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Part Number: [0876642000](#)
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, 32 Circuits, Power Beta 5, Signal 24, Power Alpha 3, Recessed Power Circuit Positions A2, A3, B1, B2, B3, B4, B5, Lea

Documents:

[3D Model](#) [Product Specification PS-87663-006 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

UL E29179

General

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

Physical

Circuits (Loaded) 32
 Circuits Detail Power Beta 5, Signal 24, Power Alpha 3
 Color - Resin Black
 Flammability 94V-0
 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

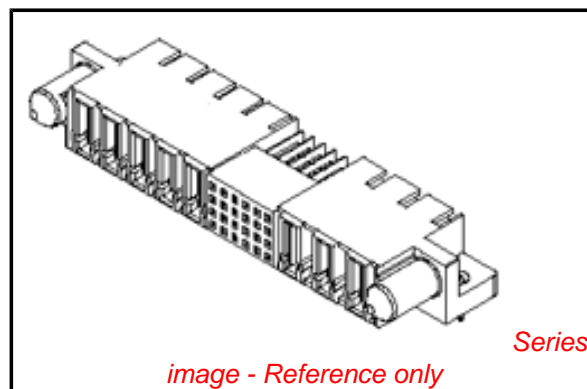


image - Reference only

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](#)

Termination Interface: Style

Through Hole

Electrical

Current - Maximum per Contact

2.5A, 30A, 50A

Voltage - Maximum

250V (RMS)

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-87663-006

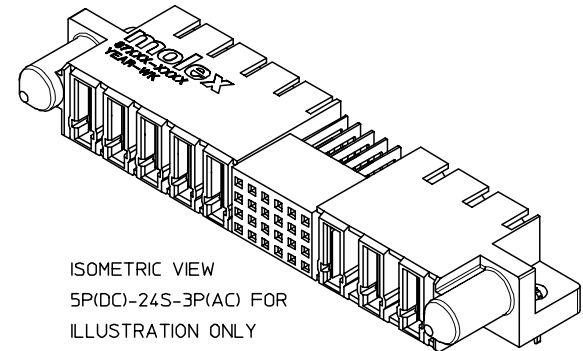
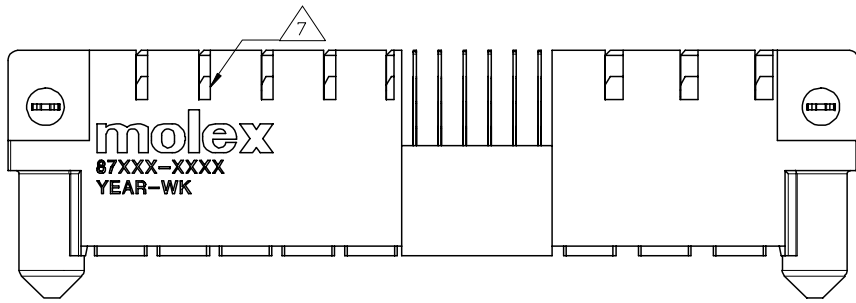
Sales Drawing

SD-87664-011

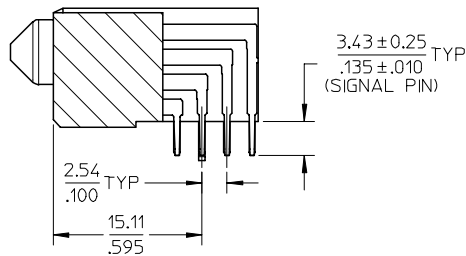
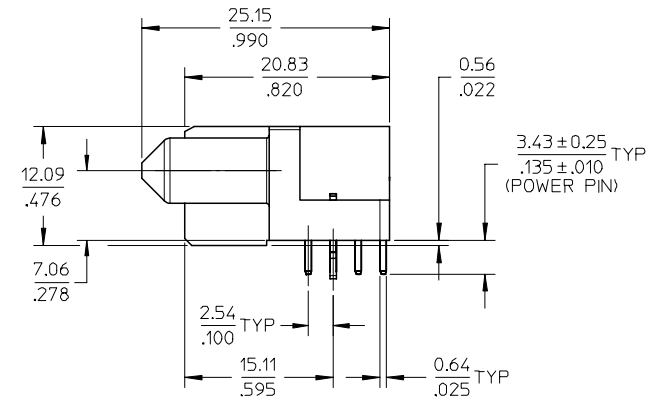
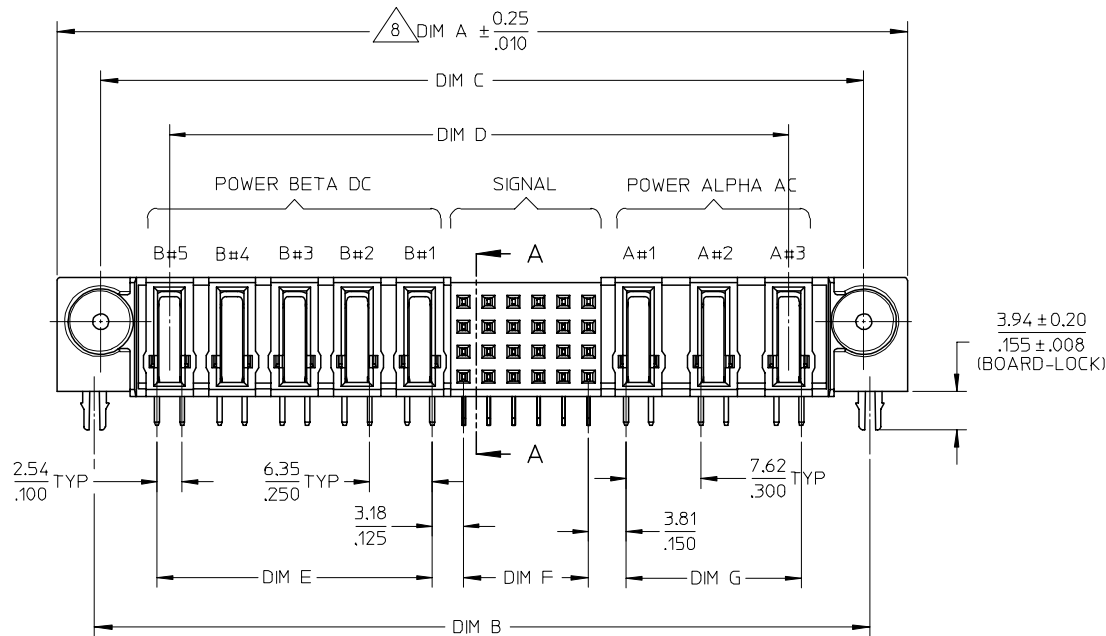
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10 9 8 7 6 5 4 3 2 1



ISOMETRIC VIEW
5P(DC)-24S-3P(AC) FOR
ILLUSTRATION ONLY



SECTION A-A

OBS TIN/LEAD P/N
EC NO: S2006-0767
DRWN:MLONG 2006/04/03
CHKD:NAGESHKN 2006/04/03
APPR:PTLIM 2006/04/06

QUALITY SYMBOLS
▽=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	
		MM/IN	
	mm	INCH	
4 PLACES	± ---	± ---	
3 PLACES	± ---	± .005	
2 PLACES	± 0.13	± .010	
1 PLACE	± 0.25	± ---	
ANGULAR ± 3 °			

DRAWN BY		DATE	
BHLOW		2002/11/20	
CHECKED BY		DATE	
PTL IM		2002/11/26	
APPROVED BY		DATE	
SKTOH		2002/11/27	
MATERIAL NO.		DOCUMENT NO.	
SEE TABLE		SD-87664-011	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
NTS	METRIC		
TITLE			
AC/DC POWER RECEPTACLE P(A)AC-S-P(B)DC CONFIG. R/A, T/H, BOARD-LOCK			
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

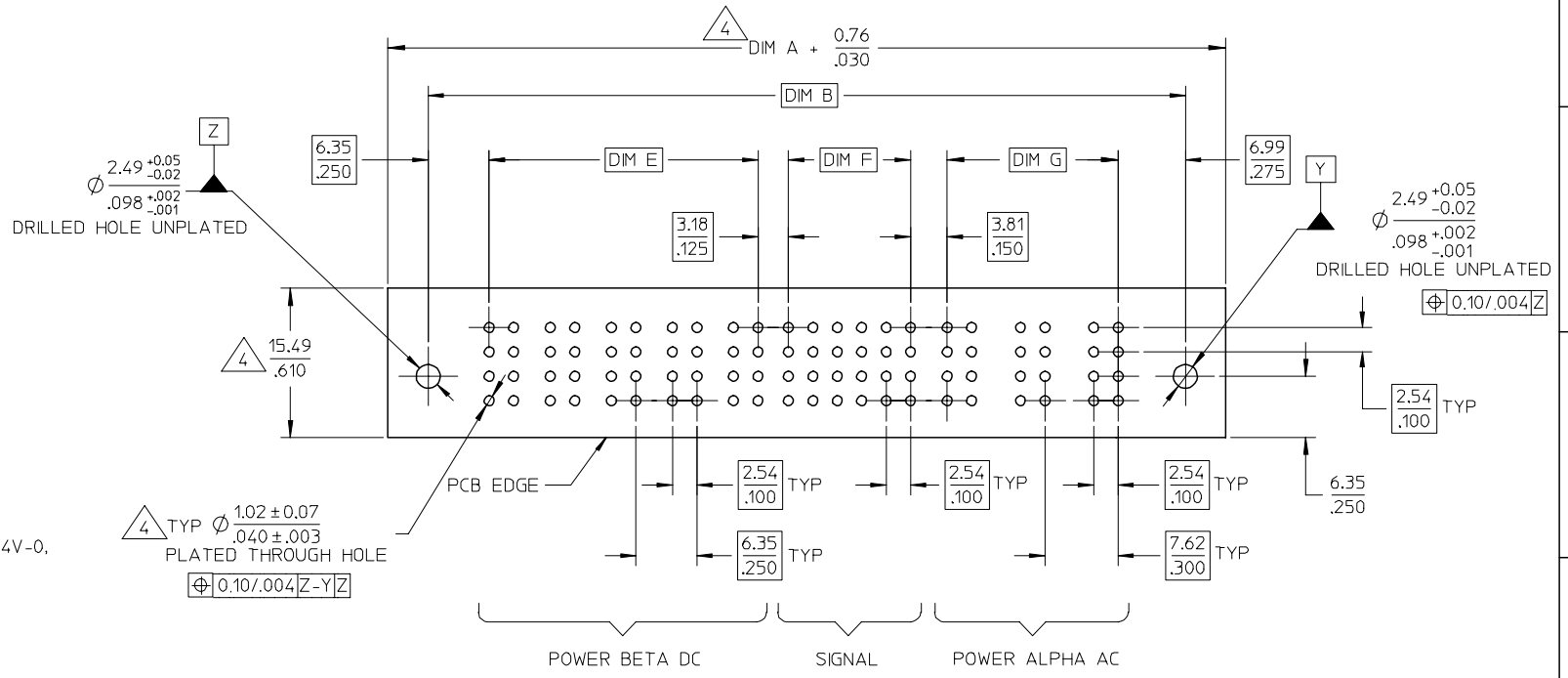
C C

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 THROUGH 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			
D	REV		4 PLACES ± --- ± ---	3 PLACES ± --- ± .005	2 PLACES ± 0.13 ± .010	1 PLACE ± 0.25 ± ---	APPROVED BY PTLIM	DATE 2002/11/26	MOLEX INCORPORATED	
			ANGULAR ± 3 °				APPROVED BY SKTOH	DATE 2002/11/27	DOCUMENT NO. SD-87664-011	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SIZE A3		SEE TABLE			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-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 2006/04/03 CHKD:NAGESHKN 2006/04/03 APPR:PTL IM 2006/04/06	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0 ∇=0	mm INCH	MM/IN	NTS	METRIC	
		4 PLACES ± --- ± ---	DRAWN BY DATE	TITLE		
		3 PLACES ± --- ± .005	BHLOW 2002/11/20	AC/DC POWER RECEPTACLE P(A)AC-S-P(B)DC CONFIG. R/A, T/H, BOARD-LOCK		
		2 PLACES ± 0.13 ± .010	CHECKED BY DATE	MOLEX INCORPORATED		
	1 PLACE ± 0.25 ± ---	PTL IM 2002/11/26	MATERIAL NO. DOCUMENT NO. SHEET NO.			
	ANGULAR ± 3 °	APPROVED BY DATE	SD-87664-011 3 OF 3			
		SKT0H 2002/11/27	SIZE THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
			SEE TABLE			
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			