

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0876640004](#)
Status: **Active**
Overview: [extreme_powerplus_ssi](#)
Description: 6.35mm (.250") and 7.62mm (.300") Pitch Power, 2.54mm (.100") Pitch Signal, EXTreme PowerPlus™ PB(AC)SPA(DC) Receptacle, Through Hole, Right Angle, 36 Circuits, Power Beta 1, Signal 32, Power Alpha 3, Recessed Power Circuit Positions: B1B3 Void Signal

Documents:

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

Agency Certification

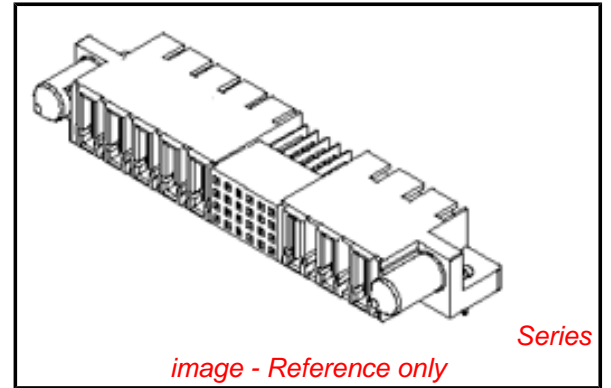
UL E29179

General

Product Family PCB Receptacles
 Series [87664](#)
 Application Board-to-Board
 Comments Recessed Power Circuit Position: B1-B3; Void Signal Pins: A5, A6, A8, B5, B6, B8, C5, C6, C8, D5, D6, D8.
 Overview [extreme_powerplus_ssi](#)
 Product Name EXTreme PowerPlus™

Physical

Circuits (Loaded) 24
 Circuits (maximum) 36
 Circuits Detail Power Beta 1, Signal 32, 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
 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



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](#)

Electrical

Current - Maximum per Contact 2.5A, 30A, 50A
Voltage - Maximum 250V (RMS)

Solder Process Data

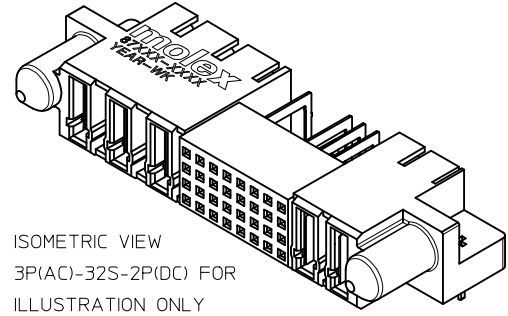
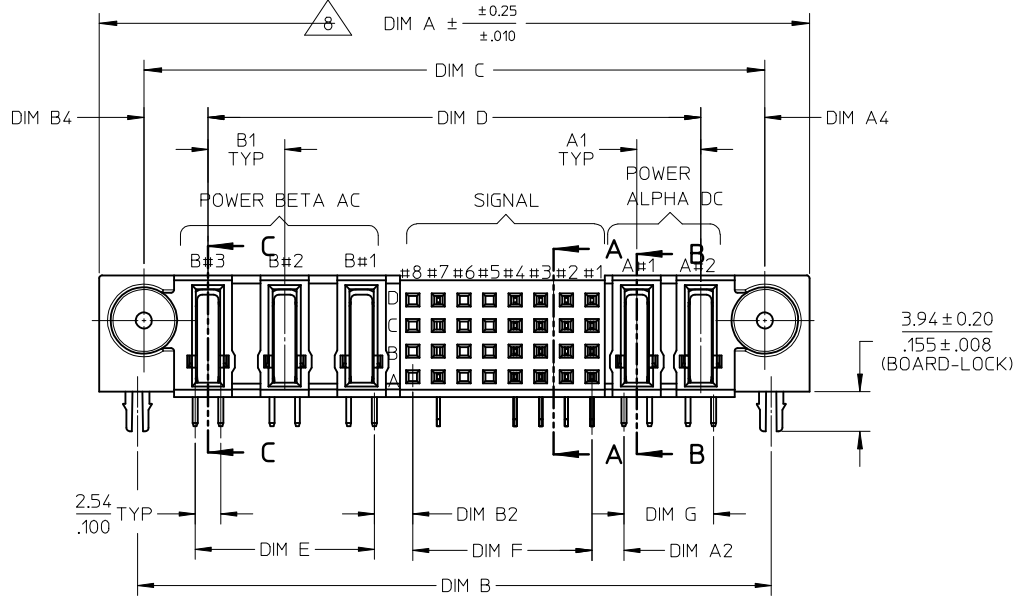
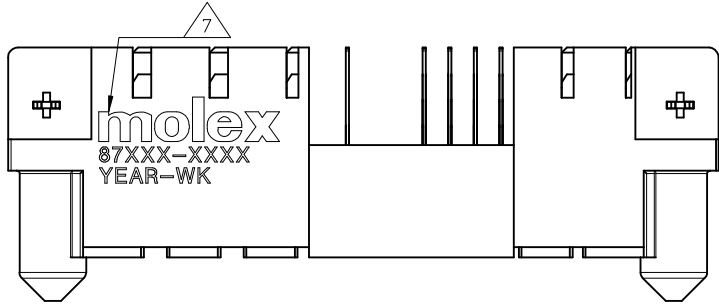
Duration at Max. Process Temperature (seconds) 10
Lead-free Process Capability SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature 3
Process Temperature max. C 260

Material Info**Reference - Drawing Numbers**

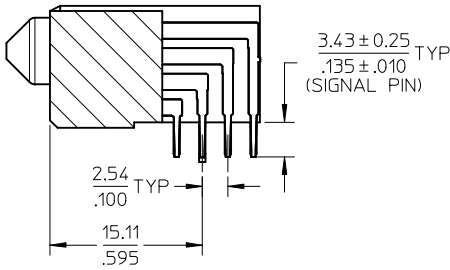
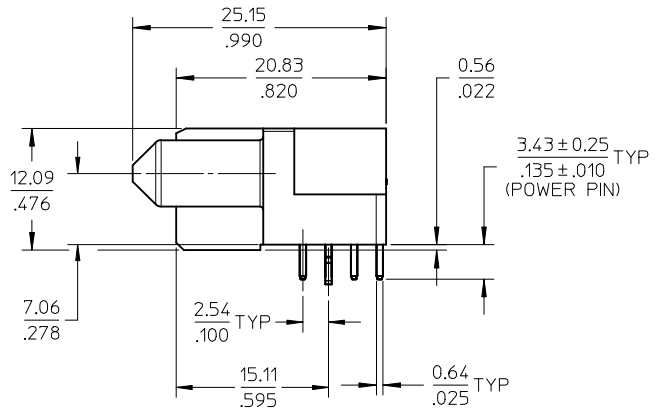
Product Specification PS-87663-006
Sales Drawing SD-87664-031

This document was generated on 06/02/2010

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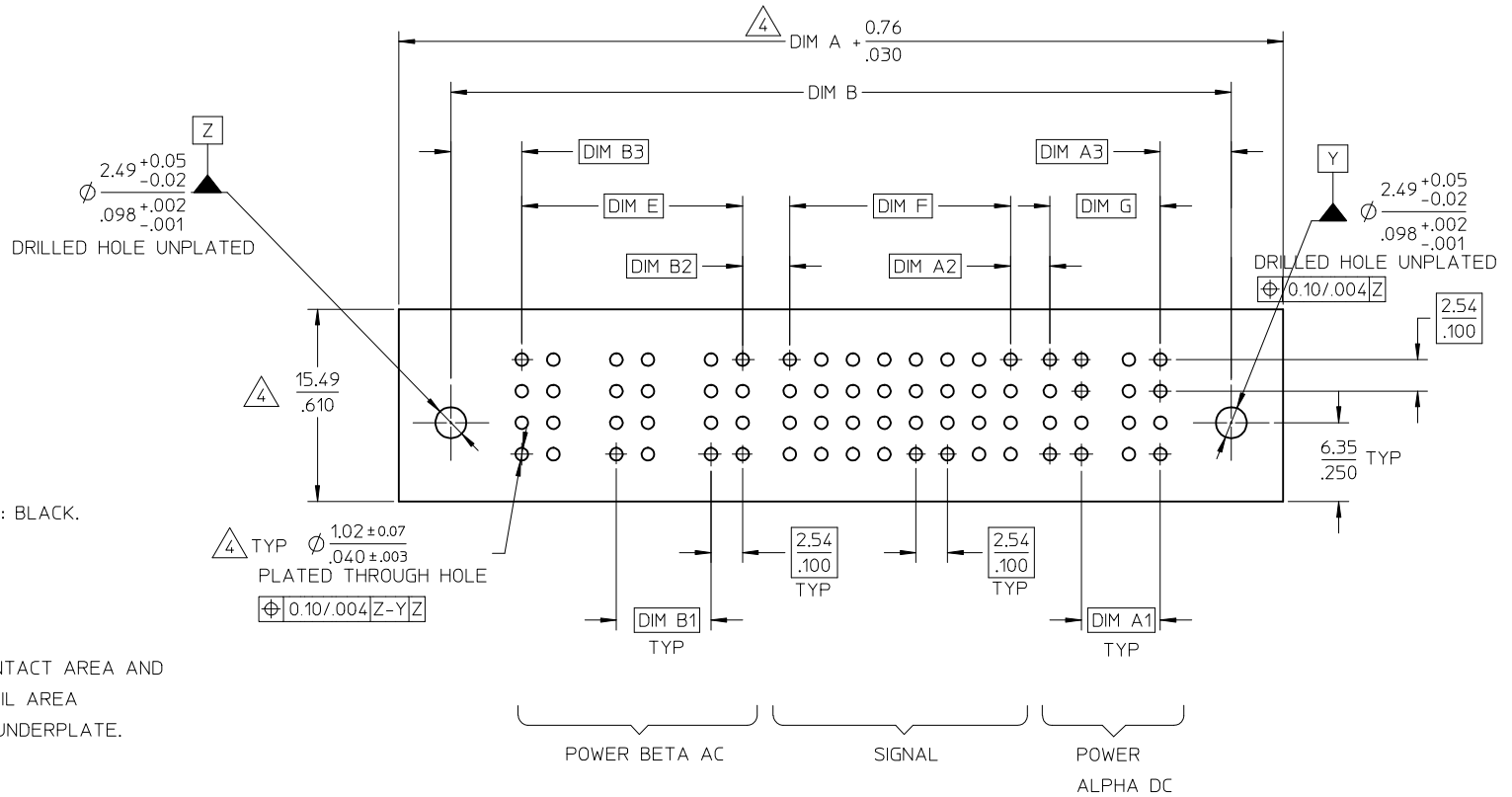
ISOMETRIC VIEW
3P(AC)-32S-2P(DC) FOR ILLUSTRATION ONLY



SECTION A-A

CORRECT TYPO ERROR EC NO: S2009-0410 DRWN:SKANG CHKD:ATSEE APPR:MLONG 2008/12/02 2008/12/02 2008/12/02	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.13 ± --- 1 PLACE ± 0.25 ± --- ANGULAR ± 3 °	DIMENSION STYLE MM ONLY	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	DRAWN BY: KFL IM CHECKED BY: BHLOW APPROVED BY: PTL IM MATERIAL NO.	DATE: 2005/11/15 DATE: 2005/11/15 DATE: 2005/11/17 DOCUMENT NO.	TITLE POWER RECEPTACLE PB(AC)-S-PA(DC) CONFIG. R/A, T/H, BOARDLOCK	MOLEX INCORPORATED	SHEET NO. 1 OF 3		
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE A3	SEE TABLE	SD-87664-031			
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						
	REV B2						

10 9 8 7 6 5 4 3 2 1



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. 3P(AC)-32S-2P(DC) IS SHOWN FOR ILLUSTRATION.

CONNECTOR CONFIGURATION IS AVAILABLE UP TO 203MM/8INCH.

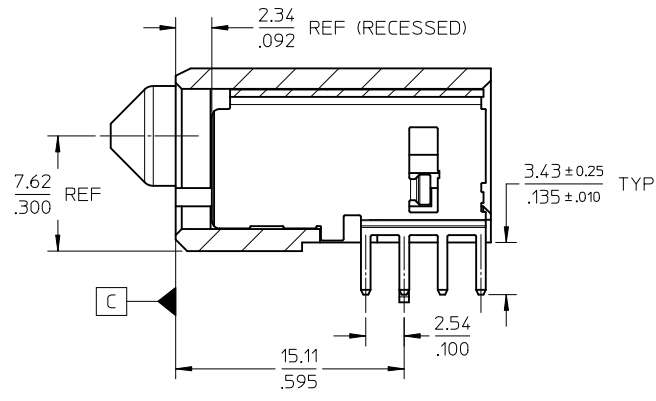
PLEASE CONTACT MOLEX SALES PERSONNEL FOR OTHER

CONFIGURATION AND OPTION NEEDED.

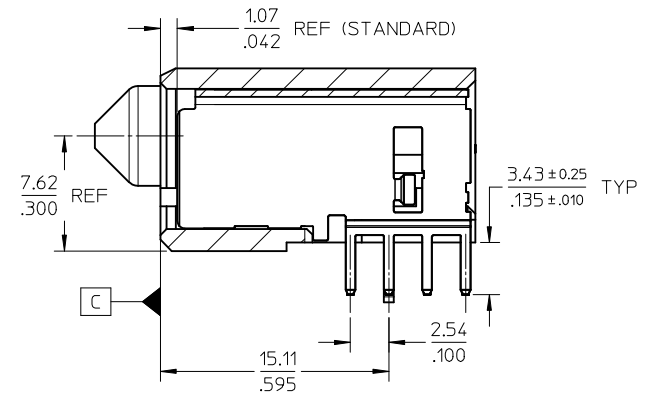
CORRECT TYPO ERROR EC NO: S2009-0410 DRWN:SKANG 2008/12/02 CHKD:ATSEE 2008/12/02 APPR:MLONG 2008/12/02 REV DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	▽=0 C=0	mm	INCH	DRAWN BY KFLIM	DATE 2005/11/15	TITLE POWER RECEPTACLE PB(AC)-S-PA(DC) CONFIG. R/A, T/H, BOARDLOCK		
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	CHECKED BY BHLOW	DATE 2005/11/15	MOLEX MOLEX INCORPORATED		
		2 PLACES ± 0.13 ± ---	1 PLACE ± 0.25 ± ---	APPROVED BY PTLIM	DATE 2005/11/17	MATERIAL NO.	DOCUMENT NO.	SHEET NO.
		ANGULAR ± 3 °		SEE TABLE		SD-87664-031		2 OF 3
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		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		POWER ALPHA				POWER BETA				VOID SIGNAL PINS	PACKAGING
	POWER ALPHA DC	SIGNAL	POWER BETA AC								A	LOCATION	A1	A2	A3	A4	B1	B2	B3	B4		
87664-0004	1	32	3	64.14 2.525	56.52 2.225	55.25 2.175	42.55 1.675	17.78 .700	17.78 .700	2.54 .100	A B	----	---	3.18 .125	5.72 .225	6.35 .250	7.62 .300	3.81 .150	5.72 .225	6.35 .250	A5,A6,A8,B5,B6,B8, C5,C6,C8,D5,D6,D8	TRAY
87664-0005	6	32	3	96.52 3.800	88.90 3.500	87.63 3.450	74.93 2.950	17.78 .700	17.78 .700	34.29 1.350	A B	1, 2, 3, 4, 5, 6 2, 3	6.35 .250	3.81 .150	5.72 .225	6.35 .250	7.62 .300	3.81 .150	5.72 .225	6.35 .250	A1,A6,A7,A8,B1,B6,B7,B8, C1,C6,C7,C8,D1,D6,D7,D8	TRAY



SECTION C-C
(RECESSED)



SECTION B-B
(STANDARD)

CORRECT TYPO ERROR EC NO: S2009-0410 DRWN:SKANG 2008/12/02 CHKD:ATSEE 2008/12/02 APPR:MLONG 2008/12/02	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	$\nabla = 0$ $\square = 0$	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.13 ± --- 1 PLACE ± 0.25 ± --- ANGULAR ± 3 °	MM ONLY	NTS	METRIC	
	DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY	DATE	TITLE	
	REV		KFL IM	2005/11/15	POWER RECEPTACLE PB(AC)-S-PA(DC) CONFIG. R/A, T/H, BOARDLOCK	
			CHECKED BY	DATE	MOLEX INCORPORATED	
			BHLOW	2005/11/15	DOCUMENT NO. SD-87664-031	
			APPROVED BY	DATE	SHEET NO. 3 OF 3	
			PTL IM	2005/11/17	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
			MATERIAL NO.			
			SIZE			
			A3			