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Part Number: **0877003005**
Status: **Active**
Overview: extreme_powerplus_ssi
Description: 6.35mm (.250") Pitch, Power, 2.54mm (.100") Pitch, Signal, EXTreme PowerPlus™ Pa-S Receptacle, Through Hole, with Beveled Metal Pins, Right Angle, Signal 16, Power Alpha 4, 20 Circuits, Leadfree

Documents:

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

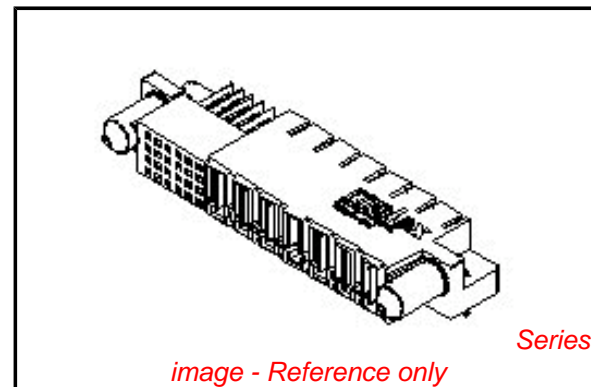
General

Product Family	PCB Receptacles
Series	<u>87700</u>
Application	Board-to-Board
Comments	No Recessed Power Circuit Position
Overview	<u>extreme_powerplus_ssi</u>
Product Literature Order No	987650-3002
Product Name	EXTreme PowerPlus™

Physical

Circuits (Loaded)	20
Circuits Detail	Signal 16, 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

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	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

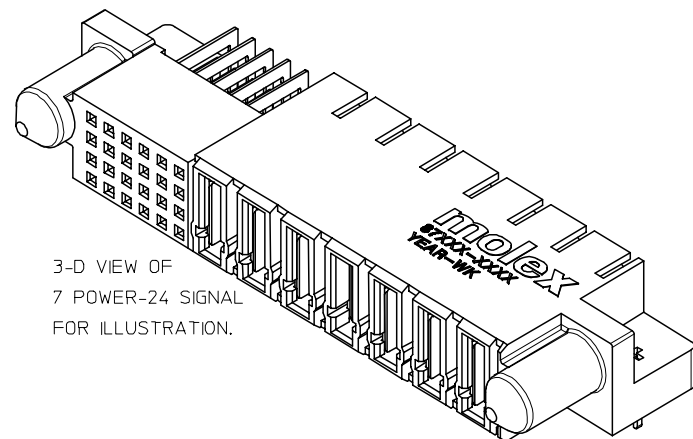
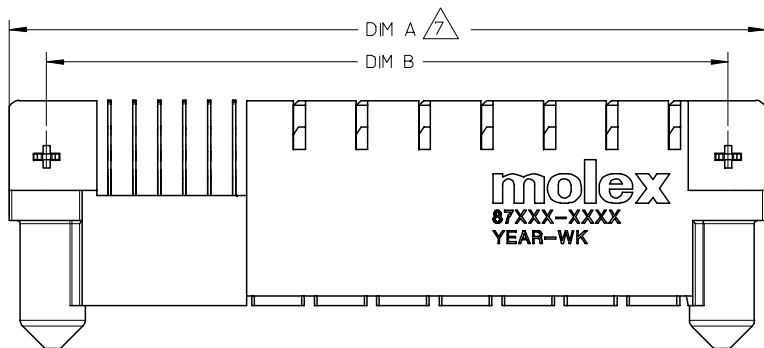
Material Info

Reference - Drawing Numbers

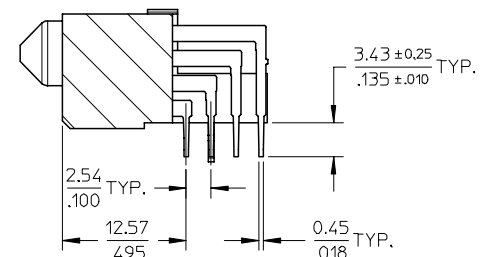
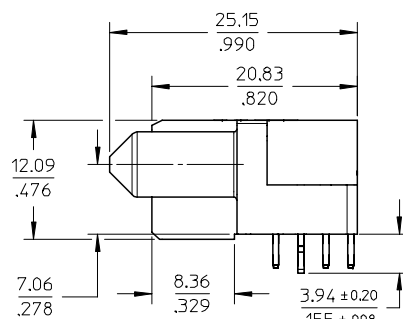
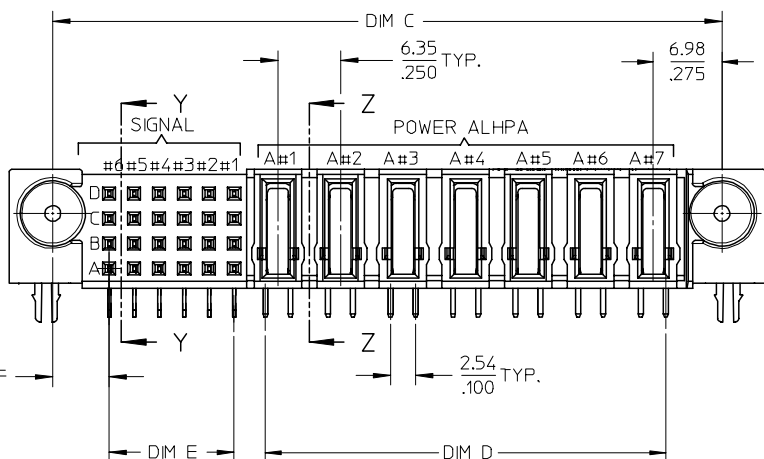
Application Specification	AS-87631-018
Product Specification	PS-87631-006
Sales Drawing	SD-87700-010

This document was generated on 05/22/2010

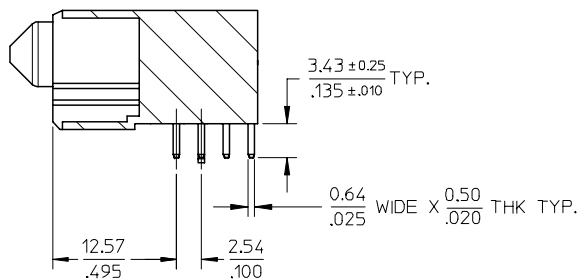
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3-D VIEW OF
7 POWER-24 SIGNAL
FOR ILLUSTRATION.



SECTION Y-Y



SECTION Z-Z

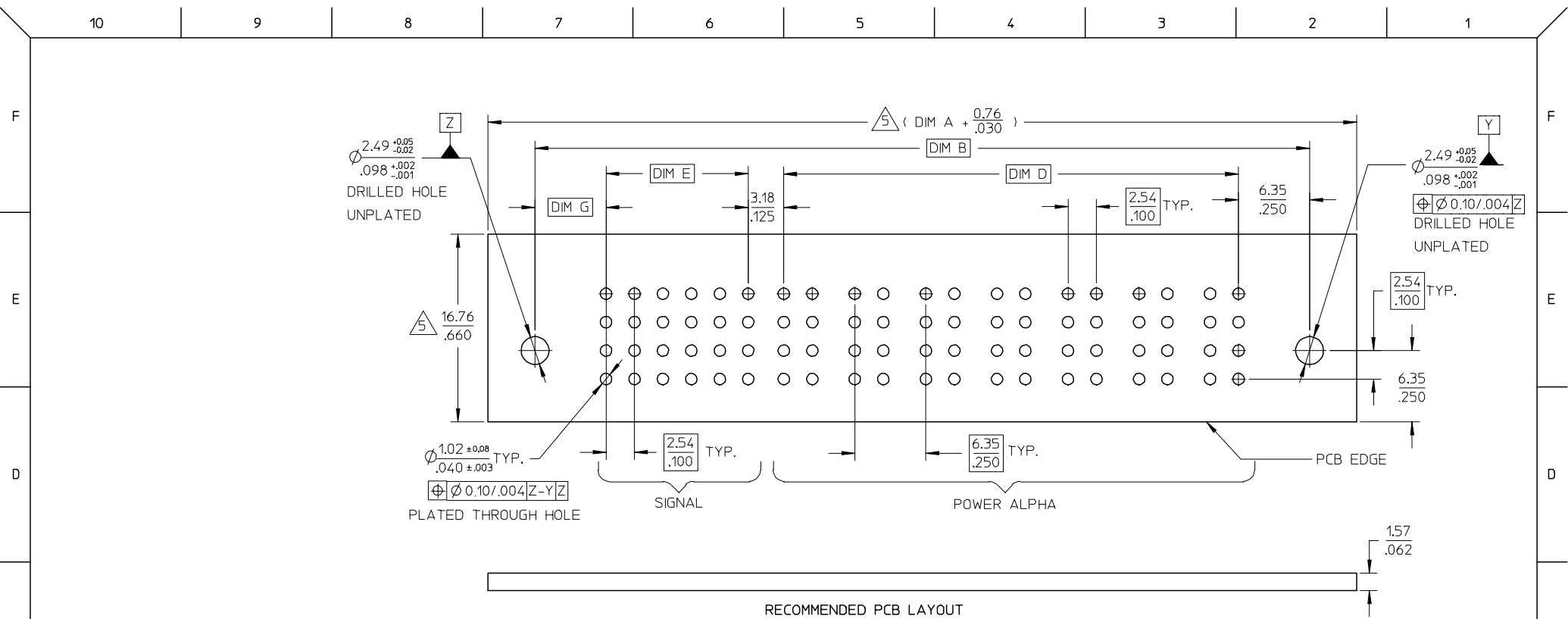
PDR#S-001245-00-00	2006/05/09
EC NO: S2006-1028	2006/05/09
DRWN:KELIM	2006/05/10
CHKD:MLONG	
APPR:PTLIM	

QUALITY SYMBOLS	DESCRIPTION
▽=0	
▽C=0	
REV	D1

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

DRAWN BY	DATE
KMGOH	2002/08/20
CHECKED BY	DATE
PTLIM	2002/11/25
APPROVED BY	DATE
SKTOH	2002/11/26
MATERIAL NO.	SEE TABLE

SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
TITLE POWER CONNECTOR RECEPT. P(A)-S CONFIGURATION R/A, T/H, 6.35MM		
MOLEX INCORPORATED		
DOCUMENT NO. SD-87700-010	SHEET NO. 1 OF 3	



- NOTES:
- MATERIALS : HOUSING - LCP, GLASS FILLED, UL 94V-0, COLOR: BLACK
 POWER PINS - COPPER ALLOY
 SIGNAL PINS - COPPER ALLOY
 BOARD LOCK - COPPER ALLOY
 - FINISHES: POWER AND SIGNAL PINS
 SELECTIVE GOLD IN THE CONTACT AREA
 THICKNESS = 0.76 MICROMETER / 30 MICROINCH MINIMUM
 SELECTIVE TIN IN THE PCB TAIL AREA
 THICKNESS = 2.54 MICROMETER / 100 MICROINCH MINIMUM
 NICKEL OVERALL
 - PRODUCT SPECIFICATIONS : PS-87631-006
 - SEE SHEET 2 FOR RECOMMENDED PCB LAYOUT AND THICKNESS
 - COMPONENT STAY AWAY ZONE FROM CONNECTOR
 - REFER TO THE TABLE ON TOP OF PAGE 3/3 FOR RECESSED PINS LOCATION
 - 7 POWER - 24 SIGNAL CONNECTOR IS SHOWN FOR ILLUSTRATION

PDR#S-001245-00-00 EC NO: S2006-1028 DRWN:KELIM 2006/05/09 CHKD:M.LONG 2006/05/09 APPR:PTL IM 2006/05/10	QUALITY SYMBOLS ▽=0 ◁=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY KMG0H	DATE 2002/08/20	TITLE POWER CONNECTOR RECEPT. P(A)-S CONFIGURATION R/A, T/H, 6.35MM			
		4 PLACES ± ---	± ---	3 PLACES ± ---	± .010	CHECKED BY PTL IM				
		2 PLACES ± 0.25	± ---	1 PLACE ± ---	± ---	APPROVED BY SKT0H	DATE 2002/11/26	MOLEX INCORPORATED		
ANGULAR ± 3°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		DOCUMENT NO. SD-87700-010	SHEET NO. 2 OF 3			

PART NUMBER	P-S CONFIGURATION		DIM A	DIM B	DIM C	DIM D	DIM E	DIM F	DIM G	RECESS POWER PINS LOCATIONS	VOID PIN LOCATION	PACKAGING
	SIGNAL	POWER ALPHA										
87700-3002	24	7	76.83 3.025	69.22 2.725	67.94 2.675	40.64 1.600	12.70 .500	5.72 .225	6.35 .250	NIL	NIL	TRAY
87700-3003	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
87700-3005	16	4	52.07 2.050	44.45 1.750	43.18 1.700	21.59 .850	7.62 .300	5.08 .200	5.72 .225	NIL	NIL	TRAY
87700-3006	20	4	54.61 2.150	46.99 1.850	45.72 1.800	21.59 .850	10.16 0.400	5.08 .200	5.72 .225	NIL	A2,B2,C2,D2	TRAY

PDR#S-001245-00-00 EC NO: S2006-1028 DRWN:KELIM 2006/05/09 CHKD:M.LONG 2006/05/09 APPR:PTLIM 2006/05/10 REV D1	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION															
	= 0 = 0	<table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± .005</td> <td>± .0005</td> </tr> <tr> <td>3 PLACES</td> <td>± .008</td> <td>± .0008</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.015</td> <td>± .0015</td> </tr> <tr> <td>1 PLACE</td> <td>± .025</td> <td>± .0025</td> </tr> </table>		mm	INCH	4 PLACES	± .005	± .0005	3 PLACES	± .008	± .0008	2 PLACES	± 0.015	± .0015	1 PLACE	± .025	± .0025	MM/IN	NTS	METRIC	
		mm	INCH																		
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	3 PLACES	± .008	± .0008																		
2 PLACES	± 0.015	± .0015																			
1 PLACE	± .025	± .0025																			
			DRAWN BY	DATE	TITLE																
			KMGOH	2002/08/20	POWER CONNECTOR RECEPT. P(A)-S CONFIGURATION R/A, T/H, 6.35MM																
			CHECKED BY	DATE																	
			PTLIM	2002/11/25																	
			APPROVED BY	DATE																	
			SKTOH	2002/11/26	MOLEX INCORPORATED																
			MATERIAL NO.	DOCUMENT NO.		SHEET NO.															
				SD-87700-010		3 OF 3															
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																	
			A3																		