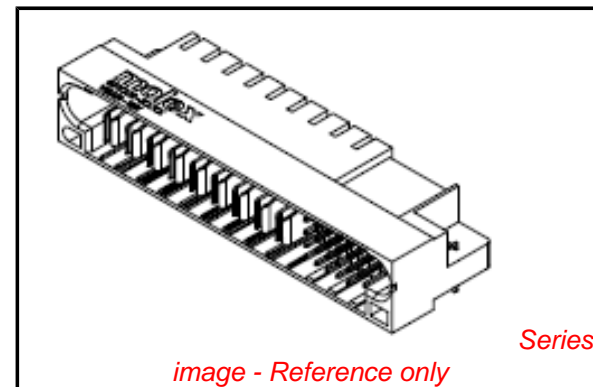


**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0878746001](#)  
**Status:** **Active**  
**Overview:** [extreme\\_lphpower](#)  
**Description:** 5.08mm (.200"), 2.54mm (.100") Pitch Power, 2.54mm (.100") Pitch Signal, EXTreme PowerPlus™ Pa-S Header, Through Hole, Right Angle, Beveled Metal Pins, 33 Circuits, Power Alpha 9, Signal 24, Recessed Signal Pin C5, Lead-free

**Documents:**

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-87805-006 \(PDF\)](#)



**General**

Product Family	PCB Headers
Series	87874
Application	Board-to-Board
Comments	<LI>Recessed Signal Pin Location at: C5<LI>No Void Pins
Overview	<a href="#">extreme_lphpower</a>
Product Name	EXTreme PowerPlus™

**Physical**

Breakaway	No
Circuits (Loaded)	34
Circuits Detail	Power Alpha 10 Signal 24
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
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	No
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, 0.200 In
Pitch - Mating Interface (mm)	2.54 mm, 5.08 mm
Plating min: Mating (µin)	30
Plating min: Mating (µm)	0.76
Plating min: Termination (µin)	100
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 +105°C
Termination Interface: Style	Through Hole

**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](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**

87874Series

**Mates With**

KK® PCB Receptacles like 4455. SL™ IDT Housings like 70430. KK® IDT Housings like 7720 and 70400a. C-Grid® PCB Receptacles like 90147 and 90148

**Electrical**

Current - Maximum per Contact	2.5A, 30A
Voltage - Maximum	250V (RMS)

**Solder Process Data**

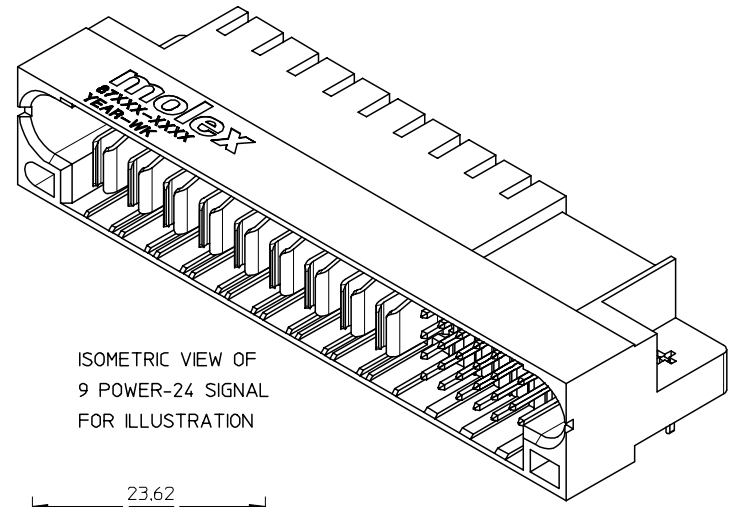
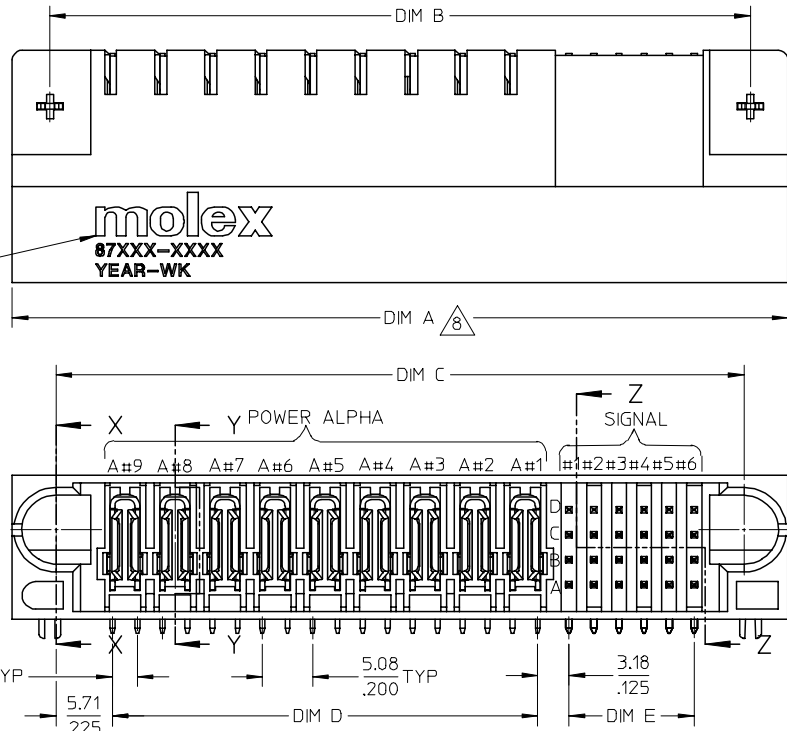
Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	260

**Material Info****Reference - Drawing Numbers**

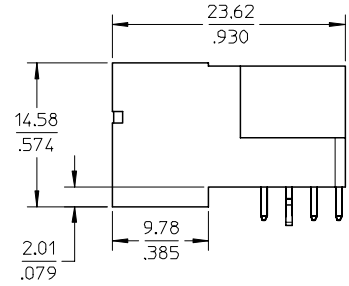
Application Specification	AS-87631-018
Product Specification	PS-87805-006
Sales Drawing	SD-87874-018

This document was generated on 05/25/2010

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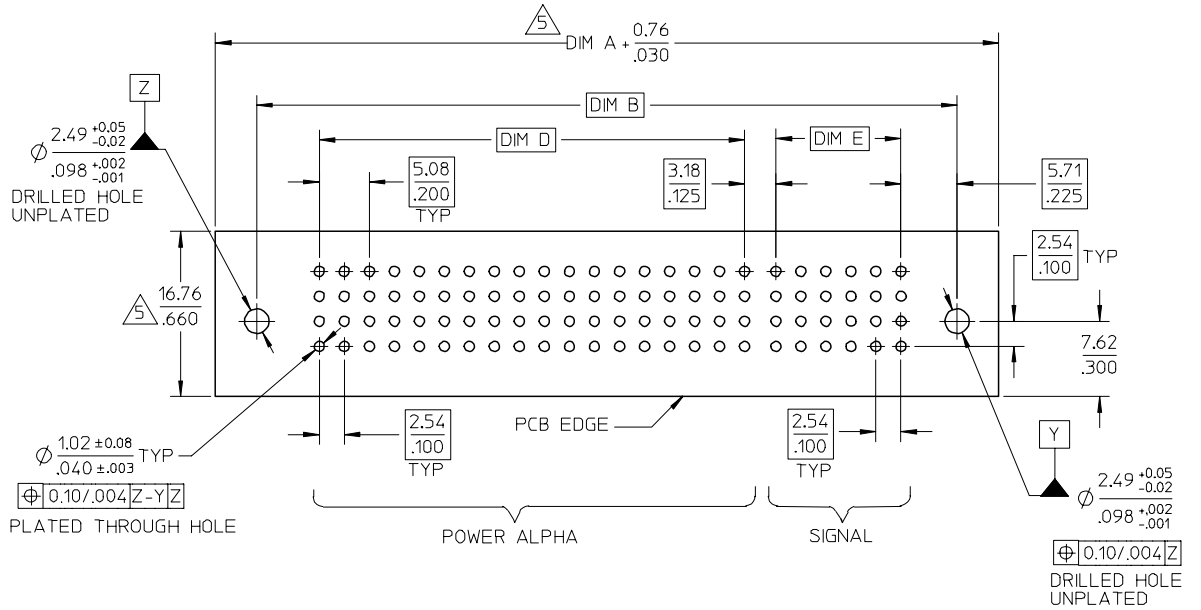
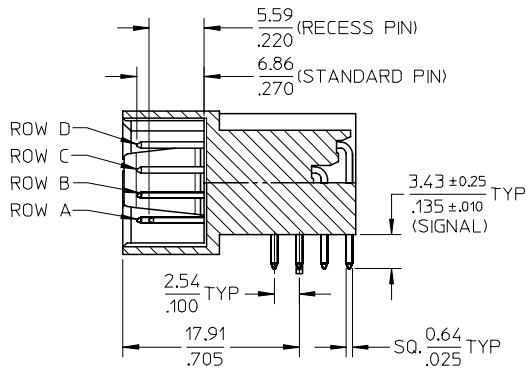
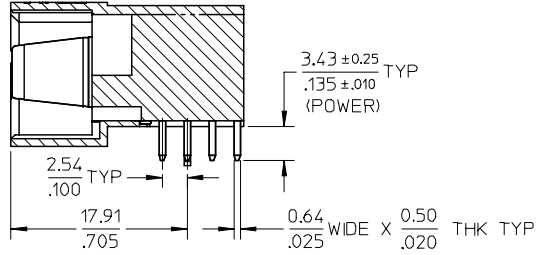
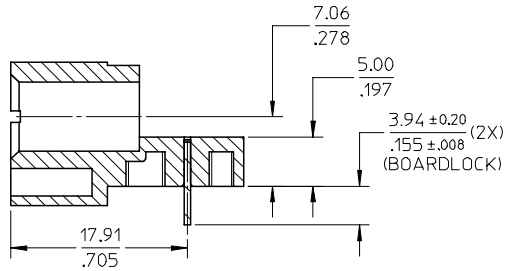
ISOMETRIC VIEW OF  
9 POWER-24 SIGNAL  
FOR ILLUSTRATION



- NOTES:
- MATERIALS: HOUSING - LCP, GLASS FILLED, UL 94V-0, COLOUR: BLACK  
POWER PINS - COPPER ALLOY  
SIGNAL PINS - COPPER ALLOY  
BOARDLOCK - COPPER ALLOY
  - FINISHES : POWER AND 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  
1.27um NICKEL OVERALL
  - PRODUCT SPECIFICATION : PS-87805-006
  - SEE SHEET 2 FOR RECOMMENDED PCB LAYOUT AND THICKNESS.
  - COMPONENT STAY AWAY ZONE FROM CONNECTOR.
  - MANUFACTURER LOGO, PART NUMBER AND YEAR-WEEK CODE.
  - PCB NOTE FOR DIAMETER 1.02/.040 PLATED HOLE.  
-DRILLED HOLE SIZE IS 1.151/.0453.  
-PLATED WITH 0.007/.0003 MINIMUM TIN OVER 0.03/.001.
  - 9 POWER ALPHA - 24 SIGNAL IS SHOWN FOR ILLUSTRATION .  
CONNECTOR CONFIGURATION IS AVAILABLE UP TO 203MM/INCH.  
PLEASE CONTACT MOLEX SALES PERSONNEL FOR OTHER  
CONFIGURATION AND OPTION NEEDED.

DIM A TYPO ERROR EC NO: S2007-0801 2007/03/14 DRAWN:GMENARLY CHKD:SKANG 2007/03/14 APPR:MLONG 2007/03/14	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	mm INCH	MM/IN	NTS	METRIC	
	∇=0	4 PLACES ± --- ± ---	DRAWN BY DATE			
		3 PLACES ± --- ± .010	KFL IM 2007/02/07	TITLE		

2 PLACES ± 0.25 ± ---	GMENARLY 2007/02/14	POWER CONNECTOR HEADER P(A)-S CONFIG. R/A, T/H BOARDLOCK
1 PLACE ± --- ± ---	APPROVED BY DATE	MOLEX INCORPORATED
ANGULAR ± 3 °	MLONG 2007/02/15	SD-87874-018
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO.	SHEET NO. 1 OF 3
	SEE TABLE	
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	



<b>DIM A TYPO ERROR</b> EC NO: S2007-0801 DRWN:GMENARLY 2007/03/14 CHKD:SKANG 2007/03/14 APPR:MLONG 2007/03/14	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION															
	$\nabla=0$ $\sphericalangle=0$	<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	± ---	± ---	MM/IN	NTS	METRIC	
		mm	INCH																		
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1 PLACE	± ---	± ---																			
DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE																			
REV																					

10	9	8	7	6	5	4	3	2	1						
ASSEMBLY PART NUMBER	P-S CONFIGURATION		COMPONENT					PACKAGING							
	POWER ALPHA	SIGNAL	DIM A	DIM B	DIM C	DIM D	DIM E		STANDARD SIGNAL PIN		RECESS SIGNAL PIN		VOID PIN LOCATION		
	87874-6001	10	24	83.83 3.300	76.20 3.000	74.93 2.950	48.26 1.900		12.70 .500	ROW	COLUMN	LENGTH	ROW	COLUMN	LENGTH
								D C B A	ALL	6.86/.270		C	5	5.59/.220	TRAY

<b>DIM A TYPO ERROR</b> EC NO: S2007-0801 DRWN:GMENARLY 2007/03/14 CHKD:SKANG 2007/03/14 APPR:MLONG 2007/03/14	QUALITY SYMBOLS = 0 = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		
				MM/IN		NTS	METRIC			
		4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE			
		3 PLACES	± ---	± .010	KFL IM	2007/02/07	POWER CONNECTOR HEADER			
		2 PLACES	± 0.25	± ---	CHECKED BY	DATE	P(A)-S CONFIG. R/A, T/H			
1 PLACE	± ---	± ---	GMENARLY	2007/02/14	BOARDLOCK					
ANGULAR ± 3 °				APPROVED BY	DATE	MOLEX INCORPORATED				
				MLONG	2007/02/15	DOCUMENT NO.		SD-87874-018		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		MATERIAL NO.		SHEET NO.		3 OF 3		
A1	REV			SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				