

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

**Part Number:** [0876674005](#)  
**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, Long Blade, 30 Circuits, Signal 24, Power Beta 6, Recessed Signal Pins A1, A2, B1, B2, C1, C2, D1, D2, Lead-free

**Documents:**

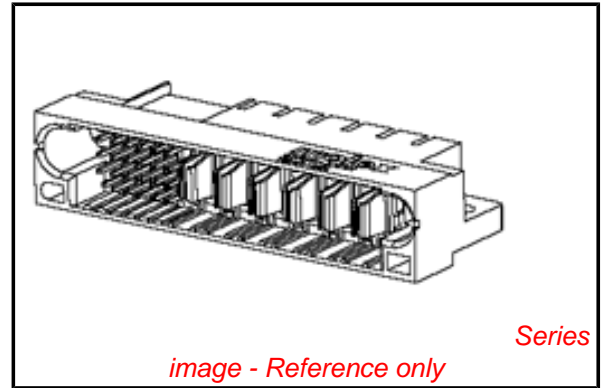
[3D Model](#) [Product Specification PS-87631-006 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family	PCB Headers
Series	<a href="#">87667</a>
Application	Board-to-Board
Comments	<LI>Long Blade<LI>Recessed Signal Pins : A1, A2, B1, B2, C1, C2, D1, D2
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	Yes
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



**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**

[87667Series](#)

**Mates With**

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

Stackable	No
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**

Lead-free Process Capability	Wave Capable (TH only)
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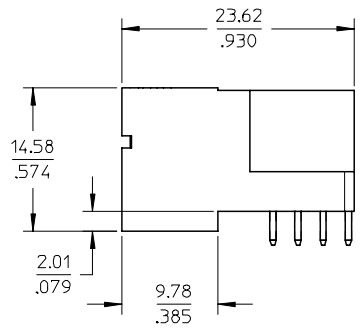
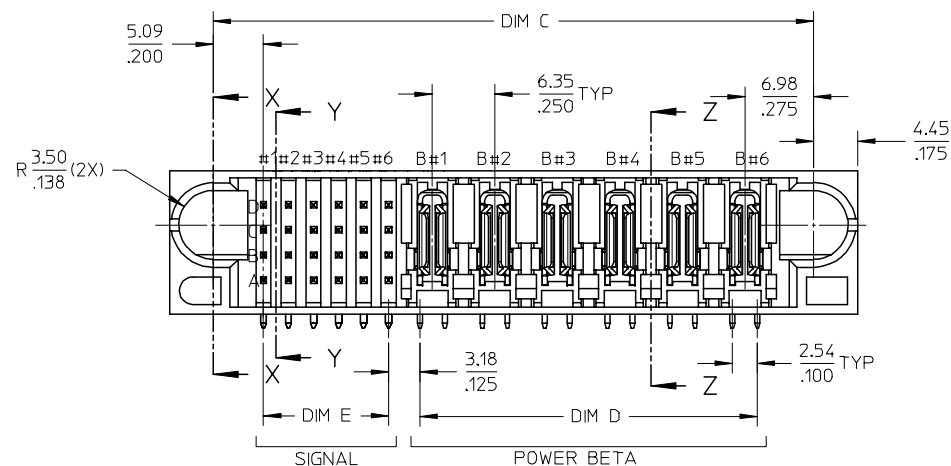
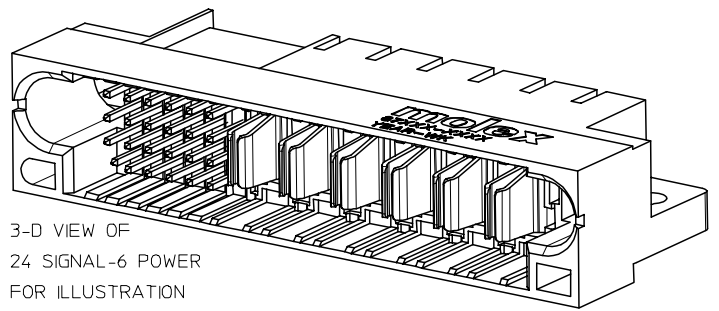
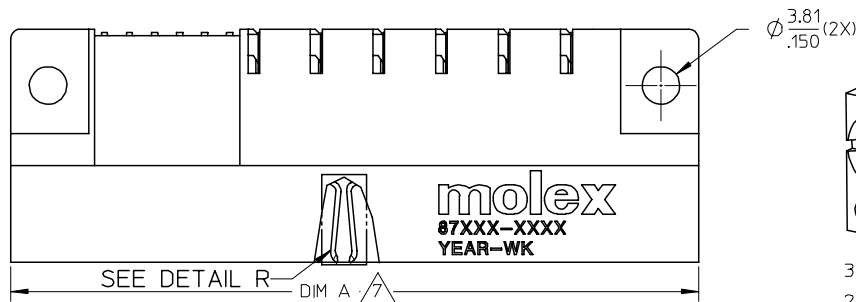
**Material Info****Reference - Drawing Numbers**

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:SKANG 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

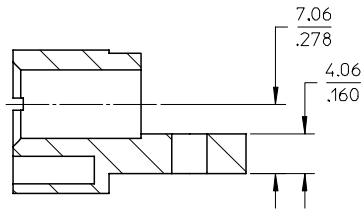
SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	
TITLE		
POWER CONNECTOR PLUG		
S-P(B) CONFIGURATION		
R/A, T/H, SCREW-MOUNT		
MOLEX INCORPORATED		
DOCUMENT NO.	SHEET NO.	
SD-87667-010	1 OF 3	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

9 8 7 6 5 4 3 2 1

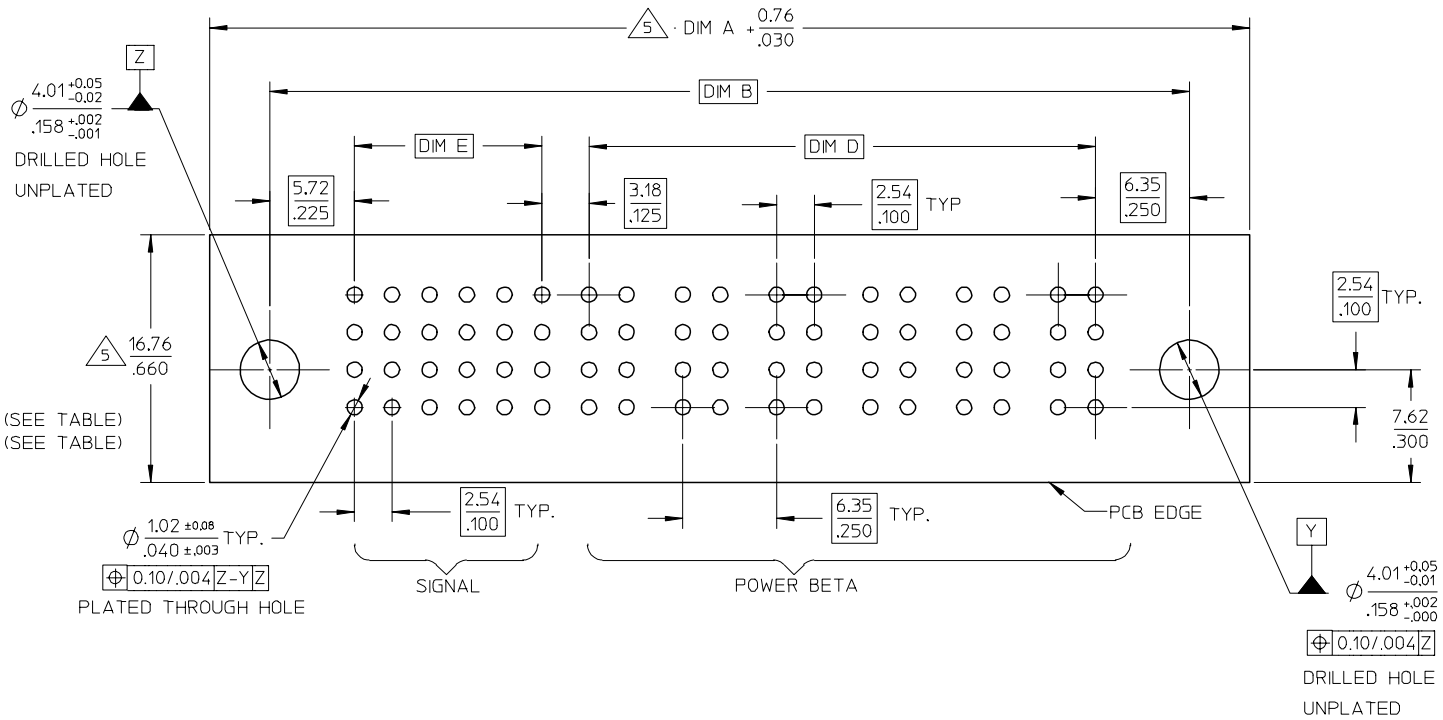
10 9 8 7 6 5 4 3 2 1

F  
E  
D  
C  
B  
A

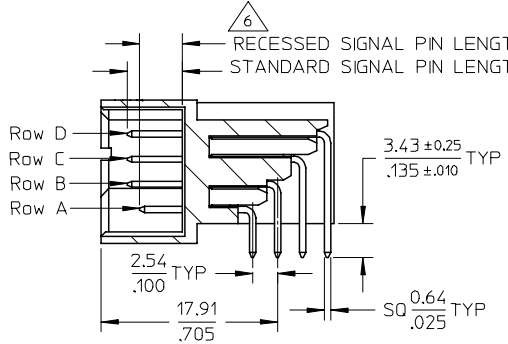
F  
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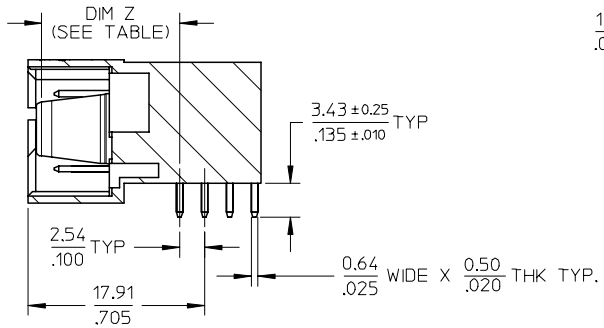
SECTION X-X



RECOMMENDED PCB LAYOUT



SECTION Y-Y



SECTION Z-Z

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

QUALITY SYMBOLS	▽=0
	∇=0

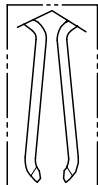
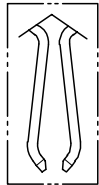
GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm INCH
4 PLACES	± --- ± ---
3 PLACES	± --- ± .010
2 PLACES	± 0.25 ± ---
1 PLACE	± --- ± ---
ANGULAR ± 3 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE	
MM/IN	
DRAWN BY	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

SCALE	NTS	DESIGN UNITS	METRIC	THIRD ANGLE PROJECTION
TITLE				
POWER CONNECTOR PLUG				
S-P(B) CONFIGURATION				
R/A, T/H, SCREW-MOUNT				
MOLEX INCORPORATED				
DOCUMENT NO.			SHEET NO.	
SD-87667-010			2 OF 3	
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9 8 7 6 5 4 3 2 1

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						
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						
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						
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)

PDR#S-001643-00-00 EC NO: S2008-0094 2007/08/17 DRWNS:KANG 2007/08/17 CHKD:ATSEE 2007/08/17 APPR:MLONG 2007/08/20	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0 ▽C=0	4 PLACES ± --- 3 PLACES ± --- 2 PLACES ± 0.25 1 PLACE ± --- ANGULAR ± 3 °	MM/IN mm INCH	NTS	METRIC	

DRAWN BY BHLW 2002/11/20 CHECKED BY PTL IM 2002/11/26 APPROVED BY SKTOH 2002/11/27	TITLE	MOLEX INCORPORATED
	POWER CONNECTOR PLUG S-P(B) CONFIGURATION R/A, T/H, SCREW-MOUNT	
MATERIAL NO.	DOCUMENT NO.	SHEET NO.
SEE TABLE	SD-87667-010	3 OF 3

DRAFT WHERE APPLICABLE  
MUST REMAIN  
WITHIN DIMENSIONS

SIZE  
A3

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