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Part Number: **0876151009**
Status: **Active**
Overview: extreme_powerplus_ssi
Description: 6.35mm (.250") Pitch Power, 2.54mm (.100") Pitch Signal, EXTreme PowerPlus™ (SSI) MPS Header, Through Hole, Right Angle, 35 Circuits, Long Power Blade Contact, with Beveled Metal Pin, Lead-free

Documents:

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

General

Product Family	PCB Headers
Series	87615
Application	Board-to-Board
Comments	Long Blade Recessed Signal Pin : A6
Overview	<u>extreme_powerplus_ssi</u>
Product Name	EXTreme PowerPlus™

Physical

Breakaway	No
Circuits (Loaded)	35
Circuits Detail	Power Alpha 5, Signal 24, Power Beta 6
Color - Resin	Black
Durability (mating cycles max)	100
First Mate / Last Break	Yes
Glow-Wire Compliant	No
Guide to Mating Part	Yes
Keying to Mating Part	None
Lock to Mating Part	Yes
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 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
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
Shrouded	Fully
Stackable	No
Temperature Range - Operating	-20°C to +70°C
Termination Interface: Style	Through Hole

Electrical

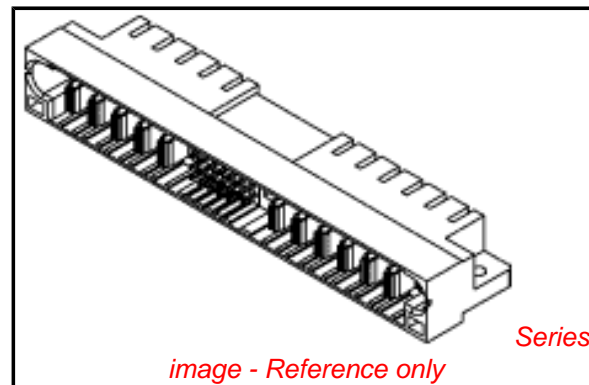


image - Reference only

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

87615Series

Mates With

87616 EXTreme PowerPlus™ (SSI) MPS Receptacle, Through Hole. 87665 EXTreme PowerPlus™ (SSI) MPS Receptacle, Press Fit

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

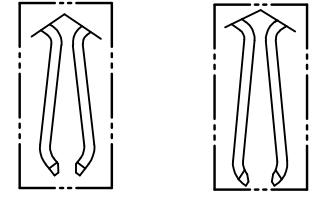
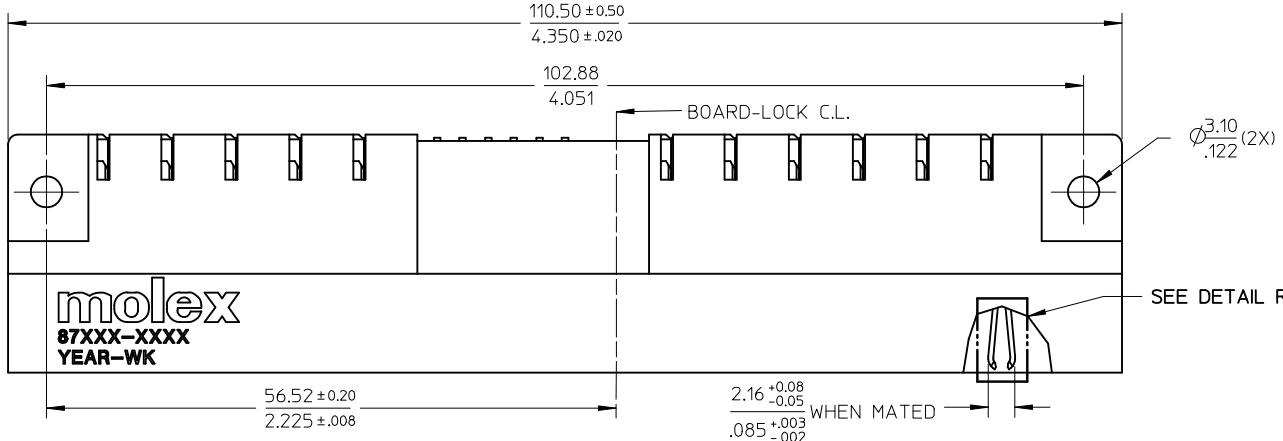
Material Info

Reference - Drawing Numbers

Application Specification	AS-87631-018
Product Specification	PS-87615-005
Sales Drawing	SD-87615-010

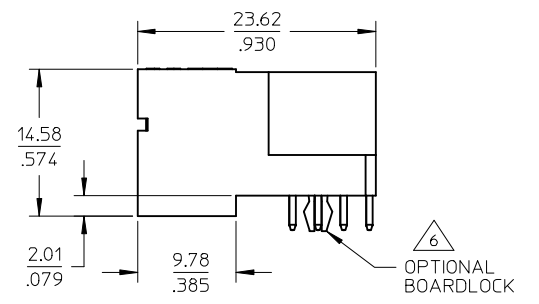
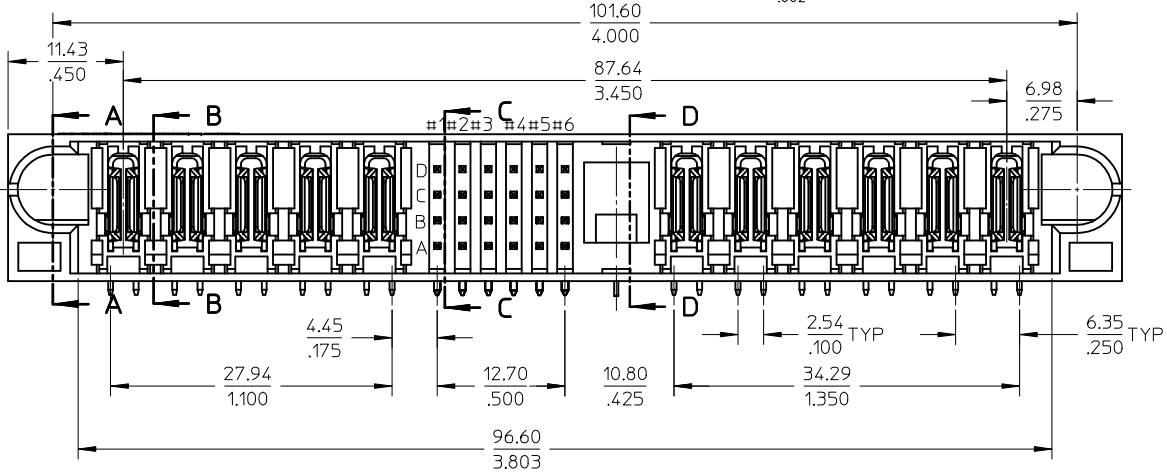
This document was generated on 05/25/2010

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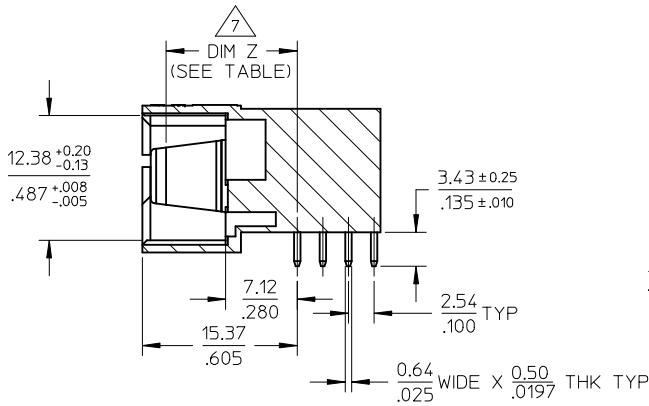


SHORT BLADE OPTION LONG BLADE OPTION

DETAIL R
(SEE TABLE FOR BLADE OPTION)

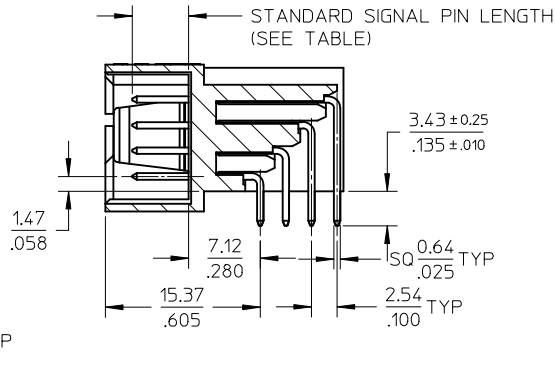


CORRECT PCB HOLE SIZE EC NO: S2009-0475 DRWN:SKANG CHKD:ATSEE APPR:MLONG	2009/01/16 2009/01/20 2009/02/05	DESCRIPTION D3	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
			▽=0 ◻=0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	MM/IN	NTS	METRIC	
			DRAWN BY: BHLOW CHECKED BY: PTLIM APPROVED BY: SKTOH	DATE: 2002/11/20 DATE: 2002/11/26 DATE: 2002/11/27	TITLE	MPS HEADER, 5P-24S-6P CONFIG., R/A, T/H		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE	MOLEX INCORPORATED		
		SIZE: A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					



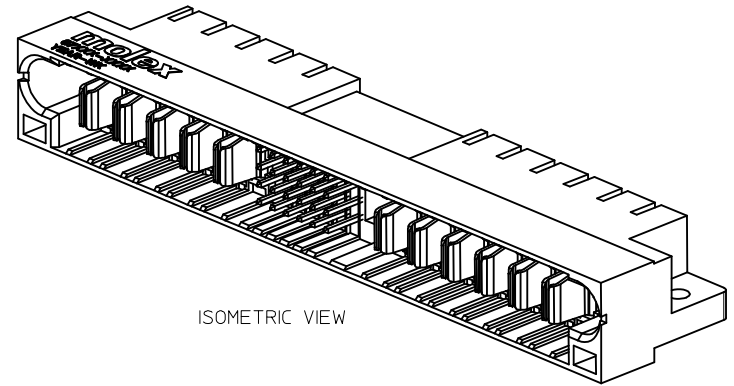
(TERMINAL LOCKING
DETAIL NOT SHOWN)

SECTION B-B



(TERMINAL LOCKING
DETAIL NOT SHOWN)

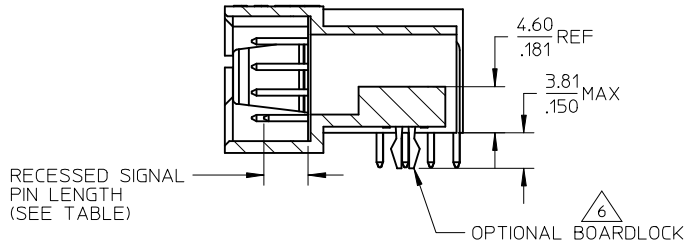
SECTION C-C



ISOMETRIC VIEW

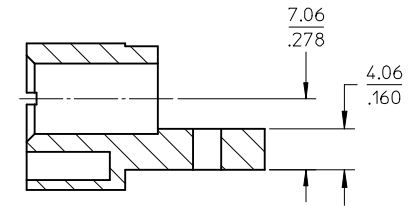
NOTES:

1. MATERIALS: HOUSING - LCP, GLASS FILLED, UL 94V-0, COLOUR: BLACK
POWER PINS - COPPER ALLOY
SIGNAL PINS - COPPER ALLOY
BOARDLOCK - STAINLESS STEEL.
2. FINISHES: POWER & SIGNAL PINS:
SELECTIVE GOLD IN 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.
3. PRODUCT SPECIFICATION: PS-87615-005.
4. SEE SHEET 3 FOR RECOMMENDED PCB LAYOUT AND THICKNESS.
5. MATES WITH MOLEX PART NUMBER: 87616-0001.
- △6. OPTIONAL BOARD-LOCK DEPENDS ON PCBA DESIGN AND PROCESS REQUIREMENTS.
- △7. LONG AND SHORT CONTACT BLADE OPTIONS ARE AVAILABLE FOR DIFFERENT CUSTOMER'S REQUIREMENTS.



(TERMINAL LOCKING
DETAIL NOT SHOWN)

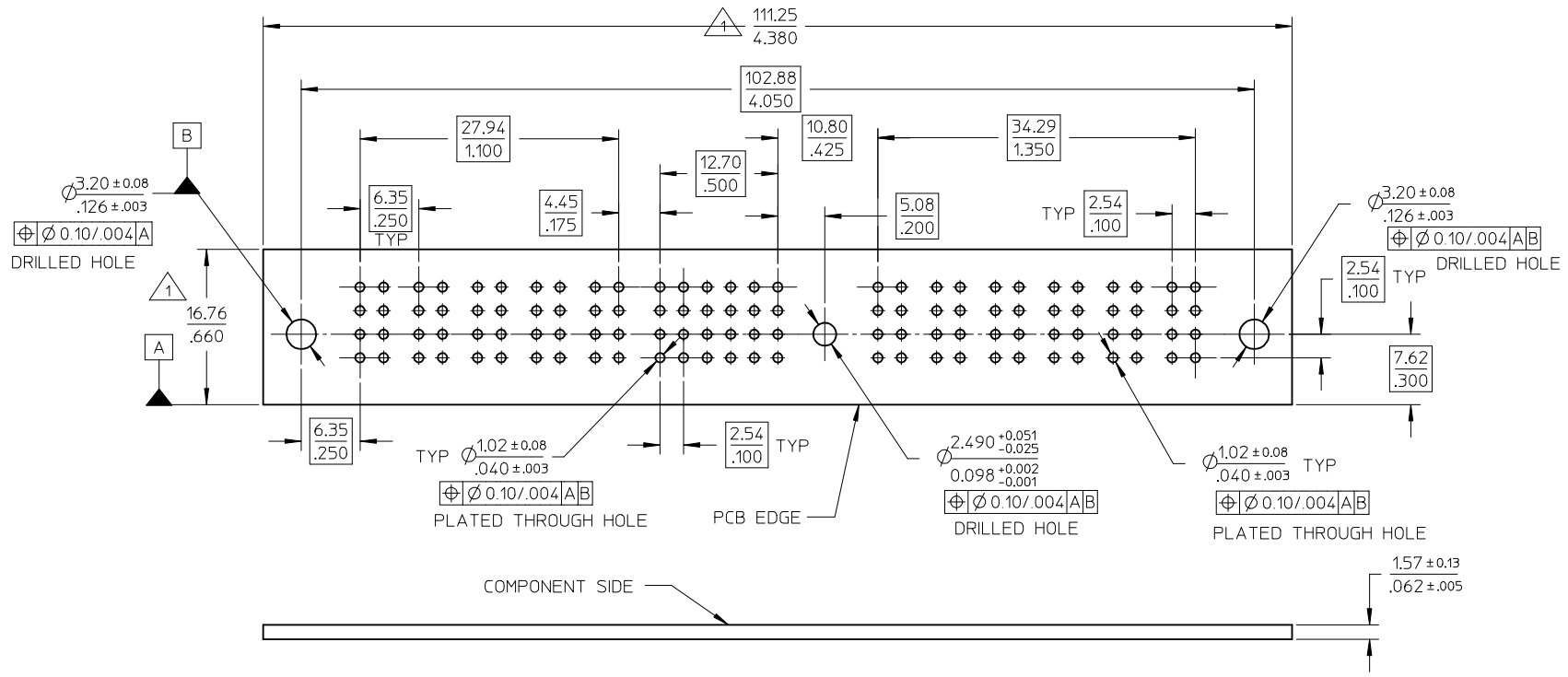
SECTION D-D



SECTION A-A

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 BHLW	DATE 2002/11/20	TITLE MPS HEADER, 5P-24S-6P CONFIG., R/A, T/H		
		4 PLACES	± ---	± ---	CHECKED BY PTL IM	DATE 2002/11/26	MOLEX INCORPORATED		
		3 PLACES	± ---	± .010	APPROVED BY SKTOH	DATE 2002/11/27			
	2 PLACES	± 0.25	± ---	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			
	1 PLACE	± ---	± ---	SIZE A3					
	ANGULAR ± 3 °		SEE TABLE						

PART NUMBER	PART STATUS	PACKAGING	OPTIONAL BOARDLOCK △6	△7 POWER BLADE OPTIONS		STANDARD SIGNAL PIN LENGTH	RECESSED SIGNAL PIN	
				TYPE	DIMENSION Z ± 0.13/.005		LENGTH	LOCATION
87615-1001	TOOLED	TRAY	WITH BOARDLOCK	SHORT CONTACT	13.32/.524	5.59/.220	4.32/.170	A6
87615-1008	TOOLED	TRAY	WITHOUT BOARDLOCK	SHORT CONTACT	13.32/.524	5.59/.220	4.32/.170	A6
87615-1009	TOOLED	TRAY	WITH BOARDLOCK	LONG CONTACT	14.12/.556	6.86/.270	5.59/.220	A6



PCB NOTES:
 1. CONNECTOR ENVELOP DIMENSIONS, OTHER COMPONENTS PLACED ON PCB SHALL AVOID THIS ZONE.

CORRECT PCB HOLE SIZE EC NO: S2009-0475 DRWN:SKANG CH'KD:ATSEE APPR:WILONG 2009/01/16 2009/01/20 2009/02/05	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± .010</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± .010	2 PLACES	± 0.25	± ---	1 PLACE	± ---	± ---	DIMENSION STYLE MM/IN	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
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			APPROVED BY SKTOH	DATE 2002/11/27	MOLEX MOLEX INCORPORATED																
			MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87615-010		SHEET NO. 3 OF 3															