

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0876682004](#)
Status: **Active**
Overview: [extreme_powerplus_ssi](#)
Description: 6.35mm (.250") Pitch, Power, 2.54mm (.100") Pitch, Signal, EXTreme PowerPlus™ S-Pb Receptacle, Through Hole, Right Angle, Beveled Metal Pins, 0.76µm (30µ") Gold (Au) Plating, 30 Circuits, Signal 24, Power Beta 6, No Void Pin, Leadfree

Documents:

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

Agency Certification

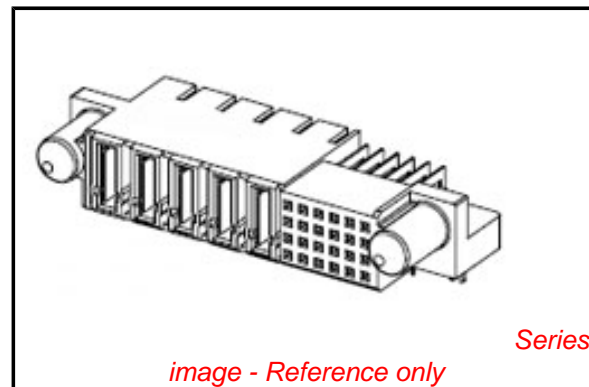
CSA LR19980
 UL E29179

General

Product Family PCB Receptacles
 Series [87668](#)
 Application Board-to-Board
 Comments Void Signal Pin: Nil
 Overview [extreme_powerplus_ssi](#)
 Product Literature Order No 987650-3002
 Product Name EXTreme PowerPlus™

Physical

Circuits (Loaded) 30
 Circuits Detail Signal 24, Power Beta 6
 Color - Resin Black
 Durability (mating cycles max) 100
 Flammability 94V-0
 Glow-Wire Compliant No
 Guide to Mating Part Yes
 Lock to Mating Part Yes
 Mated Height (in) 0.495 In
 Mated Height (mm) 12.57 mm
 Material - Metal High Performance Alloy (HPA), Phosphor Bronze
 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
 Pitch - Mating Interface (mm) 2.54 mm, 6.35 mm
 Plating min: Mating (µin) 30.4
 Plating min: Mating (µm) 0.76
 Plating min: Termination (µin) 101.6
 Plating min: Termination (µm) 2.54
 Polarized to Mating Part Yes
 Polarized to PCB Yes



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

[87668Series](#)

Mates With

[87667](#) EXTreme PowerPlus™ Right Angle S-Pb Header

Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-20°C to +105°C
Termination Interface: Style	Through Hole

Electrical

Current - Maximum per Contact	2.5A, 30A
Voltage - Maximum	50V 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-87668-014

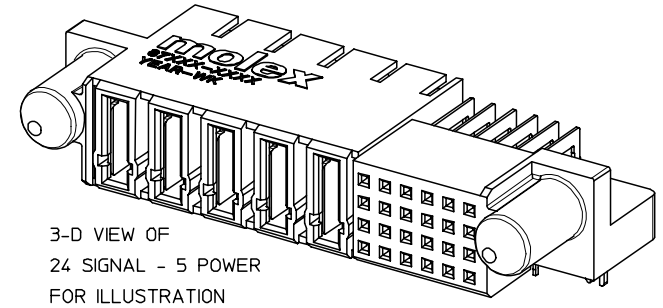
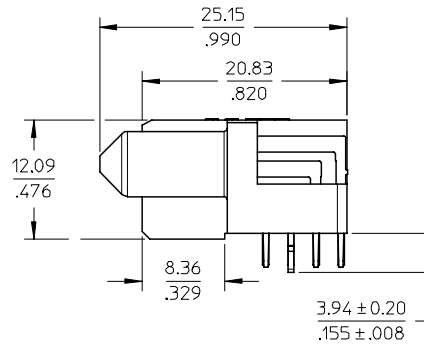
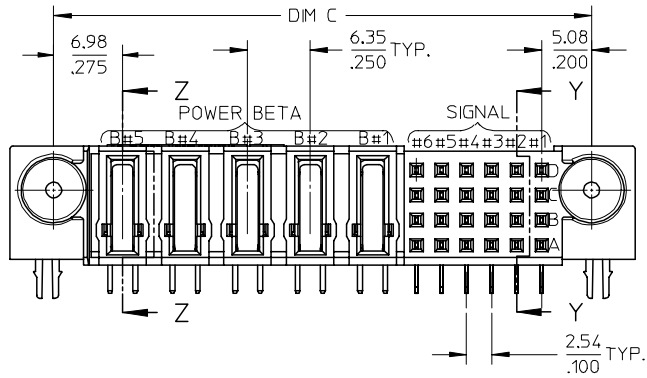
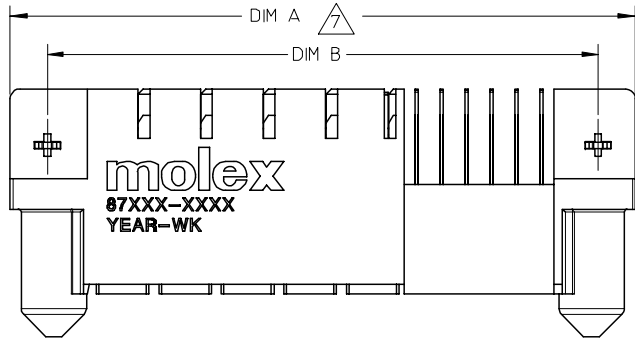
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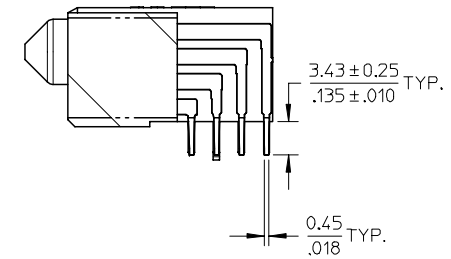
10 9 8 7 6 5 4 3 2 1

F
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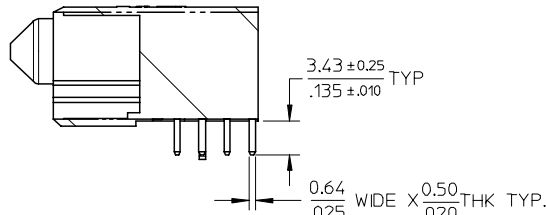
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3-D VIEW OF
24 SIGNAL - 5 POWER
FOR ILLUSTRATION



SECTION Y-Y

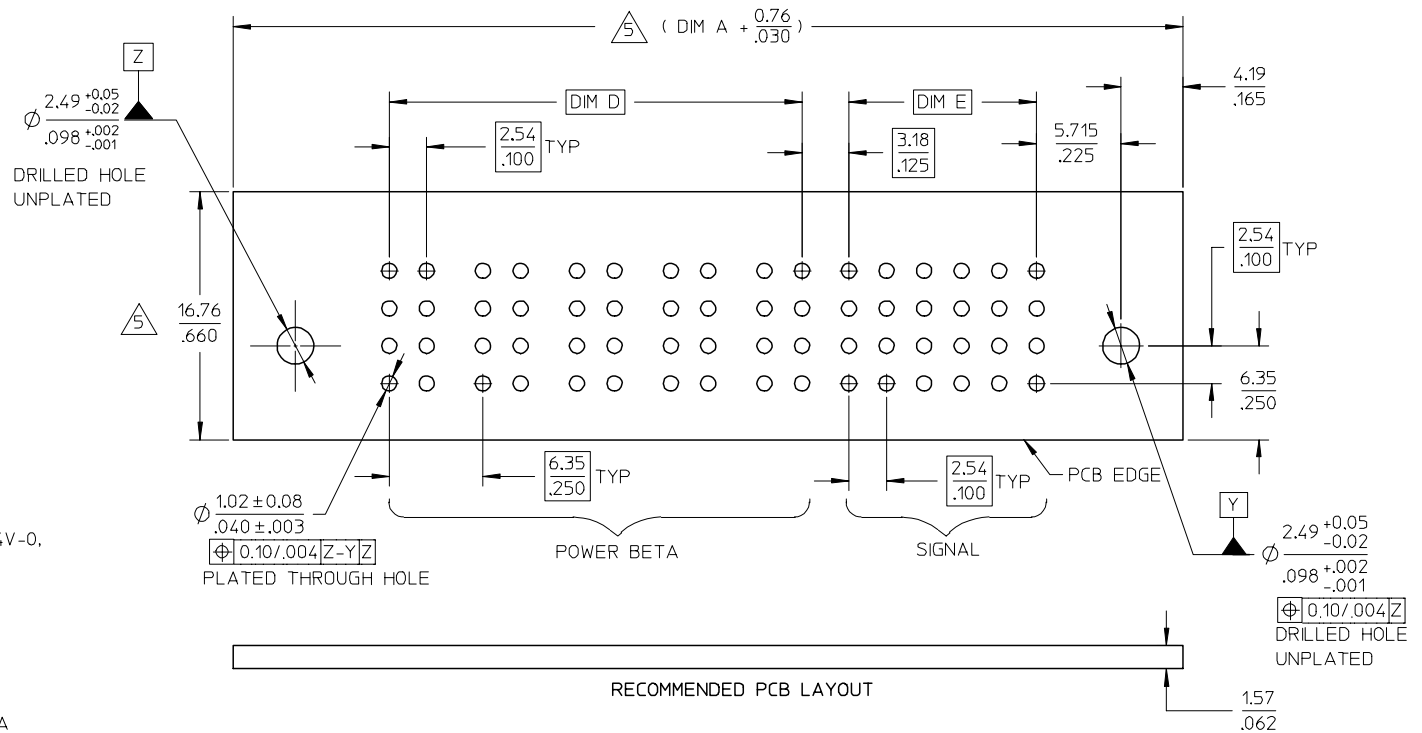


SECTION Z-Z

PDR# S-001243-00-00 EC NO: S2006-1028 DRWN: KFLM 2006/05/09 CHKD: MLONG 2006/05/09 APPR: PTLIM 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	DATE	TITLE POWER CONNECTOR RECEPT. S-P(B) CONFIGURATION R/A, BOARDLOCK			
		4 PLACES	± ---	± ---	KMGOH	2003/06/18				
		3 PLACES	± ---	± .010	CHECKED BY	DATE	MOLEX INCORPORATED			
2 PLACES	± 0.25	± ---	PTLIM	2003/06/20						
1 PLACE	± ---	± ---	APPROVED BY	DATE	MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-87668-014		SHEET NO. 1 OF 2	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		ANGULAR ± 3 °		SIZE A3		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	S-P CONFIGURATION		DIM A	DIM B	DIM C	DIM D	DIM E	VOID PIN LOCATION	PACKAGING	STATUS
	SIGNAL	POWER BETA								
87668-2002	24	10	95.25 3.750	87.63 3.450	86.36 3.400	59.69 2.350	12.70 .500	NIL	TRAY	TOOLED
87668-2003	20	4	54.61 2.150	46.99 1.850	45.72 1.800	21.59 .850	10.16 .400	NIL	TRAY	TOOLED
87668-2004	24	6	69.85 2.750	62.24 2.450	60.96 2.400	34.29 1.350	12.70 .500	NIL	TRAY	TOOLED
87668-2006	24	12	107.95 4.250	100.33 3.950	99.06 3.900	72.39 2.850	12.70 .500	NIL	TRAY	TOOLED
87668-2007	20	4	54.61 2.150	46.99 1.850	45.72 1.800	21.59 0.850	10.16 0.400	A4,B4,C4,D4	TRAY	TOOLED



NOTES:

- MATERIALS : HOUSING - LCP GLASS FILLED, UL94V-0,
COLOR: BLACK
POWER PINS - COPPER ALLOY
SIGNAL PINS - COPPER ALLOY
BOARD LOCK - COPPER ALLOY
- FINISHES: POWER AD SIGNAL PINS
SELECTIVE GOLD IN THE CONTACT AREA
THICKNESS = 0.76 MICROMETER / 30 MICROINCH MINIMUM
SELECTIVE TIN IN THE PC 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 IN PAGE 3 FOR RECESSED PINS LOCATION
- 24 SIGNAL - 5 POWER CONNECTOR IS SHOWN FOR ILLUSTRATION

PDR#S-001243-00-00	2006/05/09	2006/05/10	QUALITY SYMBOLS
EC NO: S2006-1028	DRW:KELIM	CHK:DMLONG	APPR:PTLIM
DESCRIPTION	$\nabla=0$ $\sphericalangle=0$		
REV	D1		

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

DIMENSION STYLE	
MM/IN	
DRAWN BY	DATE
KMGOH	2003/06/18
CHECKED BY	DATE
PTLIM	2003/06/20
APPROVED BY	DATE
SKTOH	2003/06/20
MATERIAL NO.	
SEE TABLE	
SIZE	A3
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	
TITLE		
POWER CONNECTOR RECEPT. S-P(B) CONFIGURATION R/A, BOARDLOCK		
MOLEX INCORPORATED		
DOCUMENT NO.	SHEET NO.	
SD-87668-014	2 OF 2	