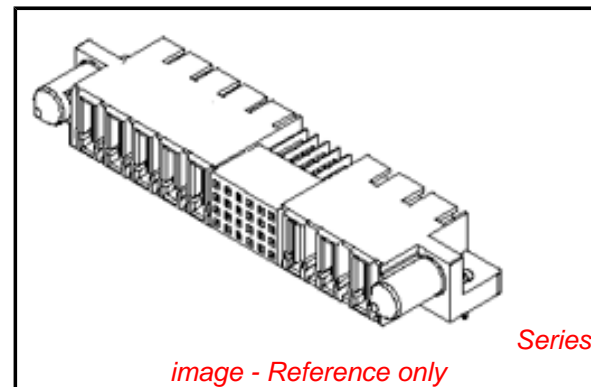


PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0876640005](#)
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, 41 Circuits, Power Beta 6, Signal 32, Power Alpha 3, Recessed Power Circuit Positions A1 to A6 B2, B3 and

Documents:

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



General

Product Family	PCB Receptacles
Series	87664
Application	Board-to-Board
Comments	Recessed Power Circuit Position: A1 to A6; B2, B3 and Void Signal Pins: A1, A6, A7, A8; B1, B6, B7, B8; C1, C6, C7, C8; D1, D6, D7, D8.
Overview	extreme_powerplus_ssi
Product Name	EXTreme PowerPlus™

Physical

Circuits (Loaded)	25
Circuits (maximum)	41
Circuits Detail	Power Beta 6, Signal 32, 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
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
Voltage - Maximum	250V (RMS)

EU RoHS

ELV and RoHS Compliant
REACH SVHC
 Not Reviewed
Halogen-Free Status

China RoHS



Not Reviewed

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

Solder Process Data

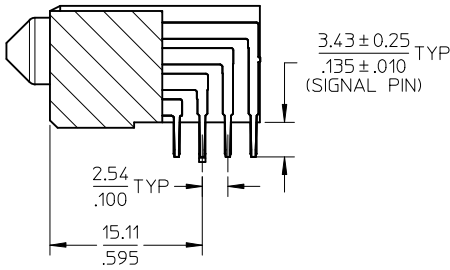
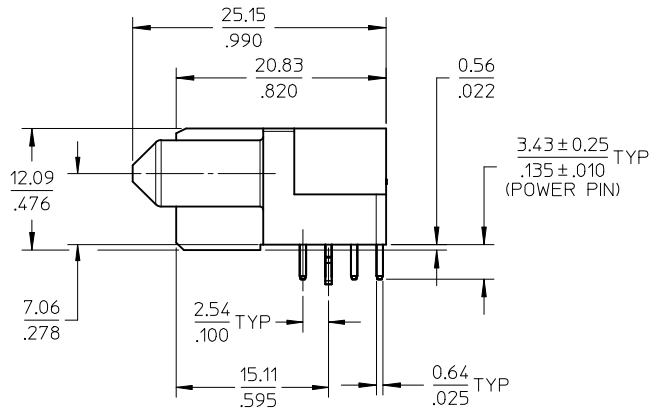
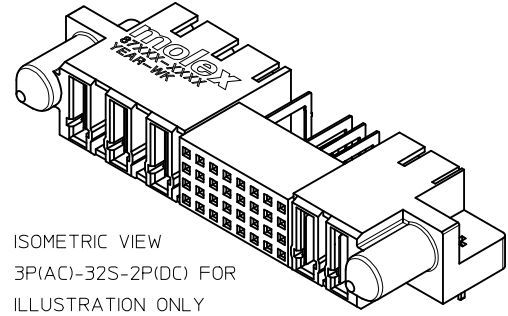
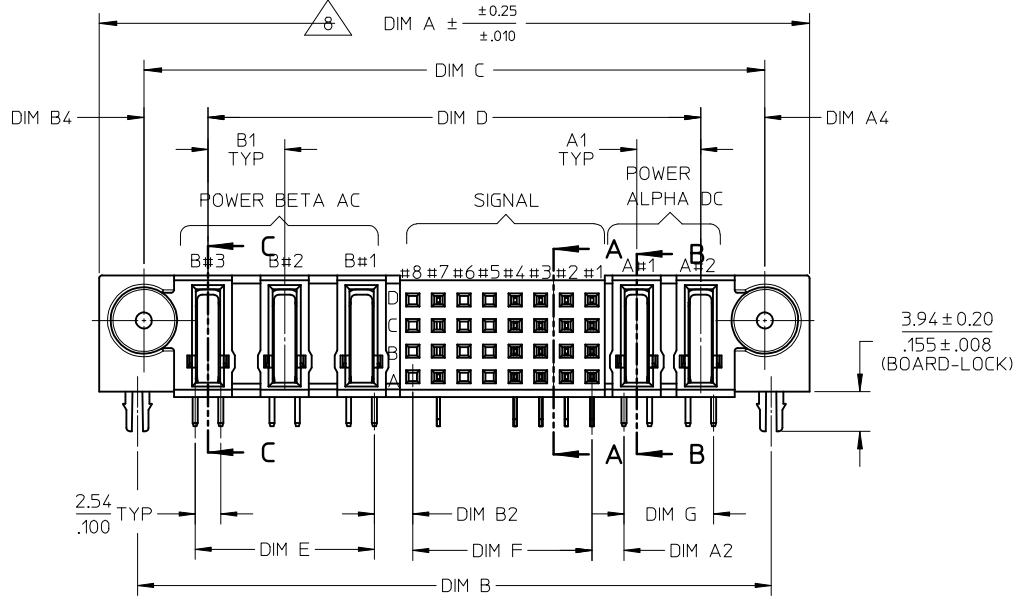
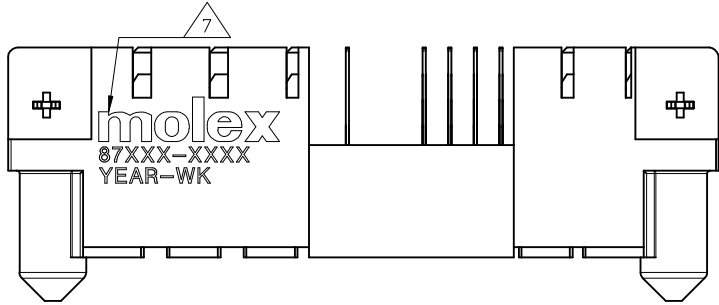
Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	260

Material Info**Reference - Drawing Numbers**

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

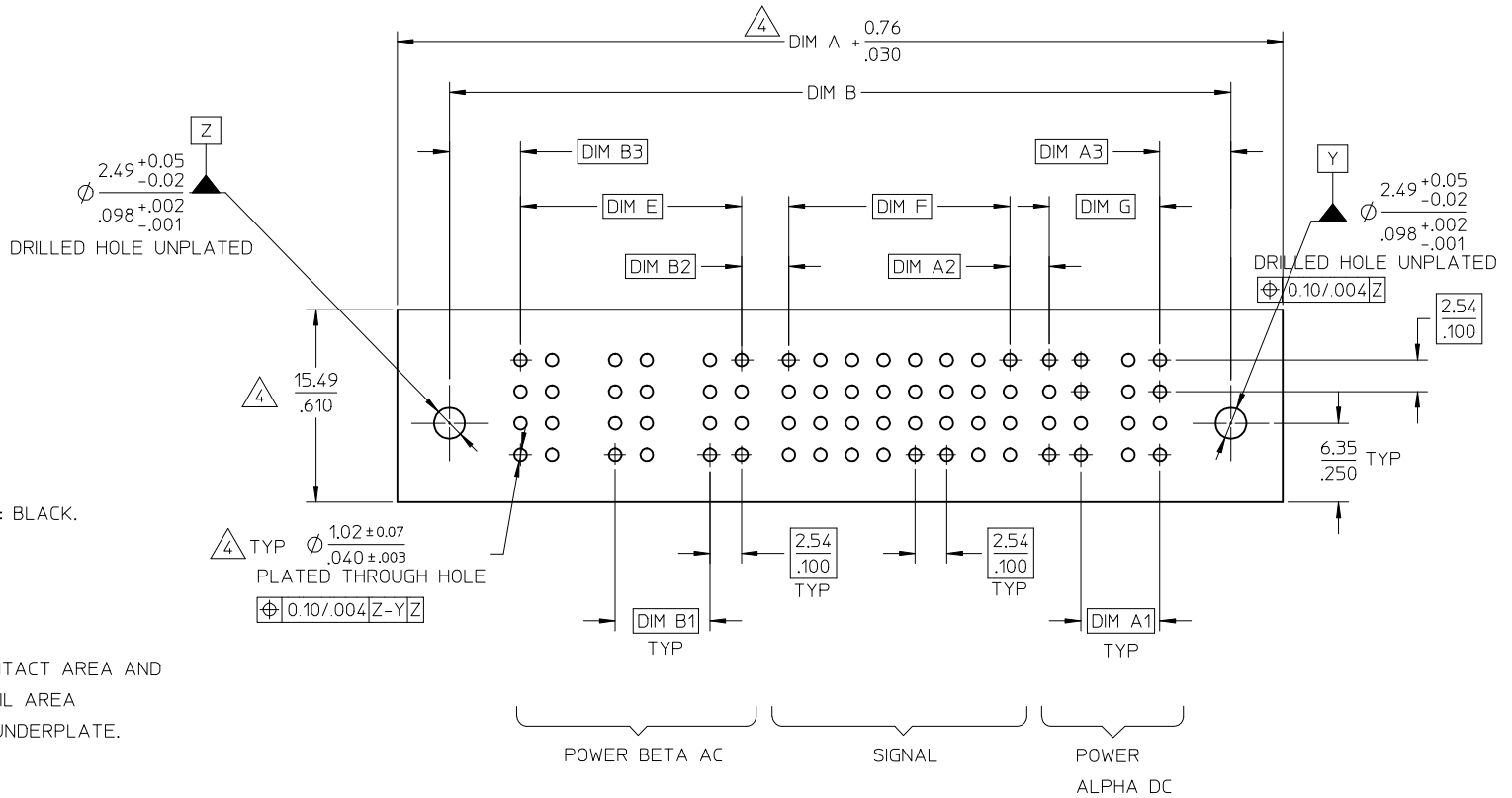
This document was generated on 06/02/2010

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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	DIMENSION STYLE MM ONLY	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.13 ± --- 1 PLACE ± 0.25 ± ---	DRAWN BY: KFL IM CHECKED BY: BHLOW APPROVED BY: PTL IM DATE: 2005/11/15 DATE: 2005/11/15 DATE: 2005/11/17	MATERIAL NO. SEE TABLE	TITLE POWER RECEPTACLE PB(AC)-S-PA(DC) CONFIG. R/A, T/H, BOARDLOCK	MOLEX INCORPORATED	DOCUMENT NO. SD-87664-031	SHEET NO. 1 OF 3
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
	REV B2	DESCRIPTION	CORRECTED DIMENSIONS				



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.

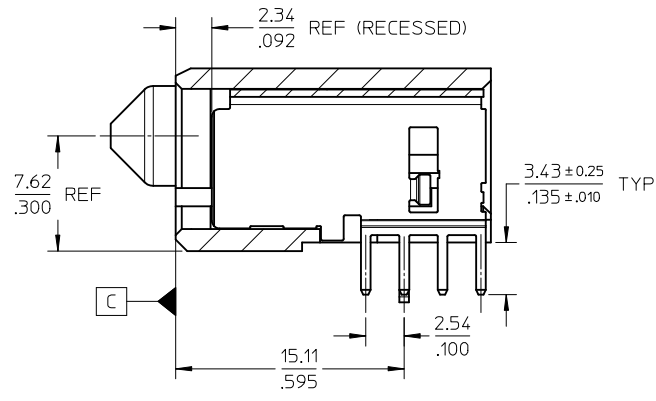
POWER BETA AC

SIGNAL

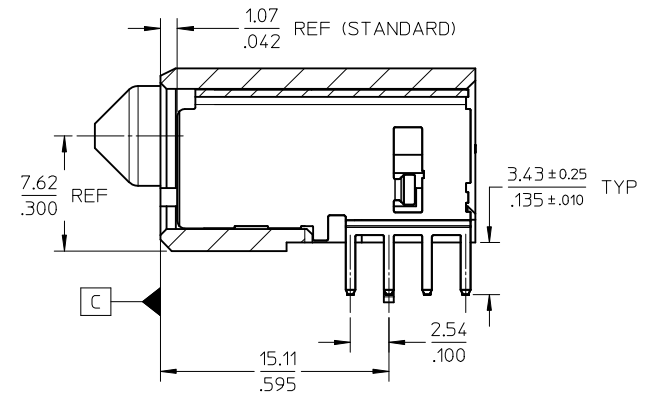
POWER ALPHA DC

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 MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	DESCRIPTION ▽=0 C=0	mm	INCH	DRAWN BY	DATE	TITLE			
		4 PLACES ± --- ± ---	KFLIM	2005/11/15		POWER RECEPTACLE PB(AC)-S-PA(DC) CONFIG. R/A, T/H, BOARDLOCK			
		3 PLACES ± --- ± ---	CHECKED BY	DATE		MOLEX MOLEX INCORPORATED			
	2 PLACES ± 0.13 ± ---	BHLOW	2005/11/15		DOCUMENT NO. SD-87664-031				
	1 PLACE ± 0.25 ± ---	APPROVED BY	DATE		SHEET NO. 2 OF 3				
	ANGULAR ± 3 °	PTLIM	2005/11/17		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.	SEE TABLE						
REV B2		SIZE A3							

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