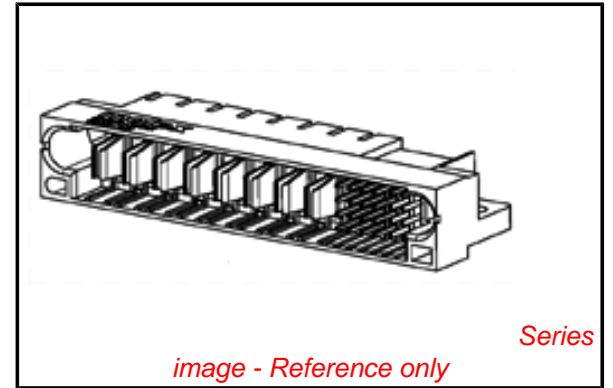


PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0876963010](#)
Status: **Active**
Overview: [extreme powerplus ssi](#)
Description: 6.35mm (.250") Pitch Power, 2.54mm (.100") Pitch Signal, EXTreme PowerPlus™ Pa-S Header, Through Hole, Right Angle, Screw Mount, Long Contacts, 36 Circuits, Power Alpha 8, Signal 28, Recessed Pin Locations: A5-A7 B1-B7,C1-C7,D1-D7; Lead-free

Documents:

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



General

Product Family	PCB Headers
Series	87696
Application	Board-to-Board
Comments	Long Contact
Overview	extreme powerplus ssi
Product Name	EXTreme PowerPlus™

Physical

Breakaway	No
Circuits (Loaded)	36
Circuits (maximum)	36
Circuits Detail	Power Alpha 8, Signal 28
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	None
Lock to Mating Part	Yes
Material - Metal	Copper Alloy
Material - Plating Mating	Gold
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
Pitch - Term. Interface (mm)	2.54 mm, 3.18 mm
Plating min: Mating (µin)	30
Plating min: Mating (µm)	0.76
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Shrouded	Closed Ends
Stackable	No
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole

EU RoHS

ELV and RoHS Compliant
REACH SVHC
 Not Reviewed
Halogen-Free Status

China RoHS



Not Reviewed

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

[87696Series](#)

Mates With

[87697](#) EXTreme PowerPlus™ Press-Fit Pa-S Receptacle. [87700](#) EXTreme PowerPlus™ Through Hole Pa-S Receptacle

Electrical

Current - Maximum per Contact	50A
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

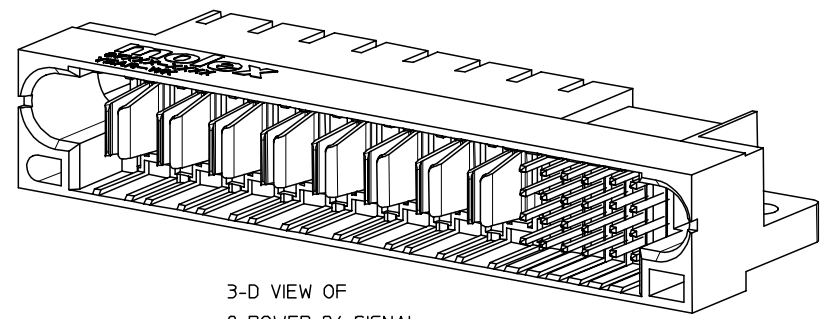
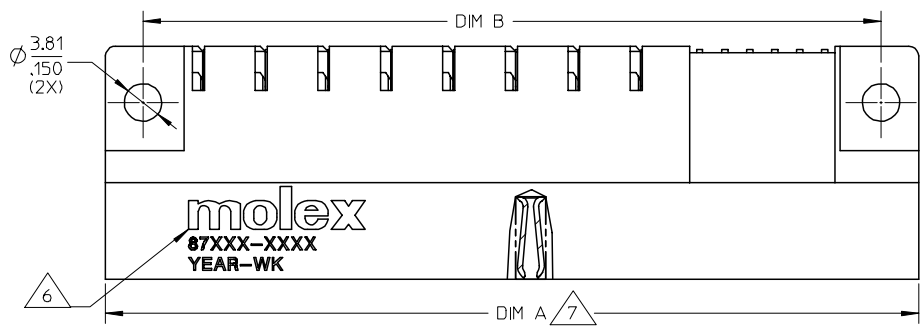
Material Info**Reference - Drawing Numbers**

Application Specification	AS-87631-018
Product Specification	PS-87631-006
Sales Drawing	SD-87696-021

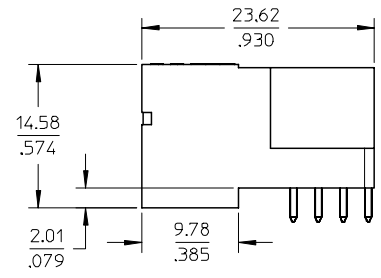
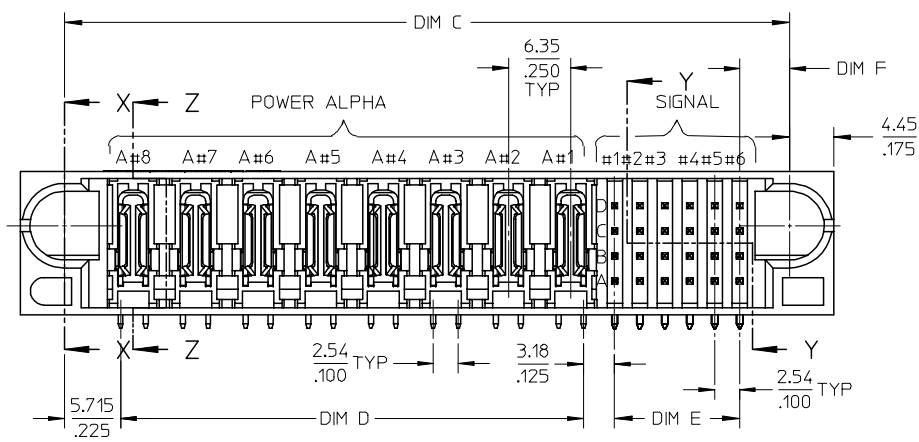
This document was generated on 05/25/2010

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10 9 8 7 6 5 4 3 2 1



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



- NOTES:
- MATERIALS: HOUSING - LCP GLASS FILLED, UL94V-0, COLOUR: BLACK
POWER PINS - COPPER ALLOY
SIGNAL PINS - COPPER ALLOY
 - FINISHES : POWER AND SIGNAL PINS :
SELECTIVE GOLD IN THE CONTACT AREA.
THICKNESS = 0.76 MICROMETER / 30 MICROINCH MINIMUM
SELECTIVE TIN ALLOY IN THE PC TAIL AREA
THICKNESS = 2.54 MICROMETER / 100 MICROINCH MINIMUM
NICKEL OVERALL
 - PRODUCT SPECIFICATION : PS-87631-006
 - SEE SHEET 2 FOR RECOMMENDED PCB LAYOUT AND THICKNESS.
COMPONENT STAY AWAY ZONE FROM CONNECTOR.
MANUFACTURER LOGO, PART NUMBER AND YEAR-WEEK CODE.
8 POWER ALPHA - 24 SIGNAL IS SHOWN FOR ILLUSTRATION .
CONNECTOR CONFIGURATION IS AVAILABLE UP TO 203MM/INCH.
PLEASE CONTACT MOLEX SALES PERSONNEL FOR OTHER CONFIGURATION AND OPTION NEEDED.

PDR#S-001375-00-00
EC NO: S2007-0253
DRWN:KELIM 2006/09/15
CHKD:MLONG 2006/09/15
APPR:SKTOH 2006/09/19

QUALITY SYMBOLS	▽=0
	△=0
DESCRIPTION	
REV	

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	MM INCH
4 PLACES	± .005 ± .002
3 PLACES	± .005 ± .002
2 PLACES	± 0.25 ± .010
1 PLACE	± .005 ± .002
ANGULAR ± 3°	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE	
MM/IN	
DRAWN BY	DATE
KFL IM	2006/03/10
CHECKED BY	DATE
MLONG	2006/03/21
APPROVED BY	DATE
NAGESHKN	2006/03/21
MATERIAL NO.	
SEE TABLE	
SIZE	
A3	

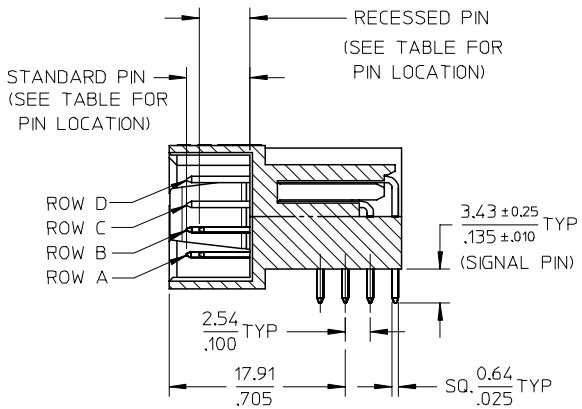
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NTS	METRIC		
TITLE		MOLEX INCORPORATED	
HEADER POWER CONNECTOR P-S CONFIGURATION R/A, T/H, SCREW-MOUNT			
DOCUMENT NO.		SHEET NO.	
SD-87696-021		1 OF 3	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

9 8 7 6 5 4 3 2 1

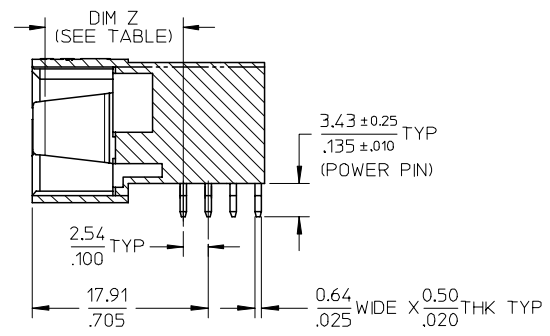
10 9 8 7 6 5 4 3 2 1

F
E
D
C
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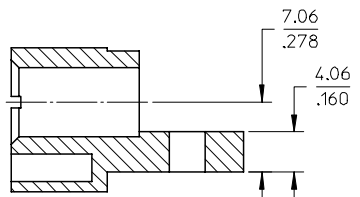
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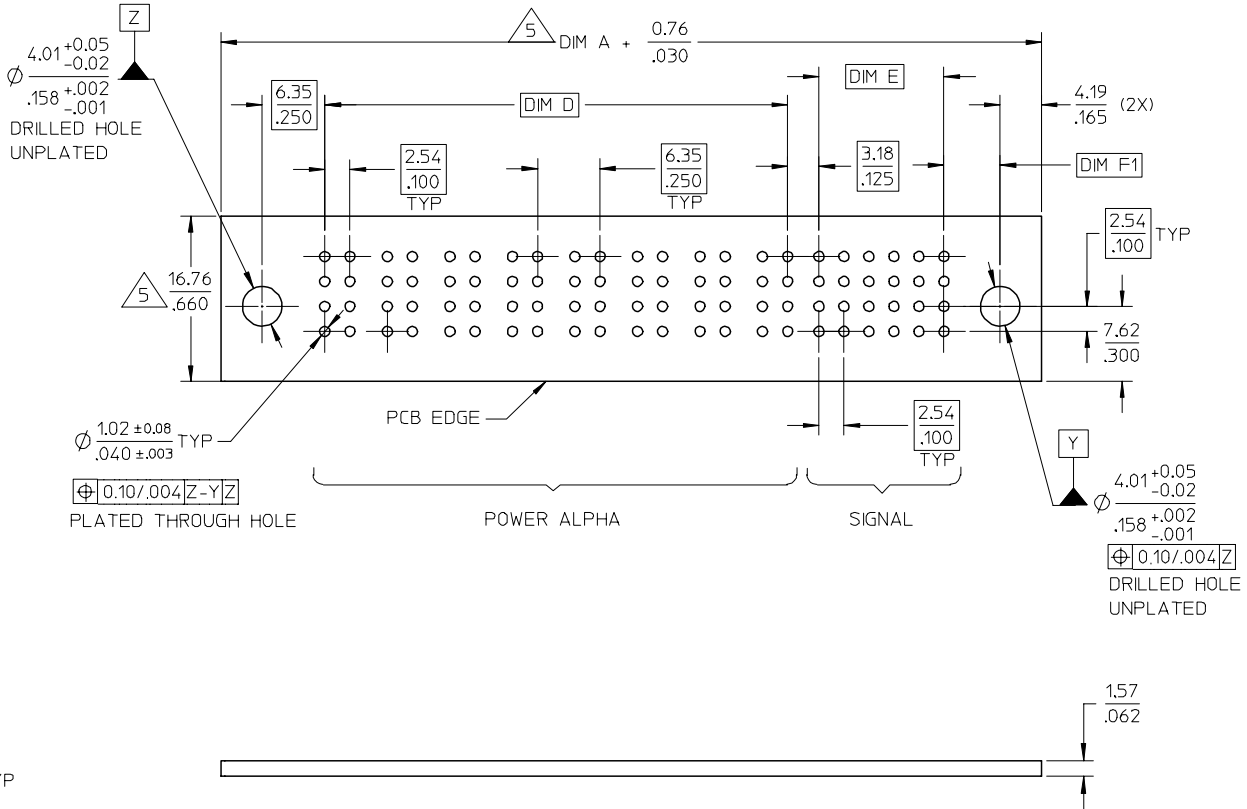
SECTION Y-Y



SECTION Z-Z



SECTION X-X





RECOMMENDED PCB LAYOUT

PDR#S-001375-00-00 EC NO: S2007-0253 DRWN:KFLM 2006/09/15 CHKD:MLONG 2006/09/15 APPR:SKTOH 2006/09/19	QUALITY SYMBOLS ▽=0 ▽C=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.25 ± ---	1 PLACE ± --- ± ---	ANGULAR ± 3°	DRAWN BY KFL IM	DATE 2006/03/10	TITLE HEADER POWER CONNECTOR P-S CONFIGURATION R/A, T/H, SCREW-MOUNT
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE TABLE	APPROVED BY NAGESHKN	DATE 2006/03/21	MOLEX INCORPORATED	SHEET NO. 2 OF 3
		MATERIAL NO.		DOCUMENT NO.		SD-87696-021		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

PART NUMBER	P-S CONFIGURATION		DIMENSIONS							POWER BLADE OPTIONS		STANDARD PIN LOCATION			RECESSED PIN LOCATION			PACKAGING			
	POWER ALPHA	SIGNAL	DIM A	DIM B	DIM C	DIM D	DIM E	DIM F	DIM F1	TYPE	DIM Z ±0.13/.005	ROW	COLUMN	LENGTH	ROW	COLUMN	LENGTH				
87696-3010	8	28	85.09 3.35	77.47 3.05	76.20 3.00	46.99 1.85	15.24 .600	5.08 .200	5.72 .225	LONG CONTACT	14.12/.556	D	NIL	6.86/.270	D	1-7	5.59/.220	TRAY			
87696-3012	2	24	44.45 1.75	36.83 1.45	35.56 1.40	8.89 0.35	12.70 .500	5.08 .200	5.72 .225			D	1-6		C	1,3,4,5,6			D	NIL	C

PDR#S-001375-00-00 EC NO: S2007-0253 DRWN:KFLM 2006/09/15 CHKD:MLONG 2006/09/15 APPR:SKTOH 2006/09/19	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION															
	 = 0  = 0.25	<table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.25	± ---	1 PLACE	± ---	± ---	MM/IN	NTS	METRIC	
		mm	INCH																		
	4 PLACES	± ---	± ---																		
3 PLACES	± ---	± ---																			
2 PLACES	± 0.25	± ---																			
1 PLACE	± ---	± ---																			
REV	DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: KFLM CHECKED BY: MLONG APPROVED BY: NAGESHKN DATE: 2006/03/21	TITLE: HEADER POWER CONNECTOR P-S CONFIGURATION R/A, T/H, SCREW-MOUNT MOLEX INCORPORATED DOCUMENT NO. SD-87696-021	SHEET NO. 3 OF 3																
A1			SEE TABLE																		
			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																	