

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: **0876151001**
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, Short Power Blade Contact, with Beveled Metal Pin, Lead-free

Documents:

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

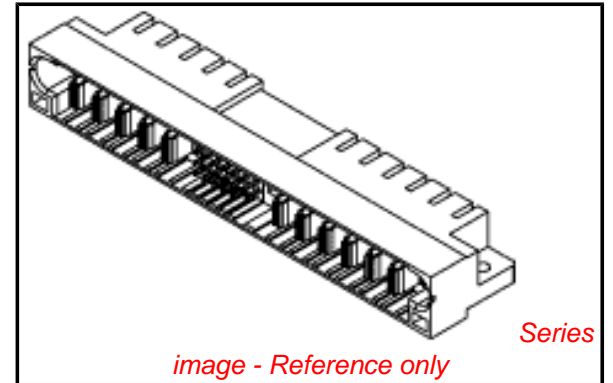
General

Product Family	PCB Headers
Series	87615
Application	Board-to-Board
Comments	Short BladeRecessed 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



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

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

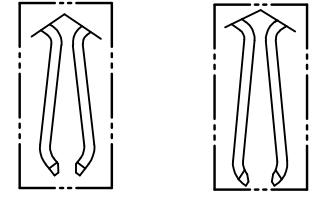
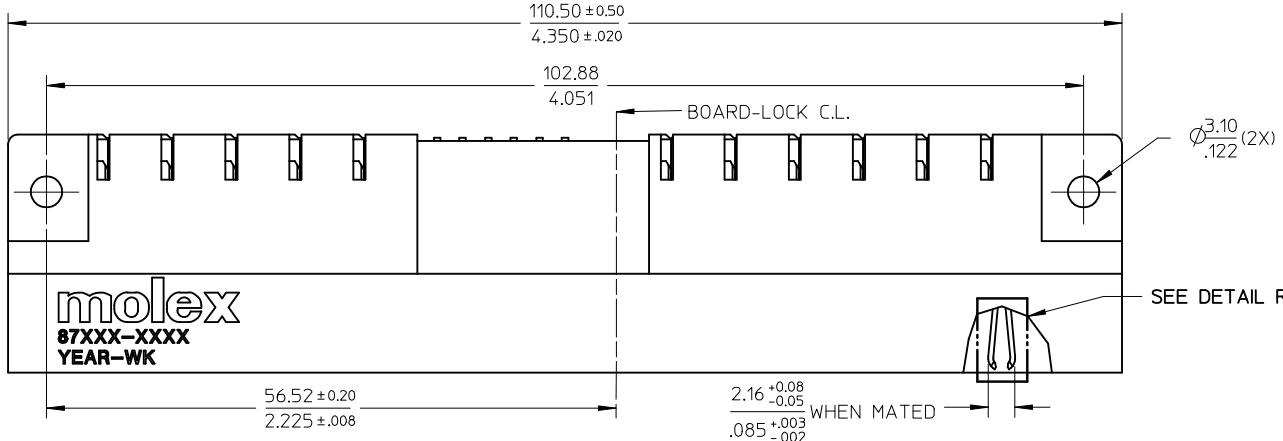
Material Info

Reference - Drawing Numbers

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

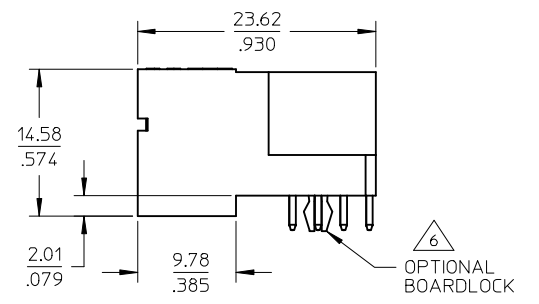
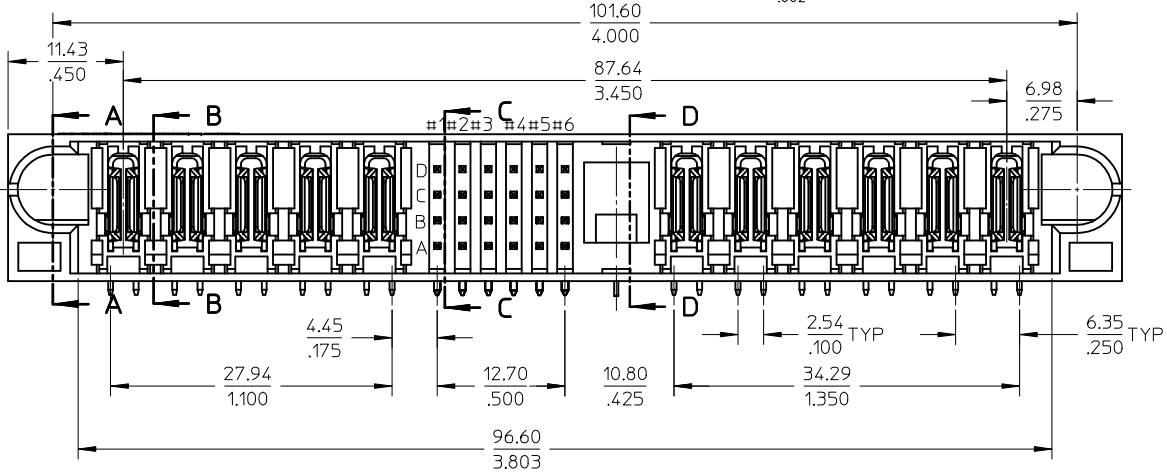
This document was generated on 05/25/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

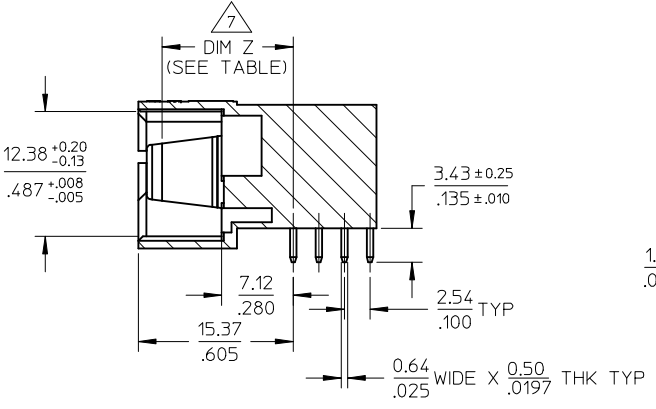


SHORT BLADE OPTION LONG BLADE OPTION

DETAIL R
(SEE TABLE FOR BLADE OPTION)

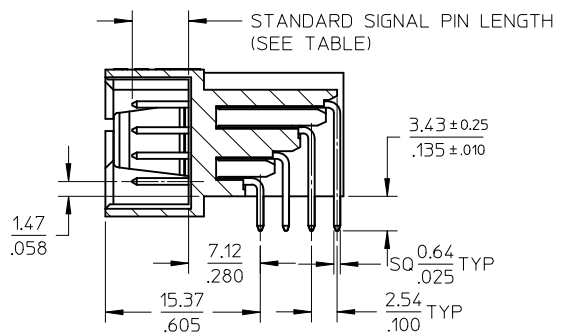


CORRECT PCB HOLE SIZE EC NO: S2009-0475 DRWN:SKANG CHKD:ATSEE APPR:MLONG	2009/01/16 2009/01/20 2009/02/05	DESCRIPTION D3	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
			▽=0 ◻=0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 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			
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE	MOLEX INCORPORATED SD-87615-010	SHEET NO. 1 OF 3	



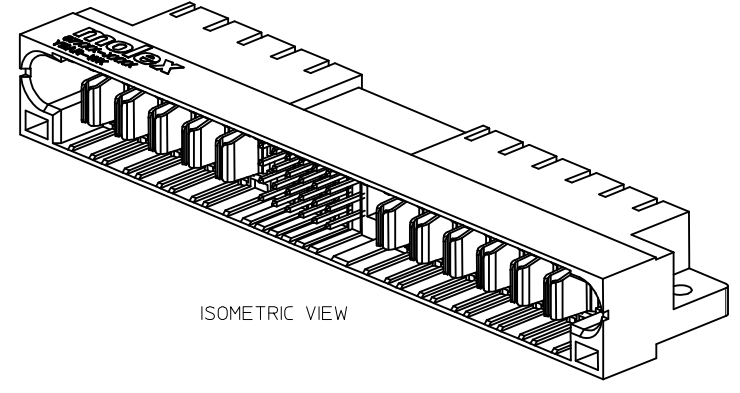
(TERMINAL LOCKING
DETAIL NOT SHOWN)

SECTION B-B



(TERMINAL LOCKING
DETAIL NOT SHOWN)

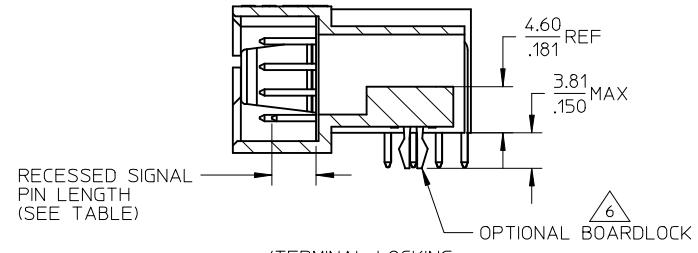
SECTION C-C



ISOMETRIC VIEW

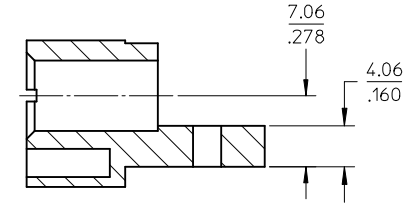
NOTES:

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)

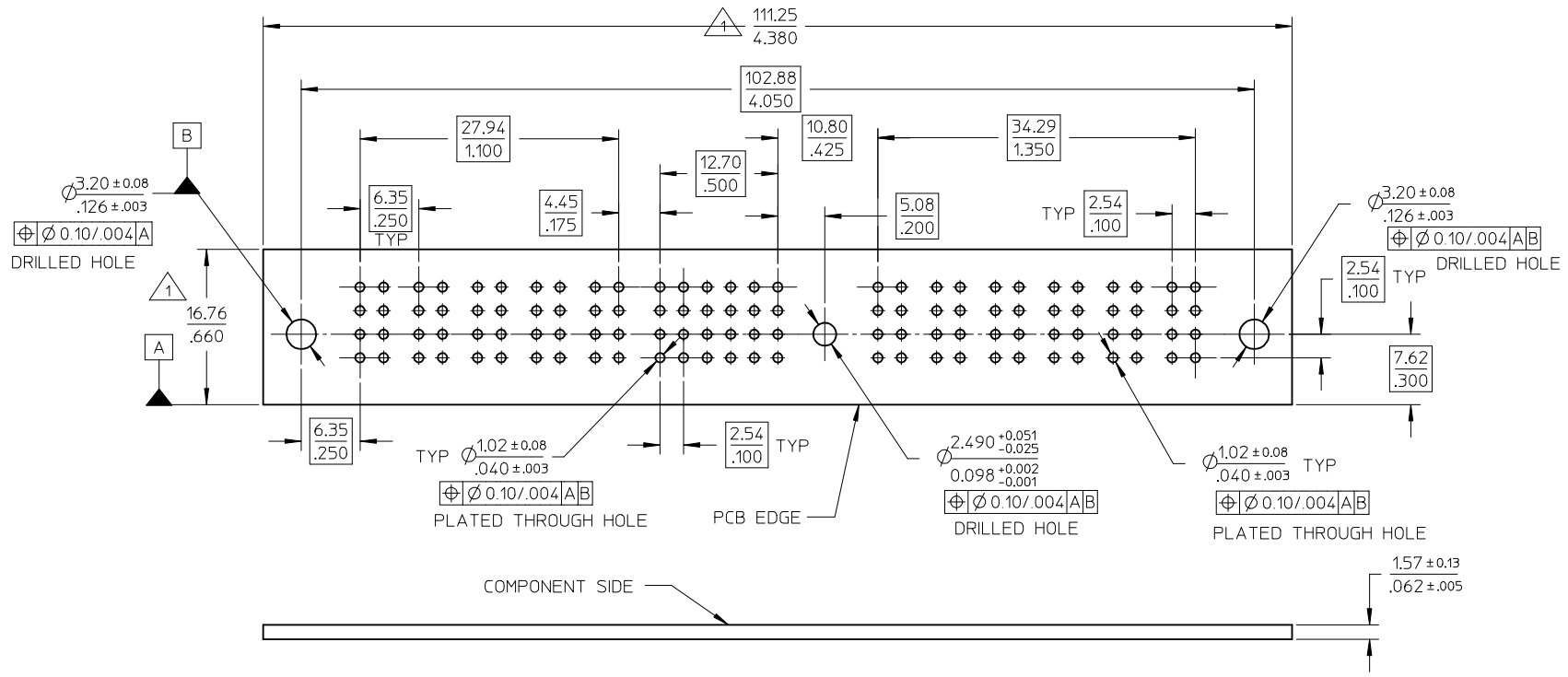
SECTION D-D



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	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		
	▽=0 Ⓢ=0	mm	INCH	MM/IN	NTS	METRIC			
		4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE		
		3 PLACES	± ---	± .010	BHLOW	2002/11/20	MPS HEADER, 5P-24S-6P CONFIG., R/A, T/H		
		2 PLACES	± 0.25	± ---	CHECKED BY	DATE			
	1 PLACE	± ---	± ---	PTL IM	2002/11/26				
		ANGULAR ± 3 °		APPROVED BY	DATE				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SKTOH	2002/11/27				
		SEE TABLE		MATERIAL NO.	DOCUMENT NO.	SHEET NO.			
		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			SD-87615-010		2 OF 3

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	2009/01/16	QUALITY SYMBOLS ▽=0 ∇=0
	DRWN:SKANG	2009/01/20	
	CHKD:ATSEE	2009/02/05	
	APPR:WILONG		
D3	REV	DESCRIPTION	

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
BHLOW	2002/11/20
CHECKED BY	DATE
PTL IM	2002/11/26
APPROVED BY	DATE
SKTOH	2002/11/27
MATERIAL NO.	DOCUMENT NO.
SEE TABLE	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	
TITLE		
MPS HEADER, 5P-24S-6P CONFIG., R/A, T/H		
MOLEX INCORPORATED		
MATERIAL NO.	DOCUMENT NO.	SHEET NO.
SEE TABLE	SD-87615-010	3 OF 3
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		