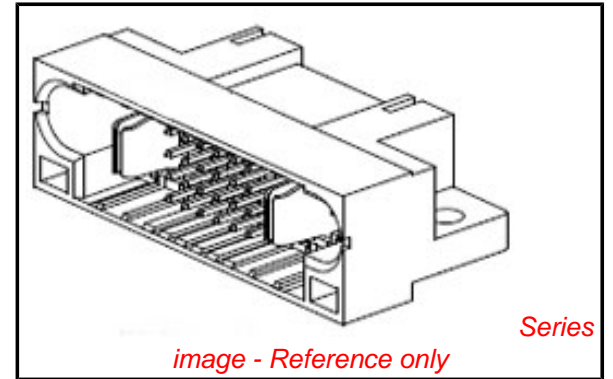


**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** **0876062004**  
**Status:** **Active**  
**Overview:** extreme\_powerplus\_ssi  
**Description:** 6.35mm (.250") Pitch Power, 2.54mm (.100") Pitch Signal, EXTreme PowerPlus™ (SSI) DPS Header, Through Hole, Right Angle, Screw Mount, Power Alpha 1, Signal 24, Power Beta 1, A1, A6, D1 and D6 Recessed Signal Pins, Long Blade, Lead-free

**Documents:**

[3D Model](#) [Product Specification PS-87606-002 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)



**General**

Product Family	PCB Headers
Series	87606
Application	Board-to-Board
Comments	<LI>Long Blade <LI>Recessed Signal Pins : A1, A6, D1, D6
Overview	<u>extreme_powerplus_ssi</u>
Product Name	EXTreme PowerPlus™

**Physical**

Breakaway	No
Circuits (Loaded)	26
Circuits Detail	Power Alpha 1, Signal 24, Power Beta 1
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	Yes
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 Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.57 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.100 In
Pitch - Mating Interface (mm)	2.54 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
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-20°C to +105°C

**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](mailto: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**  
[87606Series](#)

**Mates With**  
[87607](#) PCB Receptacle with Beveled Metal Pins. [87695](#) PCB Receptacle with Press-fit PC Tails

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

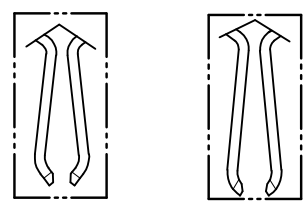
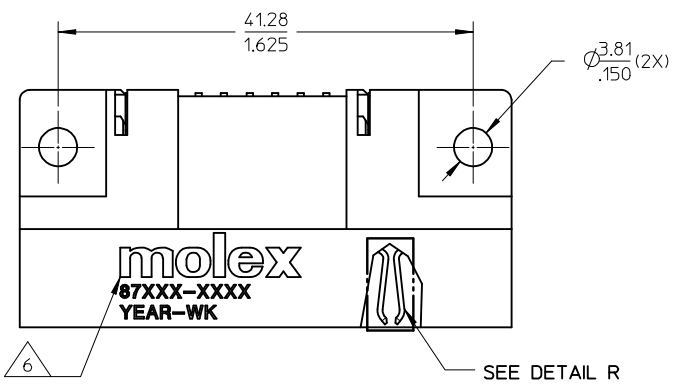
PS-87606-002

Sales Drawing

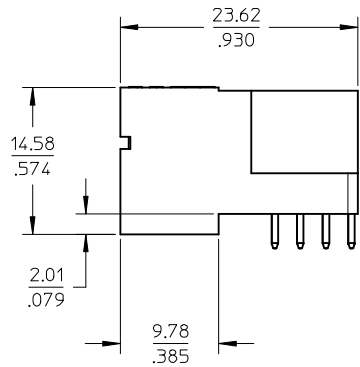
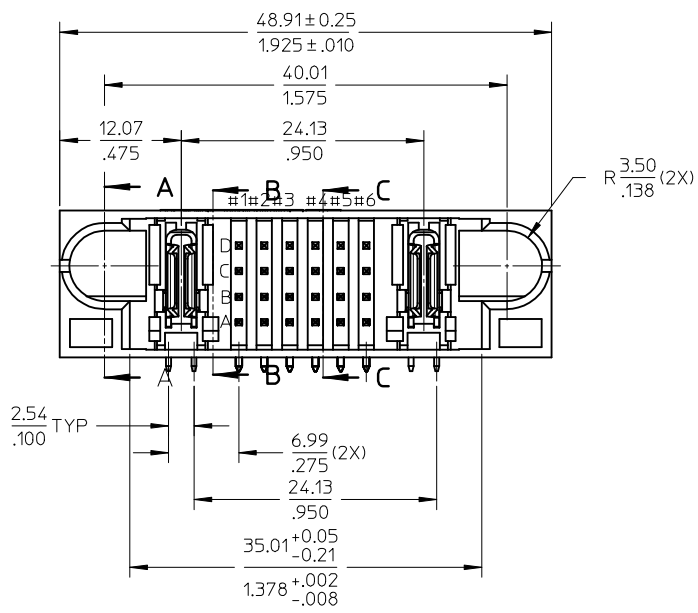
SD-87606-015

This document was generated on 05/25/2010

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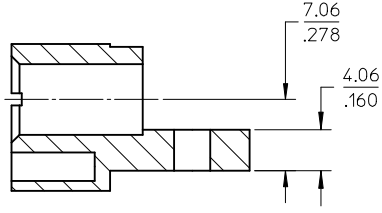
SHORT BLADE OPTION LONG BLADE OPTION  
**DETAIL R**  
 (SEE TABLE FOR BLADE OPTION)



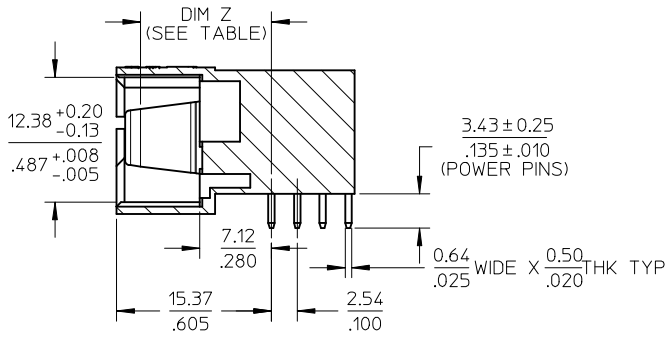
- NOTES:
1. MATERIALS: HOUSING - LCP, GLASS FILLED, UL94V-0, COLOR: BLACK  
 POWER PINS - COPPER ALLOY  
 SIGNAL PINS - COPPER ALLOY
  2. FINISHES: POWER & SIGNAL PINS:  
 SELECTIVE GOLD IN CONTACT AREA.  
 THICKNESS= 0.76 MICROMETER/ 30 MICROINCH MINIMUM  
 SELECTIVE TIN IN THE PC TAIL AREA  
 THICKNESS= 2.54 MICROMETER/100 MICROINCH MINIMUM  
 WITH 1.27µm MINIMUM NICKEL UNDERPLATE OVERALL.
  3. PRODUCT SPECIFICATION: PS-87606-002
  4. SEE SHEET 2 FOR RECOMMENDED PCB LAYOUT AND THICKNESS.
  5. COMPONENT STAY AWAY ZONE FROM CONNECTOR.
  6. MANUFACTURER LOGO, PART NUMBER AND YEAR-WEEK CODE.
  7. PCB NOTE FOR DIAMETER 1.02/.040 PLATED HOLE.  
 - DRILLED HOLE SIZE IS 1.151/.0453.  
 - PLATED WITH 0.007/.0003 MINIMUM TIN (Sn) OVER 0.03/.001  
 TO 0.08/.003 COPPER PLATING TO ACHIEVE 1.02±0.08/.040±.003 HOLE.

CORRECT PCB HOLE SIZE EC NO: S2009-0475 DRWN:SKANG CHKD:ATSEE APPR:MLONG	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 2002/12/02	TITLE DPS CONNECTOR, HEADER 1P-24S-1P CONFIG R/A, T/H, SCREW MOUNT		
		4 PLACES	± ---	± ---	CHECKED BY PTLIM	DATE 2002/12/09			
			3 PLACES	± ---	± .005	APPROVED BY SKTOH	DATE 2002/12/10	MOLEX MOLEX INCORPORATED DOCUMENT NO. SD-87606-015 SHEET NO. 1 OF 3	
	2 PLACES	± 0.13	± .010	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE			
	1 PLACE	± 0.25	± ---	SIZE A 3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
	ANGULAR ± 3 °								

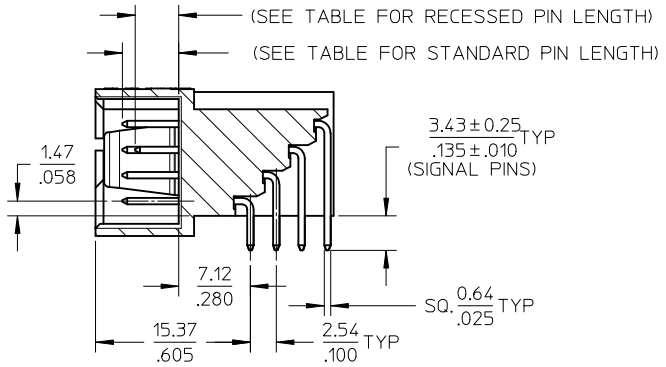
10 9 8 7 6 5 4 3 2 1



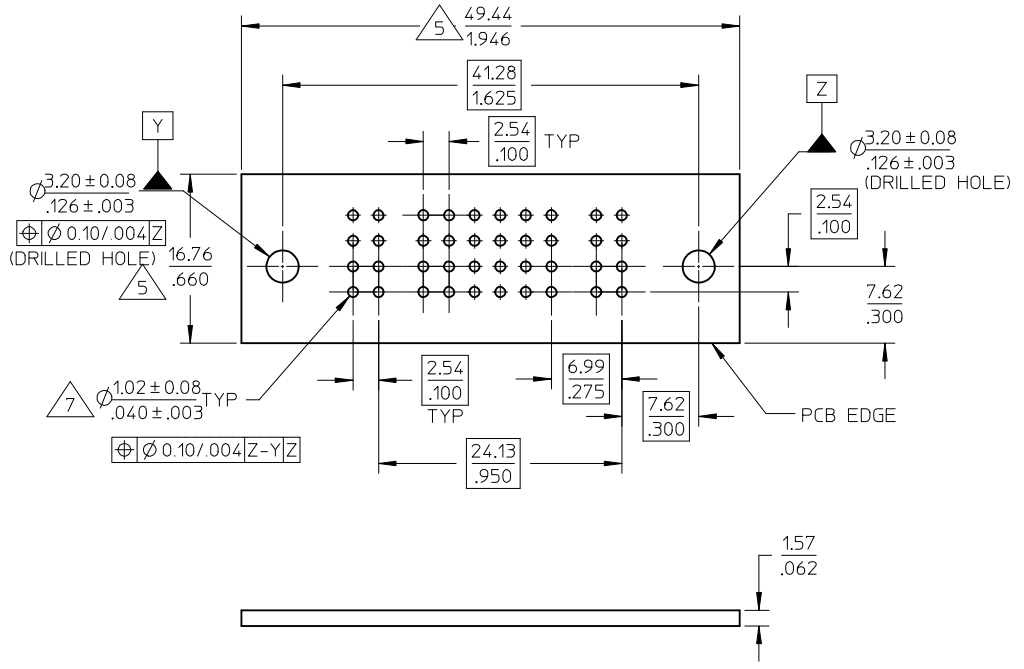
SECTION A-A



SECTION B-B  
(LOCKING DETAIL NOT SHOWN)



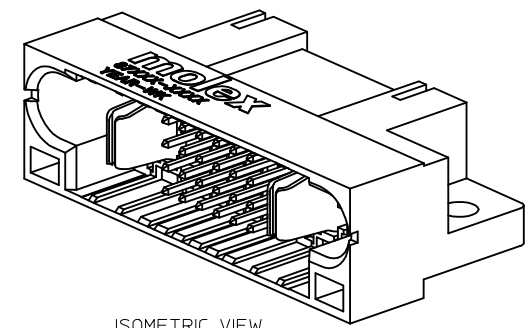
SECTION C-C  
(LOCKING DETAIL NOT SHOWN)



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	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
				MM/IN	NTS	METRIC		
			mm	INCH	DRAWN BY	DATE	TITLE	
					BHLOW	2002/12/02	DPS CONNECTOR, HEADER 1P-24S-1P CONFIG R/A, T/H, SCREW MOUNT	
			CHECKED BY	DATE				
			PTL IM	2002/12/09				
			APPROVED BY	DATE				
			SKTOH	2002/12/10	MOLEX INCORPORATED			
			MATERIAL NO.	DOCUMENT NO.				
			SEE TABLE		SD-87606-015		SHEET NO. 2 OF 3	
			SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
			A3					

9 8 7 6 5 4 3 2 1

PART NUMBER	P-S-P CONFIGURATION			POWER BLADE OPTIONS		STANDARD SIGNAL	RECESSED SIGNAL PIN		PACKAGING
	POWER ALHPA	SIGNAL	POWER BETA	TYPE	DIM Z	PIN LENGTH	PIN LENGTH	LOCATION	
87606-1001	1	24	1	SHORT CONTACT	13.32/.524	5.59/.220	4.32/.170	B4	TRAY
87606-2002	1	24	1	LONG CONTACT	14.12/.556	6.86/.270	5.59/.220	B4	TRAY
87606-2003	1	24	1	LONG CONTACT	14.12/.556	6.45/.254	4.32/.170	C1,C6	TRAY
87606-2004	1	24	1	LONG CONTACT	14.12/.556	6.86/.270	5.59/.220	A1,A6,D1,D6	TRAY
87606-2005	1	24	1	LONG CONTACT	14.12/.556	6.86/.270	5.59/.220	A2	TRAY



ISOMETRIC VIEW

CORRECT PCB HOLE SIZE EC NO: S2009-0475 DRWN:SKANG CHKD:ATSEE APPR:MLONG	2009/01/16 2009/01/20 2009/02/05	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION																	
			$\nabla = 0$ $\triangle = 0$	<table border="1"> <tr> <td></td> <td>mm</td> <td>INCH</td> </tr> <tr> <td>4 PLACES</td> <td><math>\pm</math> ---</td> <td><math>\pm</math> ---</td> </tr> <tr> <td>3 PLACES</td> <td><math>\pm</math> ---</td> <td><math>\pm</math> .005</td> </tr> <tr> <td>2 PLACES</td> <td><math>\pm</math> 0.13</td> <td><math>\pm</math> .010</td> </tr> <tr> <td>1 PLACE</td> <td><math>\pm</math> 0.25</td> <td><math>\pm</math> ---</td> </tr> </table>		mm	INCH	4 PLACES	$\pm$ ---	$\pm$ ---	3 PLACES	$\pm$ ---	$\pm$ .005	2 PLACES	$\pm$ 0.13	$\pm$ .010	1 PLACE	$\pm$ 0.25	$\pm$ ---	MM/IN	NTS	METRIC	$\triangle$ THIRD ANGLE PROJECTION		
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