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Part Number: **0876161001**
Status: **Active**
Overview: extreme_powerplus_ssi
Description: 6.35mm (.250") Pitch, Power, 2.54mm (.100") Pitch, Signal, EXTreme PowerPlus™ (SSI) MPS Receptacle, Through Hole, Right Angle, 0.76µm (30µ") Gold (Au) Plating, 35 Circuits, Power Beta 6, Signal 24, Power Alpha 5, Lead-free

Documents:

[3D Model](#) [Product Specification PS-87615-005 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

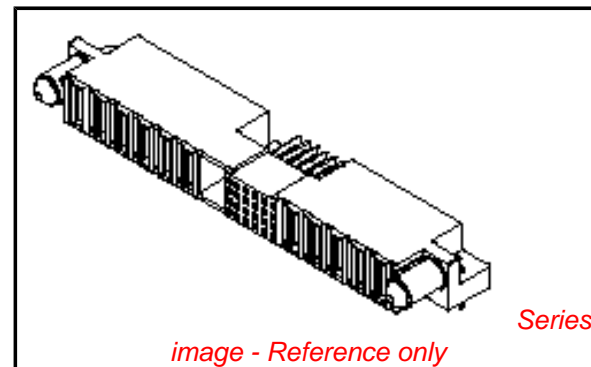


image - Reference only

General

Product Family	PCB Receptacles
Series	87616
Application	Board-to-Board
Overview	<u>extreme_powerplus_ssi</u>
Product Name	EXTreme PowerPlus™

Physical

Circuits (Loaded)	35
Circuits Detail	Power Beta 6, Signal 24, Power Alpha 5
Color - Resin	Black
Durability (mating cycles max)	100
Glow-Wire Compliant	No
Guide to Mating Part	Yes
Lock to Mating Part	None
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	No
PCB Retention	Yes
PCB Thickness Recommended (in)	0.093 In
PCB Thickness Recommended (mm)	2.40 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
Surface Mount Compatible (SMC)	N/A
Temperature Range - Operating	-20°C to +70°C
Termination Interface: Style	Through Hole

Electrical

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

Solder Process Data

<p>EU RoHS ELV and RoHS Compliant REACH SVHC Not Reviewed Halogen-Free Status Halogen-Free</p>	<p>China RoHS</p> 
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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

87616Series

Mates With

87615 EXTreme PowerPlus™ (SSI) MPS Header

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-87615-005
Sales Drawing	SD-87616-011

This document was generated on 05/21/2010

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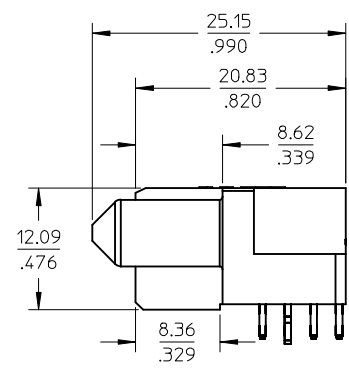
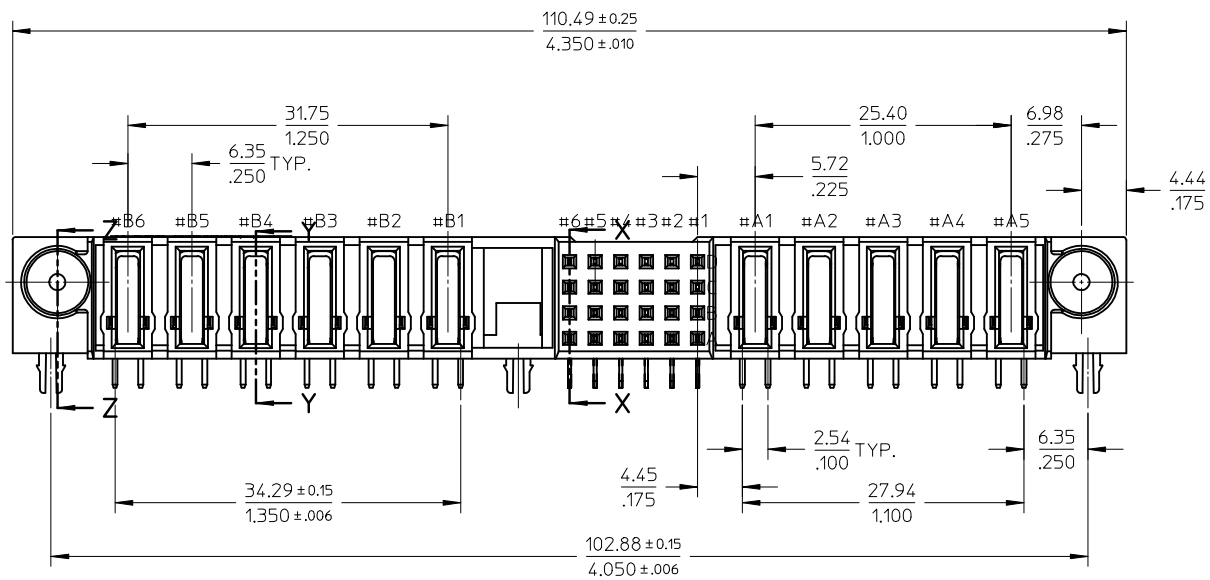
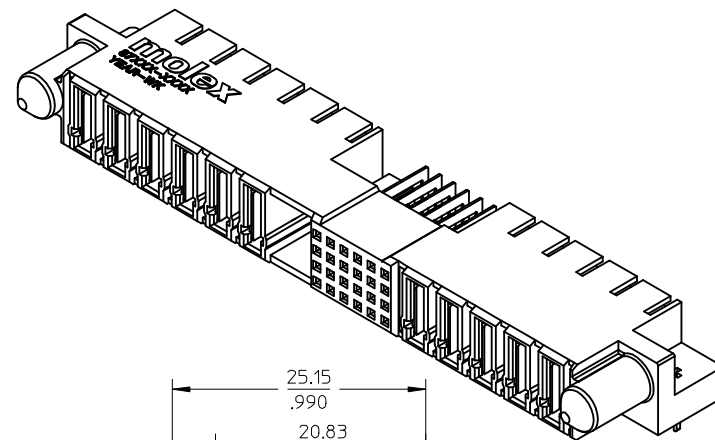
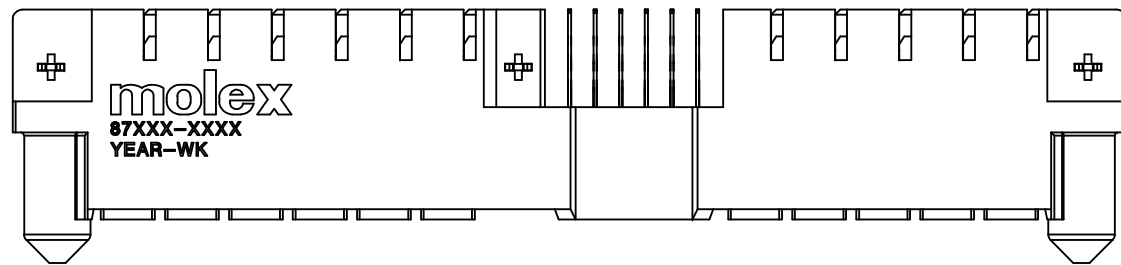
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D

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B

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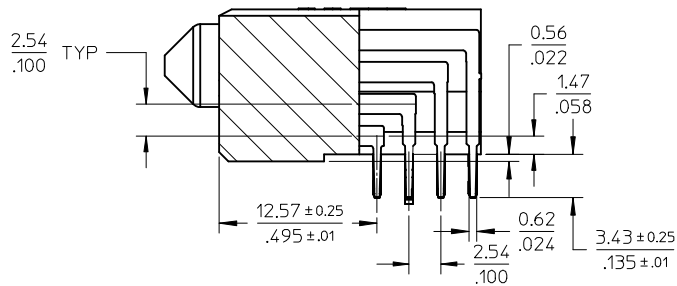


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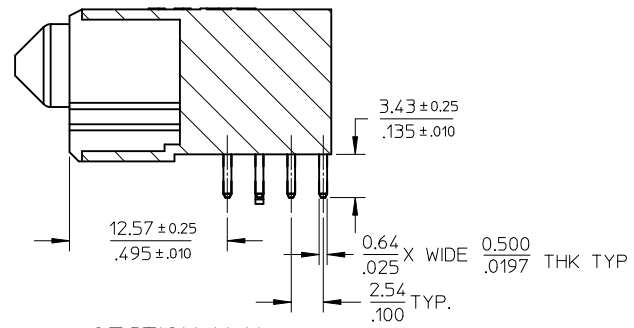
CORRECT PCB HOLE SIZE EC NO: S2009-0475 DRWN:SKANG 2009/01/16 CHKD:ATSEE 2009/01/20 APPR:MLONG 2009/02/05	DESCRIPTION D1	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .005 2 PLACES ± 0.13 ± .010 1 PLACE ± 0.25 ± --- ANGULAR ± 3 °	DIMENSION STYLE MM/IN DRAWN BY: KMG0H DATE: 2002/08/01 CHECKED BY: PTL IM DATE: 2002/11/21 APPROVED BY: SKTOH DATE: 2002/11/21 MATERIAL NO. SKTOH	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE TABLE	TITLE MPS POWER RECEPTACLE 6POWER-24SIGNAL-5POWER R/A, T/H		
					MOLEX INCORPORATED			SHEET NO. 1 OF 3
					SD-87616-011			DOCUMENT NO.

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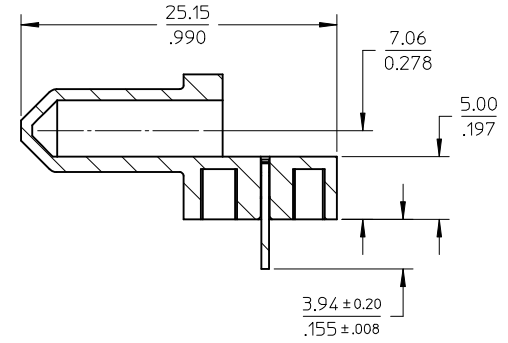
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SECTION X-X



SECTION Y-Y



SECTION Z-Z

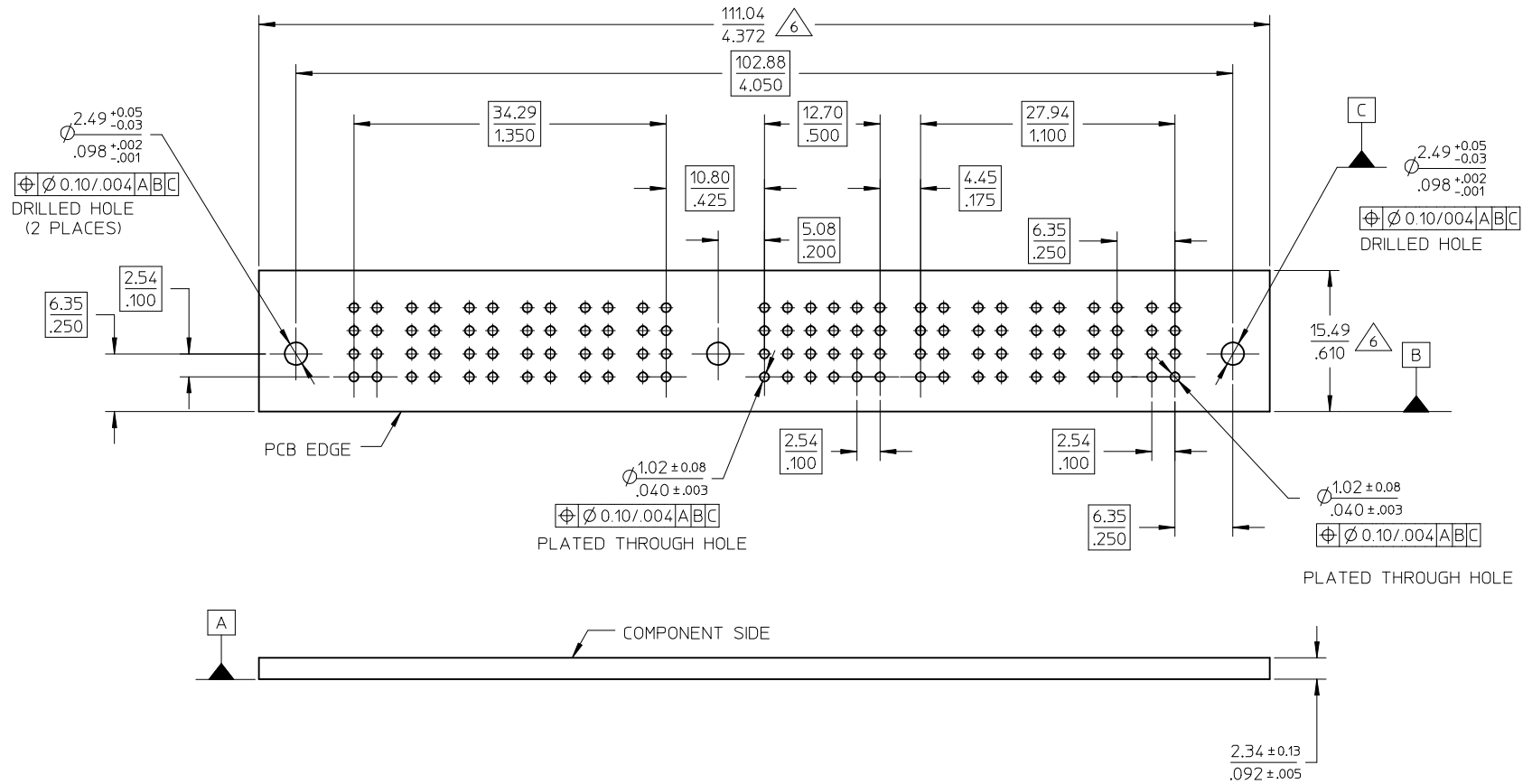
CONNECTOR - NOTES

1. MATERIALS
 - HOUSING - LCP, GLASS FILLED,
UL 94V-0, COLOR: BLACK
 - POWER PIN - COPPER ALLOY
 - SIGNAL PIN - COPPER ALLOY
 - BOARD LOCK - COPPER ALLOY
 2. PLATING
 - POWER AND SIGNAL PINS - 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-87615-005.
 4. SEE SHEET 3 FOR RECOMMENDED PCB LAYOUT AND THICKNESS
 5. MATES WITH MOLEX PART NUMBER : 87615-0001
- ⚠ COMPONENT STAY AWAY ZONE FROM CONNECTOR

CORRECT PCB HOLE SIZE	EC NO: S2009-0475	2009/01/16	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	DRWNS:SKANG	2009/01/20		mm	INCH	MM/IN	NTS	METRIC		
	CHKD:ATSEE	2009/02/05		4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE	
	APPR:MLONG			3 PLACES	± ---	± .005	KMGOH	2002/08/01	MPS POWER RECEPTACLE 6POWER-24SIGNAL-5POWER R/A, T/H	
			2 PLACES	± 0.13	± .010	CHECKED BY	DATE			
			1 PLACE	± 0.25	± ---	PTLIM	2002/11/21			
			ANGULAR ± 3 °			APPROVED BY	DATE	MOLEX MOLEX INCORPORATED		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SKTOH	2002/11/21	DOCUMENT NO.	SD-87616-011	SHEET NO.
						MATERIAL NO.	SEE TABLE			2 OF 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

10	9	8	7	6	5	4	3	2	1
PART NUMBER	PART STATUS	PACKAGING							
87616-1001	TOOLED	TRAY							



CORRECT PCB HOLE SIZE EC NO: S2009-0475 DRWN:SKANG 2009/01/16 CHKD:ATSEE 2009/01/20 APPR:MLONG 2009/02/05	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY KMG0H	DATE 2002/08/01	TITLE MPS POWER RECEPTACLE 6POWER-24SIGNAL-5POWER R/A, T/H			
		4 PLACES	± ---	± ---	CHECKED BY PTL IM	DATE 2002/11/21	MOLEX INCORPORATED			
		3 PLACES	± ---	± .005	APPROVED BY SKT0H	DATE 2002/11/21	DOCUMENT NO. SD-87616-011	SHEET NO. 3 OF 3		
			2 PLACES	± 0.13	± .010	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				
			1 PLACE	± 0.25	± ---	SIZE A3				
			ANGULAR ± 3 °		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					