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Part Number: [0876674004](#)
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, 20 Circuits, Signal 16, Power Beta 4, Recessed Signal Pin A1, Lead-free

Documents:

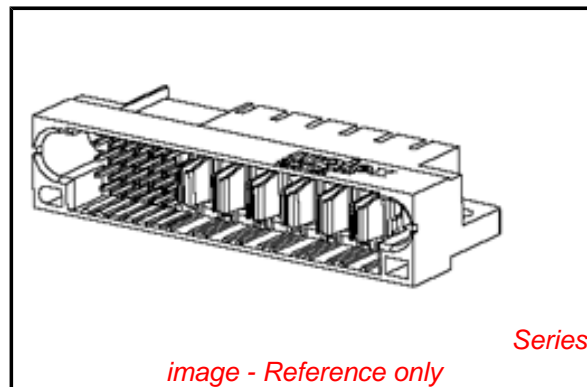
[3D Model](#) [Product Specification PS-87631-006 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

General

Product Family	PCB Headers
Series	87667
Application	Board-to-Board
Comments	Long Blade Recessed Signal Pin: A1
Overview	extreme_powerplus_ssi
Product Literature Order No	987650-3002
Product Name	EXTreme PowerPlus™

Physical

Breakaway	No
Circuits (Loaded)	20
Circuits Detail	Signal 16 Power Beta 4
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
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
 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

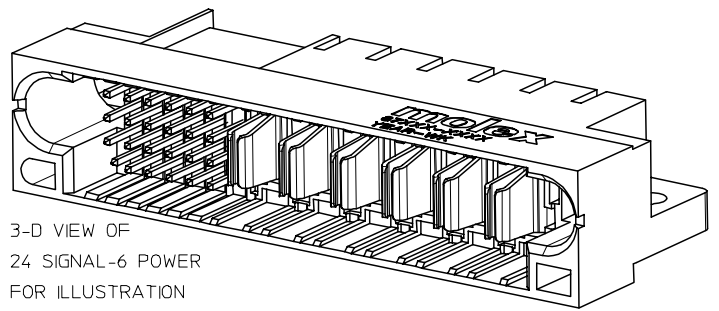
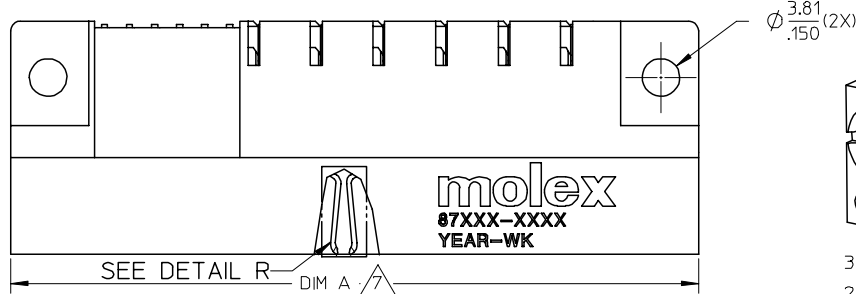
Reference - Drawing Numbers

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

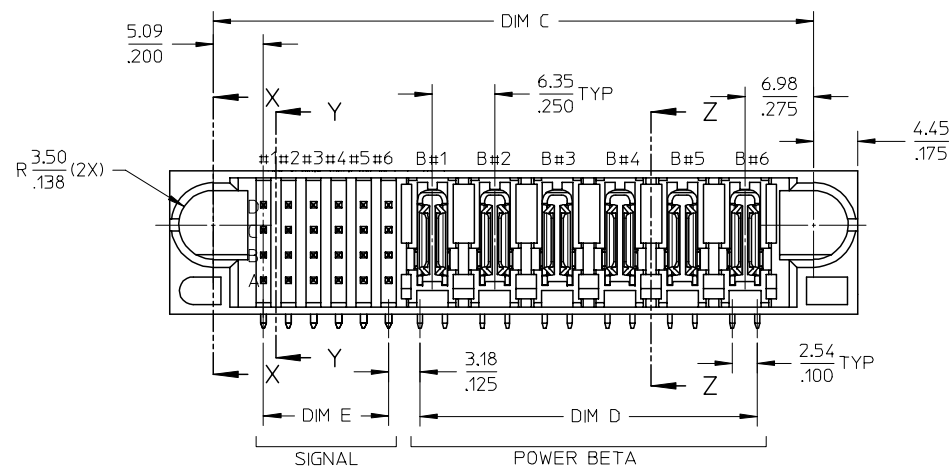
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10 9 8 7 6 5 4 3 2 1



3-D VIEW OF
24 SIGNAL-6 POWER
FOR ILLUSTRATION



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	DESCRIPTION REV
	2007/08/17		
	2007/08/20		
	D5		

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

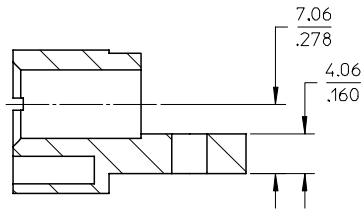
SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	
TITLE		
POWER CONNECTOR PLUG S-P(B) CONFIGURATION R/A, T/H, SCREW-MOUNT		
MOLEX INCORPORATED		
DOCUMENT NO.		SHEET NO.
SD-87667-010		1 OF 3
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT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

9 8 7 6 5 4 3 2 1

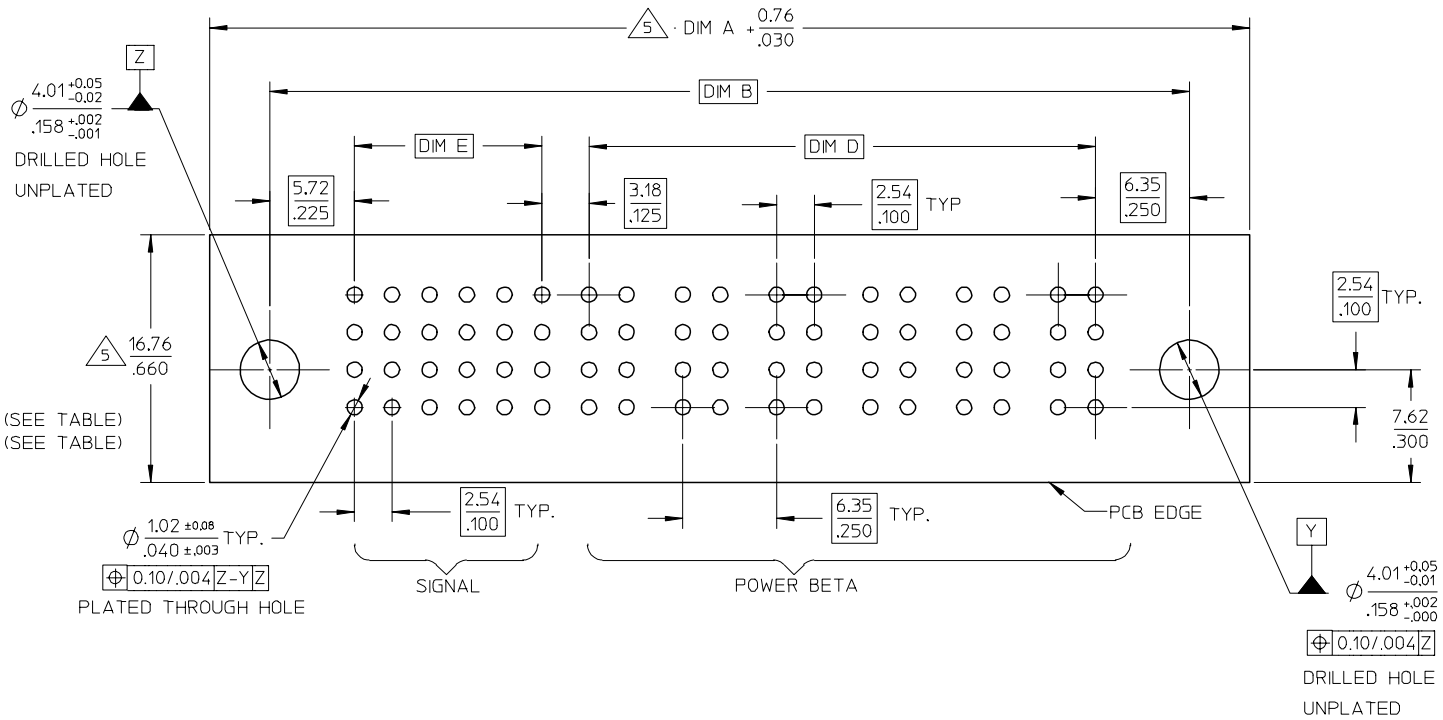
10 9 8 7 6 5 4 3 2 1

F
E
D
C
B
A

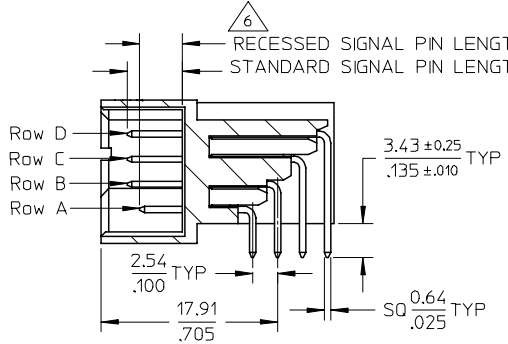
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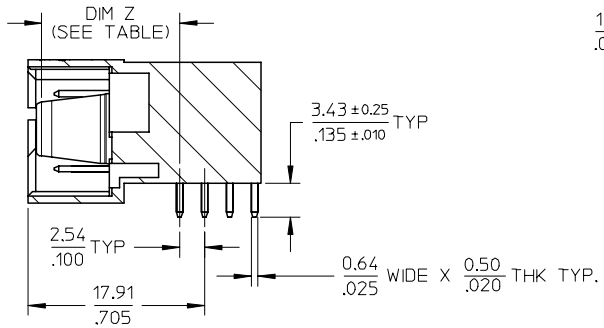
SECTION X-X



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

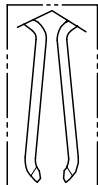
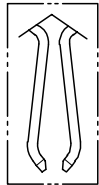
GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm INCH
4 PLACES	± --- ± ---
3 PLACES	± --- ± .010
2 PLACES	± 0.25 ± ---
1 PLACE	± --- ± ---
ANGULAR ± 3 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

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	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	2 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
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	mm INCH	MM/IN	NTS	METRIC	
	▽C=0	4 PLACES ± --- ± ---	DRAWN BY	DATE	TITLE	
		3 PLACES ± --- ± .010	BHLOW	2002/11/20	POWER CONNECTOR PLUG	
	2 PLACES ± 0.25 ± ---	CHECKED BY	DATE	S-P(B) CONFIGURATION		
	1 PLACE ± --- ± ---	PTL IM	2002/11/26	R/A, T/H, SCREW-MOUNT		
	ANGULAR ± 3 °	APPROVED BY	DATE	MOLEX INCORPORATED		
		SKTOH	2002/11/27			
		MATERIAL NO.		DOCUMENT NO.	SHEET NO.	
				SD-87667-010	3 OF 3	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE			