series](#)

**Mates With**

[87668](#) EXTreme PowerPlus™ S-Pb Receptacles with Beveled Metal Pins. [87710](#) EXTreme PowerPlus™ S-Pb Receptacles with Press-fit PC Tail

Temperature Range - Operating -20°C to +105°C  
Termination Interface: Style Through Hole

### **Electrical**

Current - Maximum per Contact 2.5A, 30A  
Voltage - Maximum 250V DC

### **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**

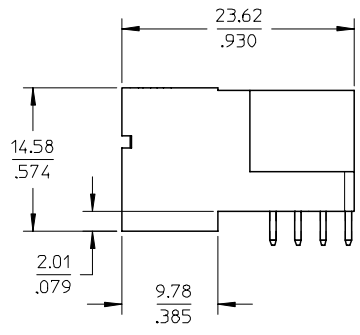
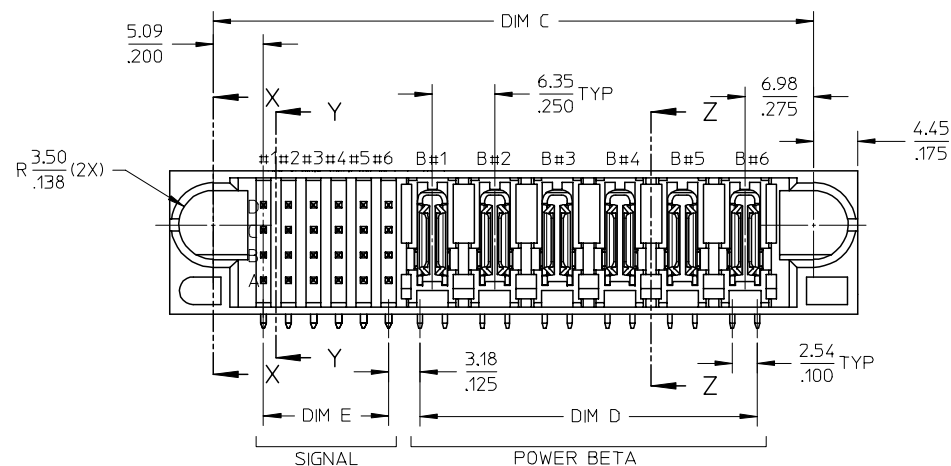
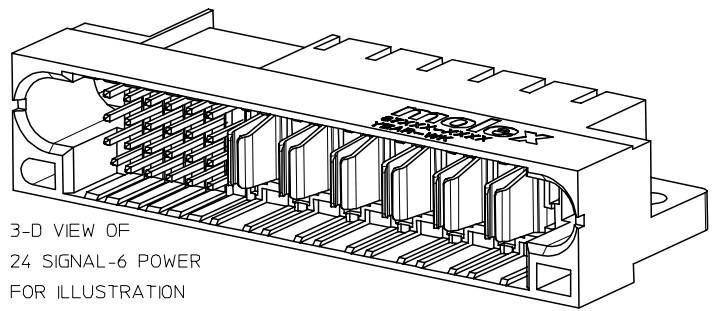
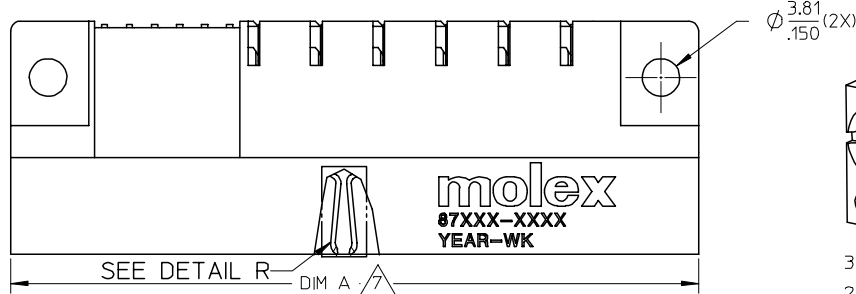
#### **Reference - Drawing Numbers**

Application Specification AS-87631-018  
Product Specification PS-87631-006  
Sales Drawing SD-87667-010

This document was generated on 05/25/2010

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10 9 8 7 6 5 4 3 2 1



NOTES:

- 1 MATERIALS : HOUSING - LCP  
GLASS FILLED, UL94V-0, COLOR: BLACK  
POWER PINS - COPPER ALLOY  
SIGNAL PINS - COPPER ALLOY  
BOARD LOCK - COPPER ALLOY
- 2 FINISHES: POWER AD SIGNAL PINS  
SELECTIVE GOLD IN THE CONTACT AREA  
THICKNESS = 0.76 MICROMETER / 30 MICROINCH MINIMUM  
SELECTIVE TIN IN THE PC TAIL AREA  
THICKNESS = 2.54 MICROMETER / 100 MICROINCH MINIMUM  
1.27um MINIMUM NICKEL OVERALL UNDERPLATE.
- 3 PRODUCT SPECIFICATIONS : PS-87631-006
- 4 SEE SHEET 2 FOR RECOMMENDED PCB LAYOUT AND THICKNESS
- 5 COMPONENT STAY AWAY ZONE FROM CONNECTOR
- 6 REFER TO THE TABLE ON TOP OF PAGE 3/3 FOR RECESSED PINS LOCATION
- 7 24 SIGNAL - 6 POWER CONNECTOR IS SHOWN FOR ILLUSTRATION

PDR#S-001643-00-00 EC NO: S2008-0094 DRWNS:KANG CHKD:ATSEE APPR:MLONG	2007/08/17	QUALITY SYMBOLS ▽=0 △=0
	2007/08/17	
D5	REV	DESCRIPTION

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	DATE
BHLOW	2002/11/20
CHECKED BY	DATE
PTL IM	2002/11/26
APPROVED BY	DATE
SKTOH	2002/11/27
MATERIAL NO.	
SEE TABLE	
SIZE	A3

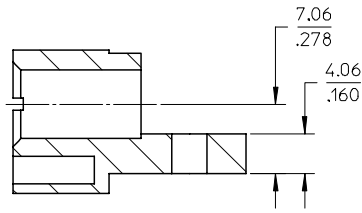
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NTS	METRIC	
TITLE		
POWER CONNECTOR PLUG S-P(B) CONFIGURATION R/A, T/H, SCREW-MOUNT		
MOLEX INCORPORATED		
DOCUMENT NO.	SHEET NO.	
SD-87667-010	1 OF 3	

9 8 7 6 5 4 3 2 1

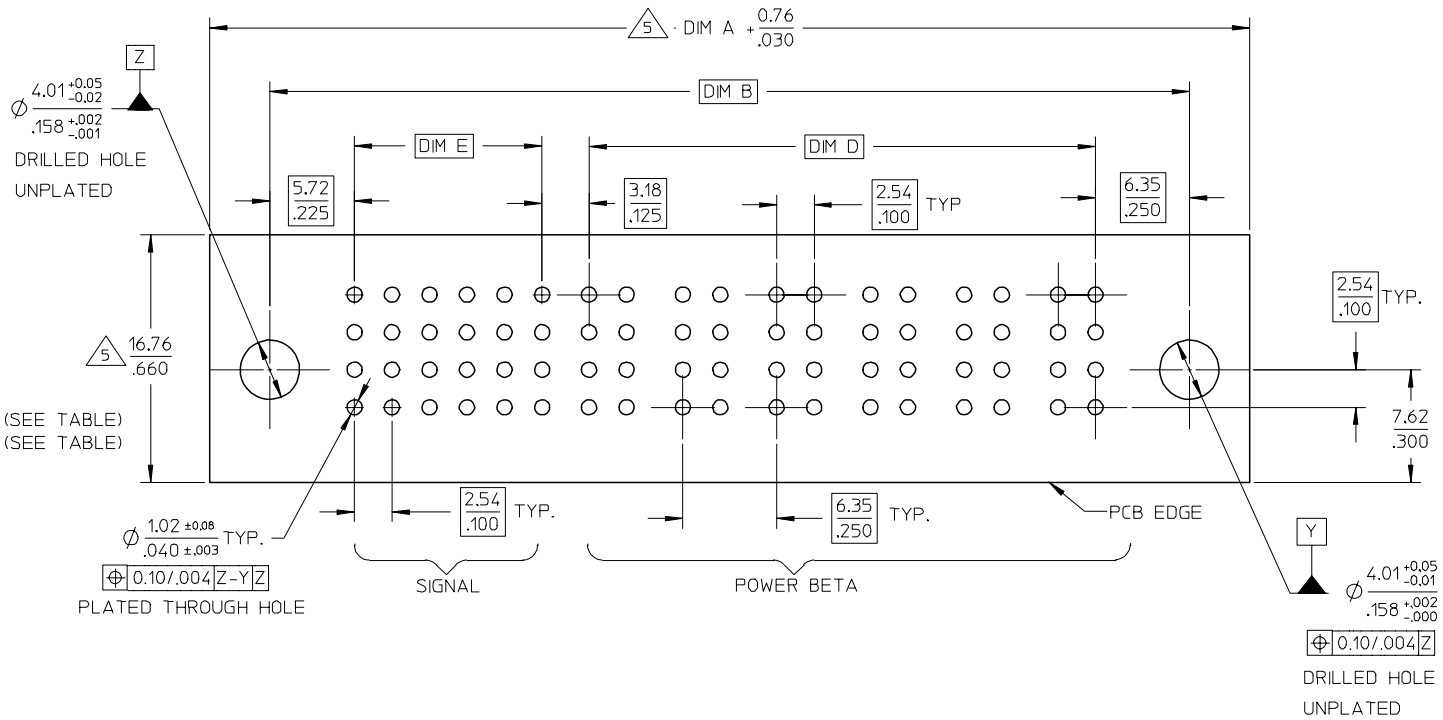
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F  
E  
D  
C  
B  
A

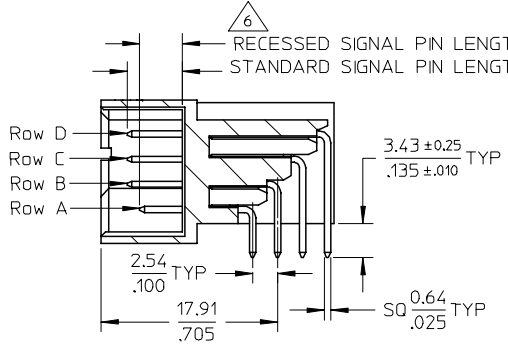
F  
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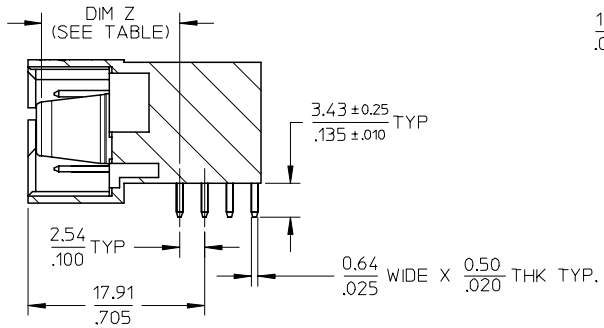
SECTION X-X



RECOMMENDED PCB LAYOUT



SECTION Y-Y



SECTION Z-Z

PDR#S-001643-00-00	DESCRIPTION
EC NO: S2008-0094	DRWNS:KANG
2007/08/17	CHKD:ATSEE
2007/08/17	APPR:MLONG
2007/08/20	REV
D5	

QUALITY SYMBOLS	DESCRIPTION
▽=0	
▽C=0	

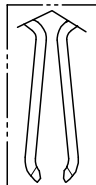
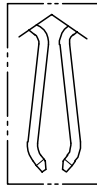
GENERAL TOLERANCES (UNLESS SPECIFIED)	
mm	INCH
4 PLACES ± ---	± ---
3 PLACES ± ---	± .010
2 PLACES ± 0.25	± ---
1 PLACE ± ---	± ---
ANGULAR ± 3 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE	
MM/IN	TITLE
DRAWN BY	DATE
BHLOW	2002/11/20
CHECKED BY	DATE
PTL IM	2002/11/26
APPROVED BY	DATE
SKTOH	2002/11/27
MATERIAL NO.	DOCUMENT NO.
SEE TABLE	SD-87667-010
SIZE	SHEET NO.
A3	2 OF 3

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	☉
TITLE		
POWER CONNECTOR PLUG		
S-P(B) CONFIGURATION		
R/A, T/H, SCREW-MOUNT		
MOLEX INCORPORATED		
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

9 8 7 6 5 4 3 2 1

F	10		9		8		7		6		5		4		3		2		1	
	PART NUMBER	S-P CONFIGURATION		DIM A	DIM B	DIM C	DIM D	DIM E	POWER BLADE OPTIONS		STANDARD SIGNAL	RECESSED SIGNAL PIN		VOID PIN LOCATION	PACKAGING					
		SIGNAL	POWER						BETA	TYPE	DIM Z ±0.13/.005	PIN LENGTH	LENGTH			LOCATION				
	87667-4002	24	6	69.85 2.750	62.23 2.450	60.96 2.400	34.29 1.350	12.70 .500	SHORT CONTACT	13.32 / .524	5.59 / .220	4.32 / .170	NIL	NIL	TRAY					
	87667-4004	16	4	52.07 2.050	44.45 1.750	43.18 1.700	21.59 .850	7.62 .300	LONG CONTACT	14.12 / .556	6.86 / .270	5.59 / .220	A1	NIL	TRAY					
	87667-4005	24	6	69.85 2.750	62.23 2.450	60.96 2.400	34.29 1.350	12.70 .500	LONG CONTACT	14.12 / .556	6.86 / .270	5.59 / .220	A1, A2 B1, B2 C1, C2 D1, D2	NIL	TRAY					
	87667-4006	24	6	69.85 2.750	62.23 2.450	60.96 2.400	34.29 1.350	12.70 .500	LONG CONTACT	14.12 / .556	6.86 / .270	5.59 / .220	NIL	NIL	TRAY					
E	87667-4007	24	10	95.25 3.750	87.63 3.450	86.36 3.400	59.69 2.350	12.70 .500	LONG CONTACT	14.12 / .556	6.86 / .270	5.59 / .220	NIL	NIL	TRAY					
	87667-4008	24	8	82.55 3.250	74.93 2.950	73.66 2.900	46.99 1.850	12.70 .500	LONG CONTACT	14.12 / .556	6.86 / .270	5.59 / .220	NIL	NIL	TRAY					
	87667-4009	24	12	107.95 4.250	100.33 3.950	99.06 3.900	72.39 2.850	12.70 .500	LONG CONTACT	14.12 / .556	6.86 / .270	5.59 / .220	NIL	NIL	TRAY					
	87667-4010	24	8	82.55 3.250	74.93 2.950	73.66 2.900	46.99 1.850	12.70 .500	LONG CONTACT	14.12 / .556	6.86 / .270	5.59 / .220	B4	NIL	TRAY					
D	87667-4011	24	6	69.85 2.750	62.23 2.450	60.96 2.400	34.29 1.350	12.70 .500	LONG CONTACT	14.12 / .556	6.86 / .270	5.59 / .220	A1	NIL	TRAY					
	87667-4012	24	6	69.85 2.750	62.23 2.450	60.96 2.400	34.29 1.350	12.70 .500	LONG CONTACT	14.12 / .556	6.86 / .270	5.59 / .220	B4	NIL	TRAY					
	87667-4013	20	4	54.61 2.150	46.99 1.850	45.72 1.800	21.59 .850	10.16 .400	LONG CONTACT	14.12 / .556	6.86 / .270	5.59 / .220	A1, A5	A4, B4 C4, D4	TRAY					
	87667-4014	20	6	67.31 2.650	59.69 2.350	58.42 2.300	34.29 1.350	10.16 .400	LONG CONTACT	14.12 / .556	6.86 / .270	5.59 / .220	B4	NIL	TRAY					
C	87667-4015	24	6	69.85 2.750	62.23 2.450	60.96 2.400	34.29 1.350	12.70 .500	LONG CONTACT	14.12 / .556	6.86 / .270	5.59 / .220	A1 B5 C5 D5	NIL	TRAY					



SHORT BLADE OPTION LONG BLADE OPTION

DETAIL R

(SEE TABLE FOR BLADE OPTION)

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	2007/08/17	2007/08/17	2007/08/20
QUALITY SYMBOLS	DESCRIPTION	REV	
▽=0		D5	
▽C=0			

GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	
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2 PLACES	± 0.25		
1 PLACE	± ---		
ANGULAR ± 3 °			
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DRAWN BY	DATE	TITLE
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CHECKED BY	DATE	S-P(B) CONFIGURATION
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APPROVED BY	DATE	MOLEX INCORPORATED
SKTOH	2002/11/27	
MATERIAL NO.	DOCUMENT NO.	SHEET NO.
	SD-87667-010	3 OF 3

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	
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