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Part Number: **0877002002**
Status: **Active**
Overview: extreme_powerplus_ssi
Description: 6.35mm (.250") Pitch, Power, 2.54mm (.100") Pitch, Signal, EXTreme PowerPlus™ Pa-S Receptacle, Through Hole, Screw Mount, Right Angle, Signal 20, Power Alpha 4, 24 Circuits, Void Pins: A2, B2, C2, D2, Leadfree

Documents:

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

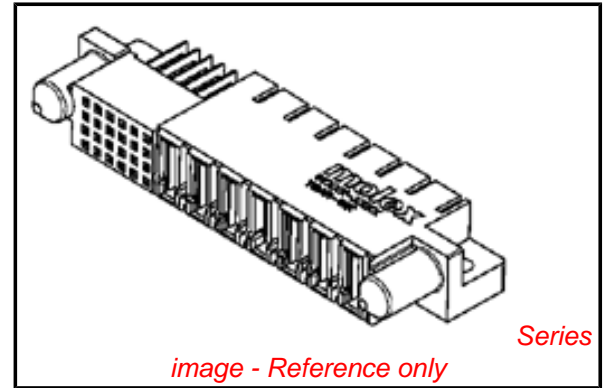
General

Product Family	PCB Receptacles
Series	87700
Application	Board-to-Board
Comments	Recessed Power Circuit Position: NIL Void Pins: A2, B2, C2, D2
Overview	<u>extreme_powerplus_ssi</u>
Product Name	EXTreme PowerPlus™

Physical

Circuits (Loaded)	24
Circuits Detail	Signal 20, Power Alpha 4
Color - Resin	Black
Durability (mating cycles max)	100
Glow-Wire Compliant	No
Guide 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
Pitch - Term. Interface (mm)	2.54 mm, 3.18 mm
Plating min: Mating (µin)	30.4
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
Stackable	No
Temperature Range - Operating	-20°C to +105°C
Termination Interface: Style	Through Hole

Electrical



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
 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

87700Series

Mates With

87696 EXTreme PowerPlus™ Pa-S Header

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

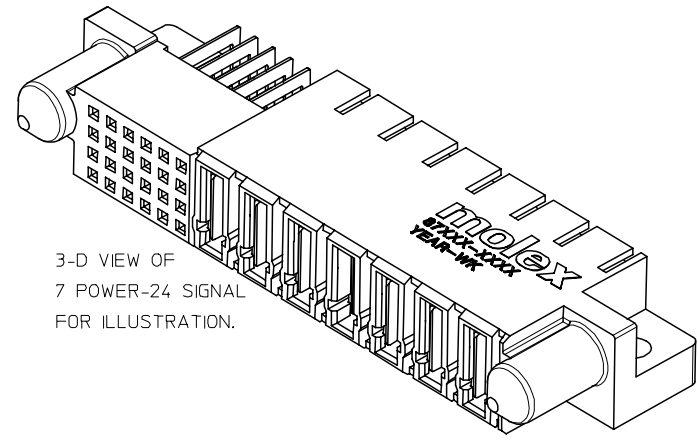
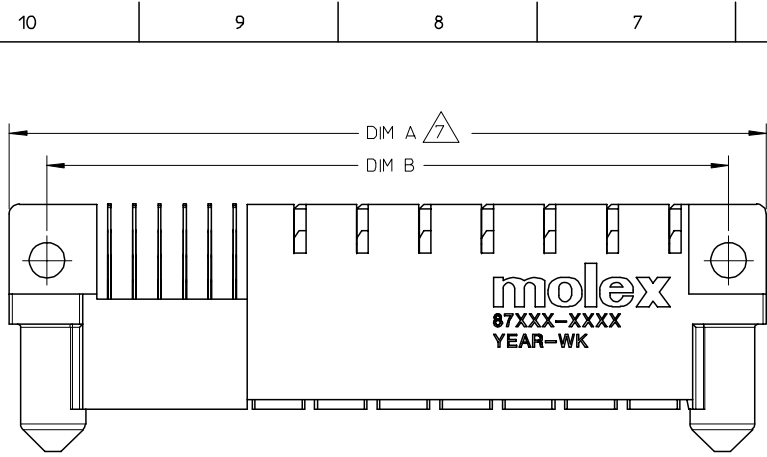
Material Info

Reference - Drawing Numbers

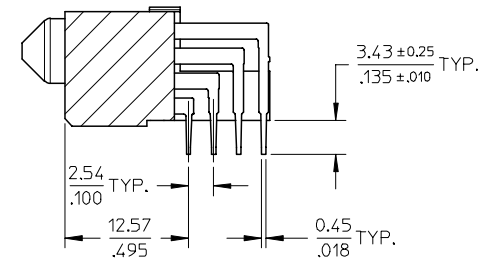
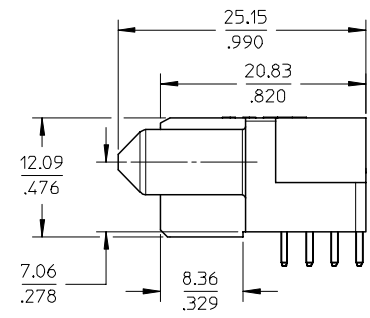
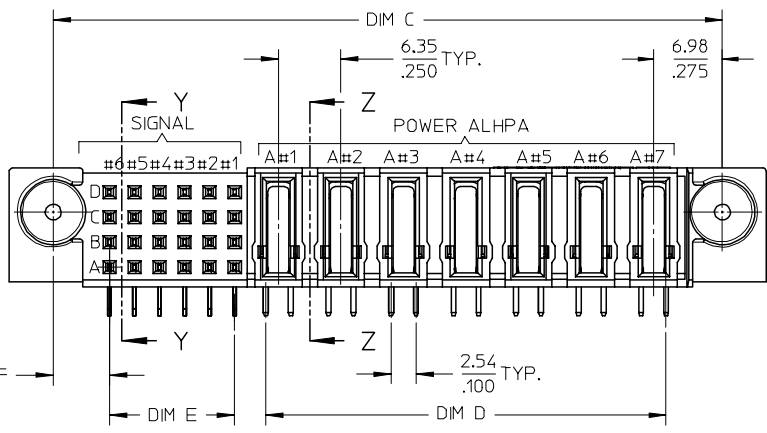
Application Specification	AS-87631-018
Product Specification	PS-87631-006
Sales Drawing	SD-87700-016

This document was generated on 05/22/2010

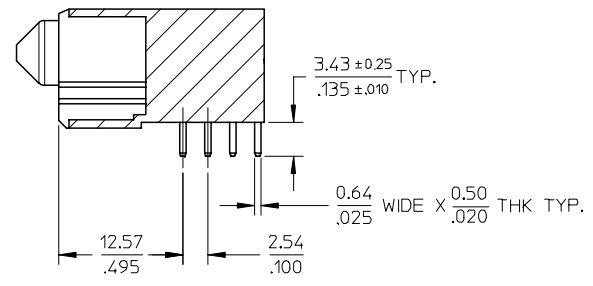
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3-D VIEW OF
7 POWER-24 SIGNAL
FOR ILLUSTRATION.



SECTION Y-Y



SECTION Z-Z

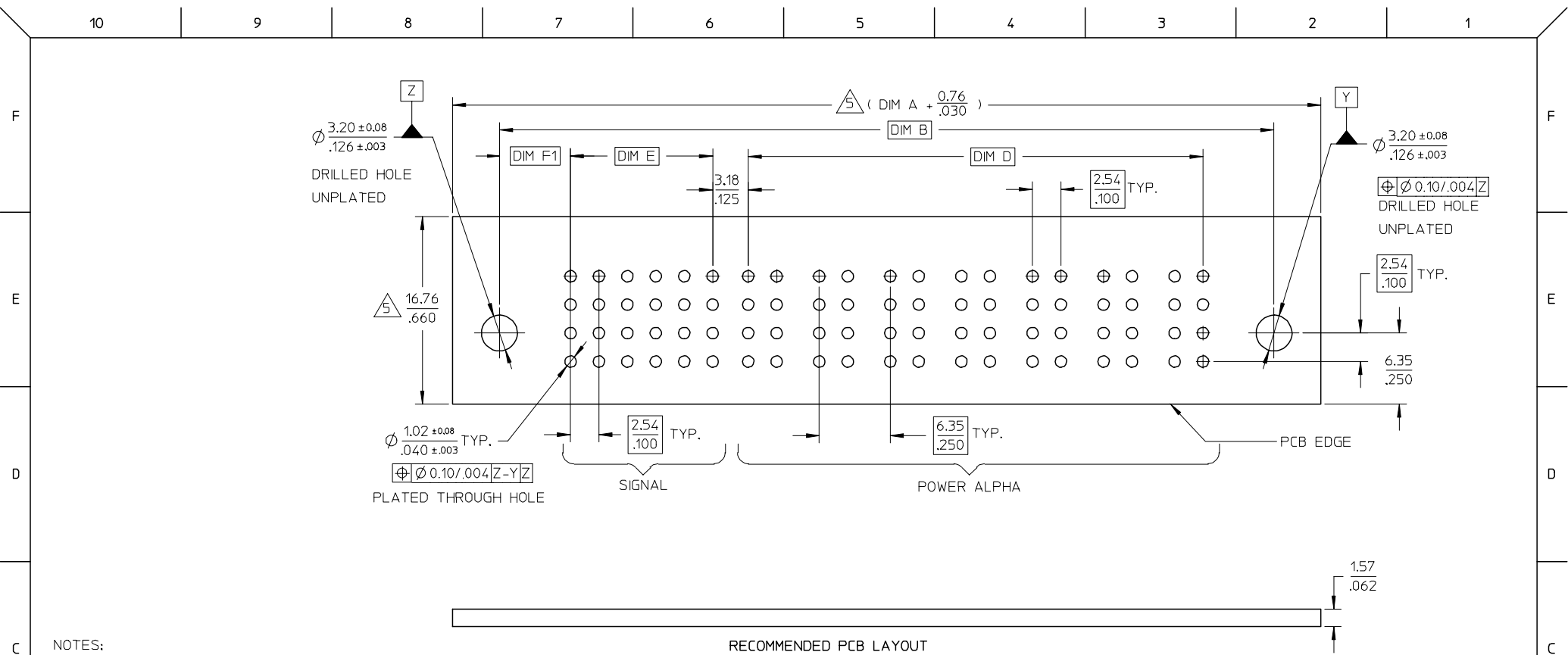
PDR#S-001537-00-00	2007/03/14
EC NO: S2007-0773	2007/03/14
DRWN:GEMARLY	2007/03/14
CHKD:SKANG	2007/03/14
APPR:MLONG	2007/03/14
D1	

QUALITY SYMBOLS	DESCRIPTION
▽=0	
▽=0	

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	MM INCH
4 PLACES	± .010 ± .0004
3 PLACES	± .025 ± .0010
2 PLACES	± 0.25 ± .0100
1 PLACE	± .50 ± .0200
ANGULAR ± 3 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE	
MM/IN	
DRAWN BY	DATE
KMGOH	2003/06/06
CHECKED BY	DATE
PTL IM	2003/06/11
APPROVED BY	DATE
SKTOH	2003/06/12
MATERIAL NO.	
SEE TABLE	
SIZE	A3

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	
TITLE		
POWER CONNECTOR RECEPT. P(A)-S CONFIGURATION R/A, SCREW MOUNT, 6.35MM		
MOLEX INCORPORATED		
DOCUMENT NO.		SHEET NO.
SD-87700-016		1 OF 3







NOTES:

- 1 MATERIALS : HOUSING - LCP, GLASS FILLED,
UL94V-0, COLOR: BLACK
POWER PINS - COPPER ALLOY
SIGNAL PINS - 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
NICKEL OVERALL
- 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 POWER - 24 SIGNAL CONNECTOR IS SHOWN FOR ILLUSTRATION

RECOMMENDED PCB LAYOUT

PDR#S-001537-00-00 EC NO: S2007-0773 DRWG:GMENARLY 2007/03/14 CHKD:SKANG 2007/03/14 APPR:MLONG 2007/03/14	DESCRIPTION D1	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION															
		$\nabla = 0$ $\triangle = 0$	<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>± .010</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	± ---	± .010	2 PLACES	± 0.25	± ---	1 PLACE	± ---	± ---	MM/IN	NTS	METRIC	<input checked="" type="checkbox"/> THIRD ANGLE <input type="checkbox"/> FIRST ANGLE
			mm	INCH																		
		4 PLACES	± ---	± ---																		
3 PLACES	± ---	± .010																				
2 PLACES	± 0.25	± ---																				
1 PLACE	± ---	± ---																				
	DRAWN BY: KMG0H CHECKED BY: PTL IM APPROVED BY: SKT0H DATE: 2003/06/06 DATE: 2003/06/11 DATE: 2003/06/12	TITLE			POWER CONNECTOR RECEPT. P(A)-S CONFIGURATION R/A, SCREW MOUNT, 6.35MM																	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE		MOLEX INCORPORATED SD-87700-016	SHEET NO. 2 OF 3																

PART NUMBER	P-S CONFIGURATION		DIM A	DIM B	DIM C	DIM D	DIM E	DIM F	DIM F1	RECESS POWER PINS LOCATIONS	VOID PIN LOCATIONS	PACKAGING
	SIGNAL	POWER ALPHA										
87700-2000	16	4	52.70 2.075	45.09 1.775	43.81 1.725	21.59 .850	7.62 .300	5.72 .225	6.35 .250	NIL	NIL	TRAY
87700-2001	24	8	82.55 3.250	74.93 2.950	73.66 2.900	46.99 1.850	12.70 .500	5.08 .200	5.72 .225	NIL	NIL	TRAY
87700-2002	20	4	54.61 2.150	46.99 1.850	45.72 1.800	21.59 .850	10.16 .400	5.08 .200	5.72 .225	NIL	A2,B2,C2,D2	TRAY

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D1			SIZE A3	SD-87700-016	3 OF 3																		