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Part Number: [0876642001](#)

Status: **Active**

Overview: [extreme_powerplus_ssi](#)

Description: 6.35mm (.250") and 7.62mm (.300") Pitch Power, 2.54mm (.100") Pitch Signal, EXTreme PowerPlus™ AC/DC Receptacle, Through Hole, Right Angle, 33 Circuits, Power Beta 6, Signal 24, Power Alpha 3, Recessed Power Circuit Positions A2, A3, B1, B2, B3, B4, B5, B6,

Documents:

[3D Model](#)

[Drawing \(PDF\)](#)

[Product Specification PS-87663-006 \(PDF\)](#)

[RoHS Certificate of Compliance \(PDF\)](#)

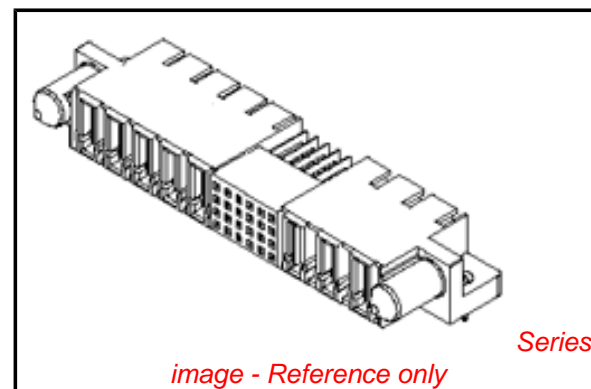


image - Reference only

Series

General

Product Family	PCB Receptacles
Series	87664
Application	Board-to-Board
Comments	Recessed Power Circuit Position: A2, A3, B1, B2, B3, B4, B5, B6
Overview	extreme_powerplus_ssi
Product Literature Order No	987650-3002
Product Name	EXTreme PowerPlus™

Physical

Circuits (Loaded)	33
Circuits Detail	Power Beta 6, Signal 24, Power Alpha 3
Color - Resin	Black
Glow-Wire Compliant	No
Guide to Mating Part	Yes
Lock to Mating Part	None
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	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.60 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.100 In, 0.250 In, 0.300 In
Pitch - Mating Interface (mm)	2.54 mm, 6.35 mm, 7.62 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
Stackable	No
Temperature Range - Operating	-20°C to +105°C
Termination Interface: Style	Through Hole

Electrical

Current - Maximum per Contact	2.5A, 30A, 50A
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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

87664Series

Mates With

87663 PCB Header with Beveled Metal Pins

Voltage - Maximum

250V (RMS)

Material Info

Reference - Drawing Numbers

Application Specification

AS-87631-018

Product Specification

PS-87663-006

Sales Drawing

SD-87664-011

This document was generated on 06/02/2010

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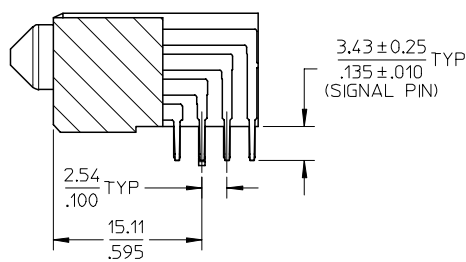
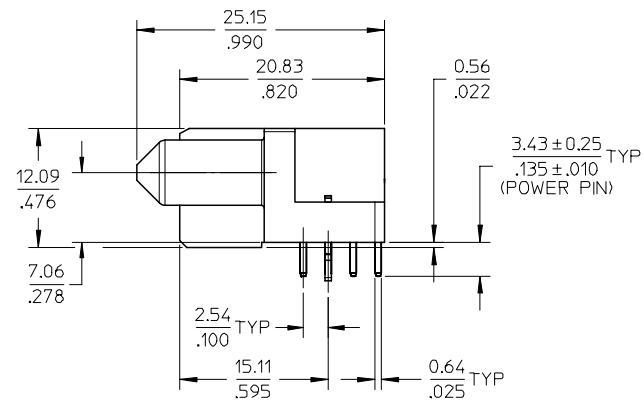
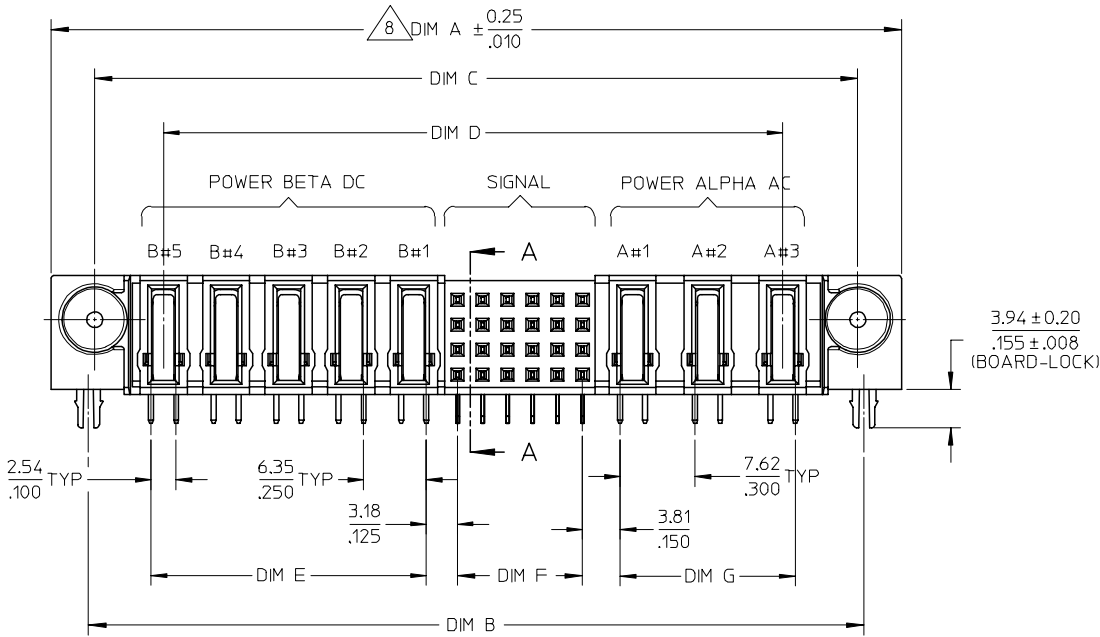
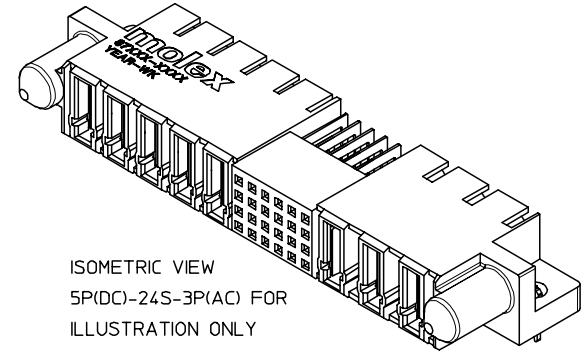
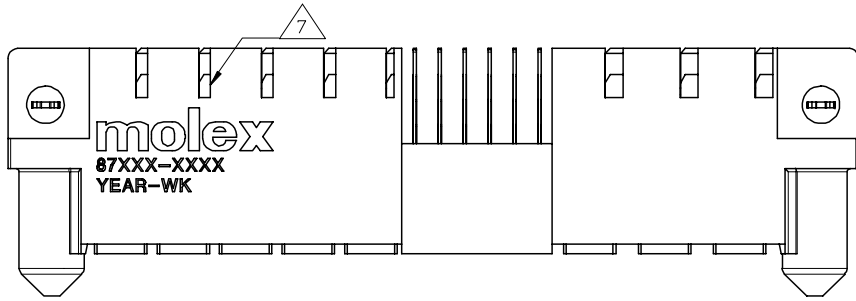
E

D

C

B

A



SECTION A-A

OBS EC NO: S2006-0767 DRWN:MLONG CHKD:NAGESHKN APPR:PTLIM	2006/04/03	DESCRIPTION
	2006/04/03	
	2006/04/06	
	REV	

QUALITY SYMBOLS	▽=0
	∇=0

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm INCH
4 PLACES	± --- ± ---
3 PLACES	± --- ± .005
2 PLACES	± 0.13 ± .010
1 PLACE	± 0.25 ± ---
ANGULAR ± 3 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE MM/IN	
DRAWN BY	DATE
BHLOW	2002/11/20
CHECKED BY	DATE
PTLIM	2002/11/26
APPROVED BY	DATE
SKTOH	2002/11/27
MATERIAL NO.	DOCUMENT NO.
SEE TABLE	SD-87664-011
SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
TITLE		
AC/DC POWER RECEPTACLE P(A)AC-S-P(B)DC CONFIG. R/A, T/H, BOARD-LOCK		
MOLEX MOLEX INCORPORATED		
SHEET NO. 1 OF 3		

9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

F F

E E

D D

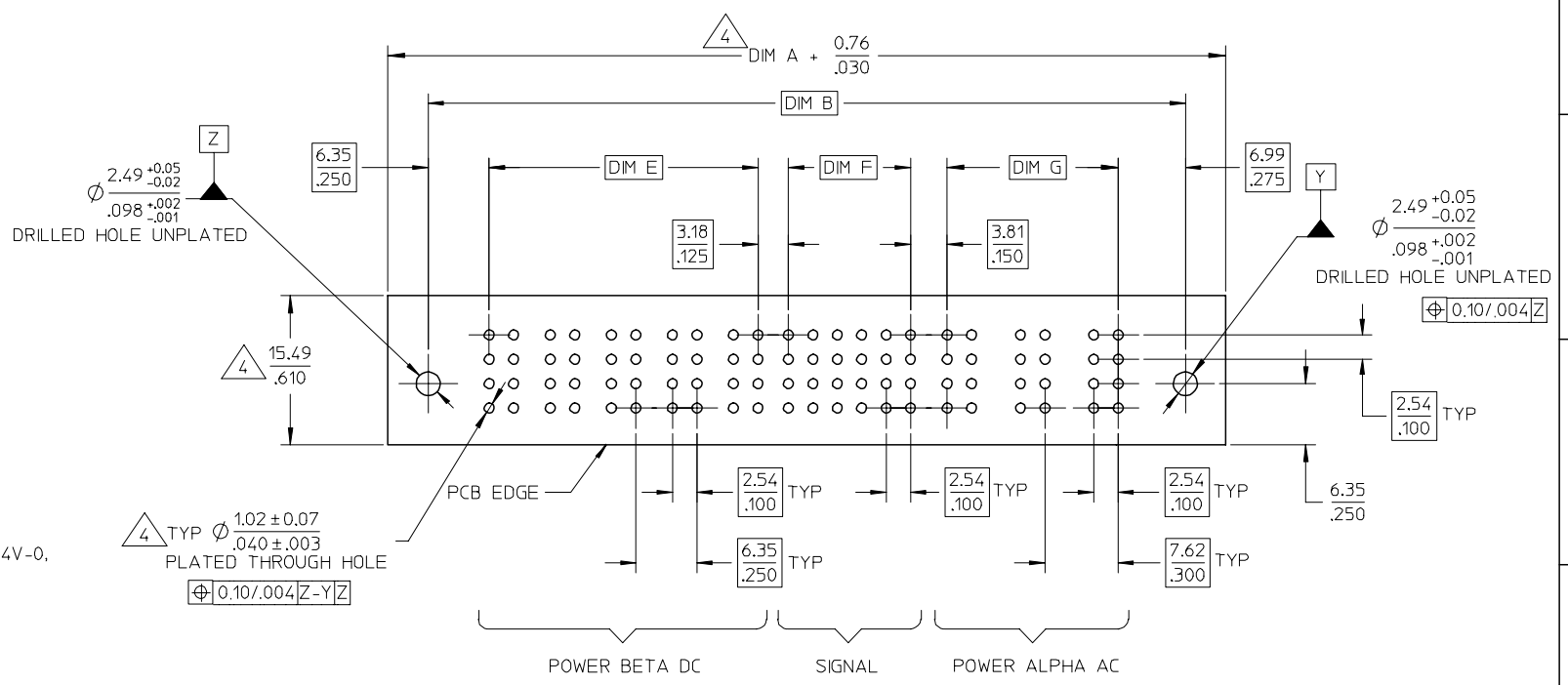
C C

B B

A A

NOTES:

1. MATERIALS:-
HOUSING - LCP, GLASS FILLED, UL94V-0, COLOUR: BLACK.
SIGNAL TERMINAL - COPPER ALLOY
POWER TERMINAL - COPPER ALLOY
2. FINISH :-
SIGNAL & POWER CONTACTS
0.76 MICROMETER MINIMUM GOLD (Au) AT CONTACT AREA AND
2.54 MICROMETER MINIMUM TIN AT SOLDER TAIL AREA
OVER 1.27 MICROMETER MINIMUM NICKEL (Ni) UNDERPLATE.
3. PRODUCT SPECIFICATION : PS-87663-006.
4. COMPONENT STAY AWAY FROM CONNECTOR.
5. PCB NOTE FOR DIAMETER 1.02/.040 PLATED HOLE.
- DRILLED HOLE SIZE IS 1.15/ .0453.
- PLATE WITH 0.007 / .0003 MINIMUM TIN OVER 0.03/.001
TO 0.08/.003 COPPER PLATING TO ACHIEVE 1.02±0.07/.040±.003 HOLE.
6. ALL TERMINAL TIPS ARE DESIGNED WITH EXPOSE BASE COPPER.
THIS IS CREATED BY FINAL CUTTING PROCESS AFTER PLATING.
7. MANUFACTURING LOGO, PART NUMBER AND YEAR-WEEK CODE.
8. 5P(DC)-24S-3P(AC) IS SHOWN FOR ILLUSTRATION.
CONNECTOR CONFIGURATION IS AVAILABLE UP TO 203MM/8INCH.
PLEASE CONTACT MOLEX SALES PERSONNEL FOR OTHER CONFIGURATION AND OPTION NEEDED.



RECOMMENDED PCB LAYOUT

OBS TIN/LEAD P/N EC NO: S2006-0767 DRWN:MLONG 2006/04/03 CHKD:WAGESHKM 2006/04/03 APPR:PTLIM 2006/04/06	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY BHLW	DATE 2002/11/20	TITLE AC/DC POWER RECEPTACLE P(A)AC-S-P(B)DC CONFIG. R/A, T/H, BOARD-LOCK	MOLEX INCORPORATED			
			4 PLACES ± --- ± ---	3 PLACES ± --- ± .005	CHECKED BY PTLIM	DATE 2002/11/26					
			2 PLACES ± 0.13 ± .010	1 PLACE ± 0.25 ± ---	APPROVED BY SKTOH	DATE 2002/11/27					
		ANGULAR ± 3 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		MATERIAL NO.	DOCUMENT NO. SD-87664-011	SHEET NO. 2 OF 3		

9 8 7 6 5 4 3 2 1

PART NUMBER	P-S-P CONFIGURATION			DIM A	DIM B	DIM C	DIM D	DIM E	DIM F	DIM G	RECESSED POWER PIN LOCATION		PACKAGING
	POWER BETA DC	SIGNAL	POWER ALPHA AC								A	B	
87664-2000	5	24	3	86.36 3.400	78.74 3.100	77.47 3.050	62.88 2.475	27.94 1.100	12.70 .500	17.78 .700	A 2, 3 B 1, 2, 3, 4, 5	TRAY	
87664-2001	6	24	3	92.71 3.650	85.09 3.350	83.82 3.300	69.23 2.725	34.29 1.350	12.70 .500	17.78 .700	A 2, 3 B 1, 2, 3, 4, 5, 6	TRAY	

OBS TIN/LEAD P/N EC NO: S2006-0767 DRWN:MLONG CHKD:NAGESHKN APPR:PTL IM	2006/04/03 2006/04/03 2006/04/06	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM/IN	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION																												
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