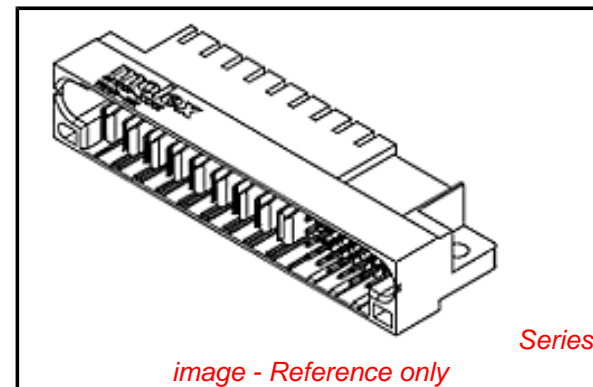


PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0878743002](#)
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, Screw Mount, 24 Circuits, Power Alpha 20, Signal 4, Recessed Signal Pin A1-A5, 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	Recessed Signal Pin Locations at: A1-A5No Void Pins
Overview	extreme_lphpower
Product Name	EXTreme PowerPlus™

Physical

Breakaway	No
Circuits (Loaded)	24
Circuits Detail	Power Alpha 4 Signal 20
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
 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

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

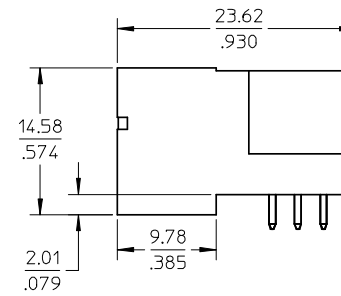
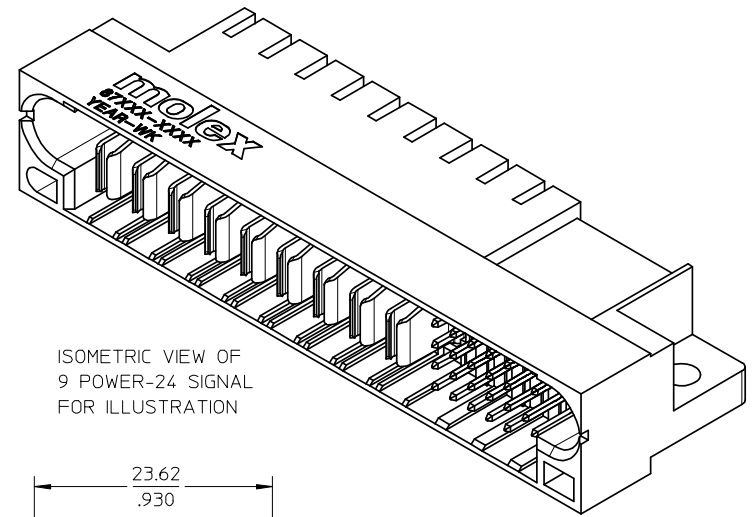
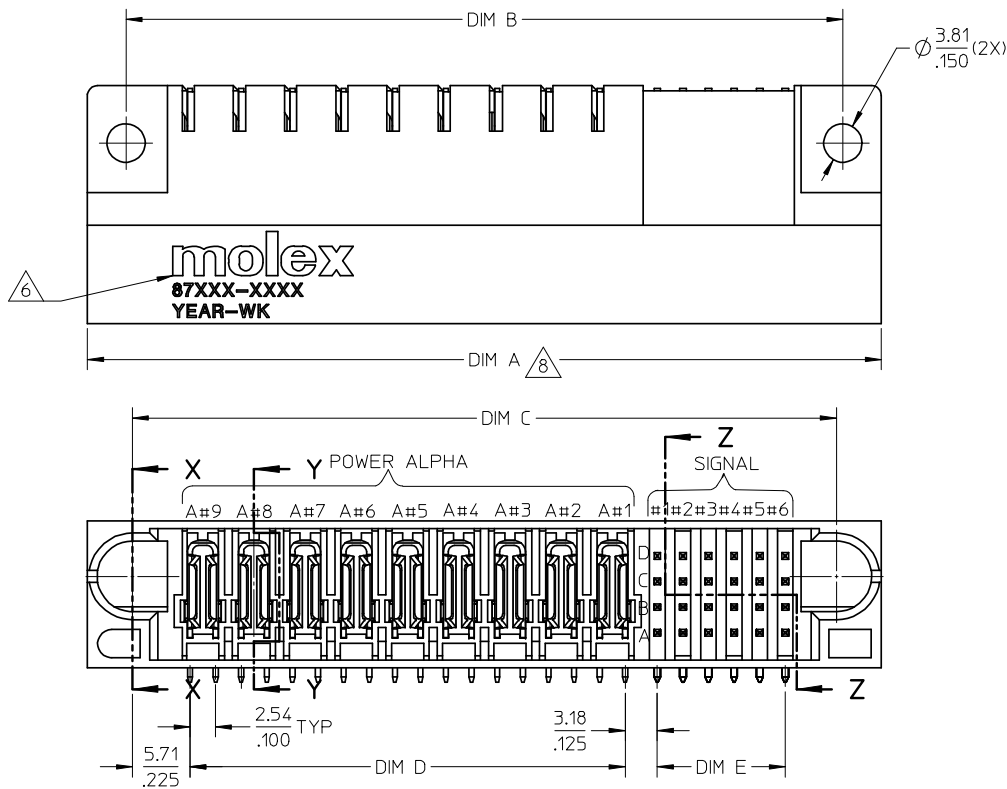
Material Info**Reference - Drawing Numbers**

Application Specification AS-87631-018
Product Specification PS-87805-006
Sales Drawing SD-87874-014

This document was generated on 05/25/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

10 9 8 7 6 5 4 3 2 1



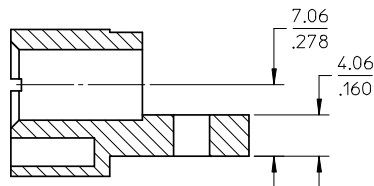
NOTES:

1. MATERIALS: HOUSING - LCP, GLASS FILLED, UL 94V-0, COLOUR: BLACK
POWER PINS - COPPER ALLOY
SIGNAL PINS - COPPER ALLOY
2. 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
3. PRODUCT SPECIFICATION : PS-87805-006
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 OVER 0.03/.001.
8. 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.

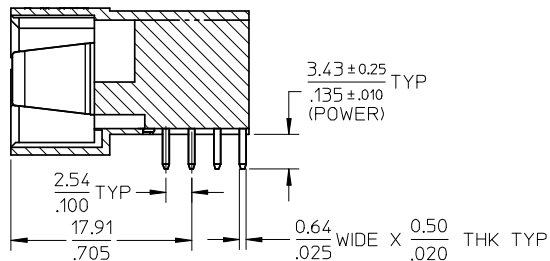
PDR#S-001762-00-00 EC NO: S2008-0747 DRWN:SKANG 2008/03/28 CHKD:ATSEE 2008/03/31 APPR:MLONG 2008/03/31	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY KFLIM	DATE 2007/01/25	TITLE POWER CONNECTOR HEADER P(A)-S CONFIG. R/A, T/H, S/M			
		4 PLACES	± ---	± ---	CHECKED BY GMENARLY	DATE 2007/02/02	MOLEX INCORPORATED DOCUMENT NO. SD-87874-014 SHEET NO. 1 OF 3			
		3 PLACES	± ---	± .010	APPROVED BY MLONG	DATE 2007/02/02				
2 PLACES	± 0.25	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
1 PLACE	± ---	± ---	ANGULAR ± 3 °		SIZE A3					

9 8 7 6 5 4 3 2 1

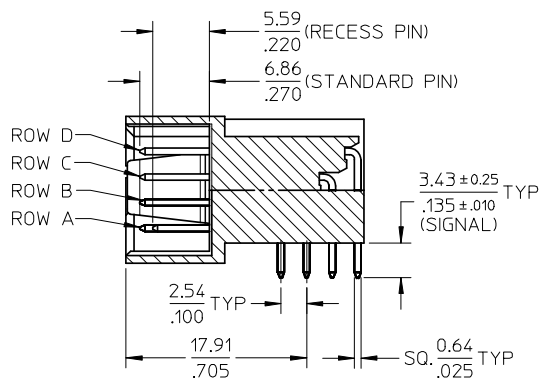
10 9 8 7 6 5 4 3 2 1



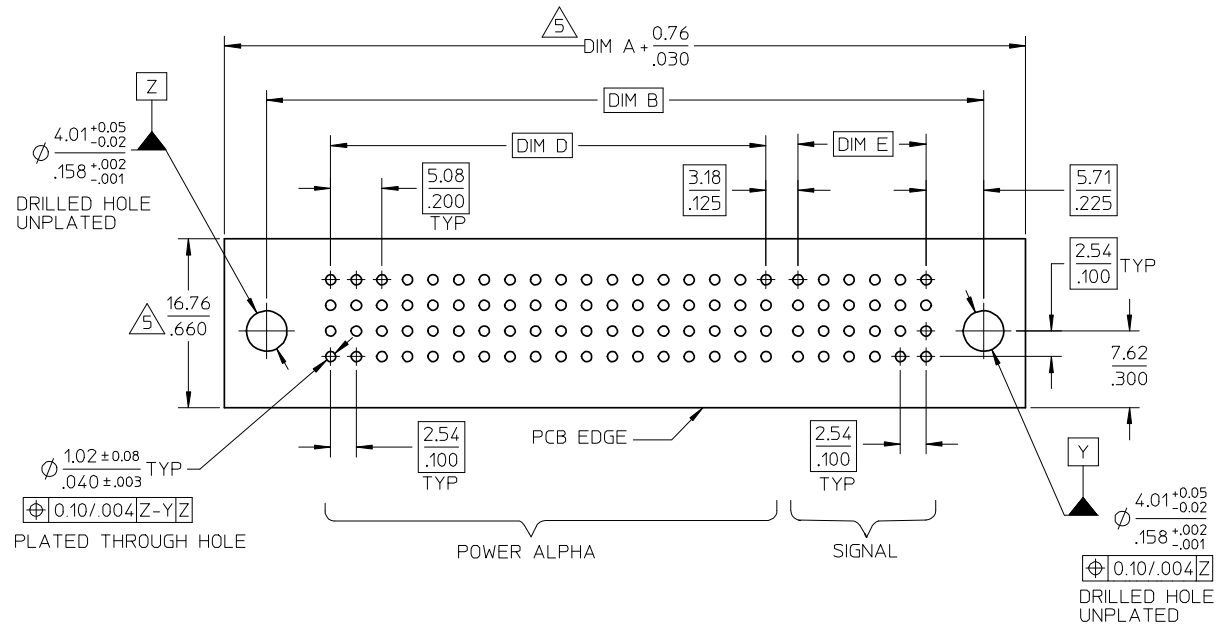
SECTION X-X



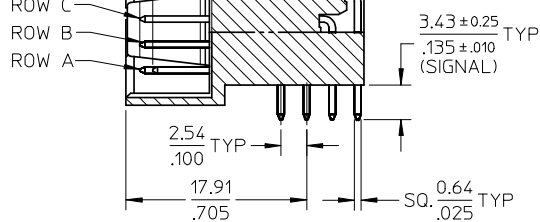
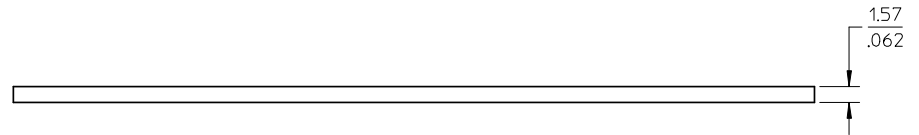
SECTION Y-Y



SECTION Z-Z



RECOMMENDED PCB LAYOUT
(COMPONENT SIDE)



SECTION Z-Z

PDR#S-001762-00-00 EC NO: S2008-0747 DRWN:SKANG 2008/03/28 CHKD:ATSEE 2008/03/31 APPR:MLONG 2008/03/31	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
		mm	INCH																		
	4 PLACES	± ---	± ---																		
	3 PLACES	± ---	± .010																		
2 PLACES	± 0.25	± ---																			
1 PLACE	± ---	± ---																			
DESCRIPTION A2	DRAWN BY KFL IM	DATE 2007/01/25	TITLE POWER CONNECTOR HEADER P(A)-S CONFIG. R/A, T/H, S/M																		
REV A2	CHECKED BY GMENARLY	DATE 2007/02/02	MOLEX INCORPORATED																		
	APPROVED BY MLONG	DATE 2007/02/02	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87874-014	SHEET NO. 2 OF 3																

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

9 8 7 6 5 4 3 2 1

ASSEMBLY PART NUMBER	P-S CONFIGURATION		COMPONENT PART NUMBER											PACKAGING	
	POWER ALPHA	SIGNAL	DIM A	DIM B	DIM C	DIM D	DIM E	STANDARD SIGNAL PIN			RECESS SIGNAL PIN				VOID PIN LOCATION
								ROW	COLUMN	LENGTH	ROW	COLUMN	LENGTH		
87874-3001	9	24	78.74 3.100	71.12 2.800	69.85 2.750	43.18 1.700	12.70 .500	D C B A	1,2,3,4,5 1,2,3,4,5 1,2,3,4,5,6 1,2,3,4,5	6.86/.270	D C B A	6 6 NIL 6	5.59/.220	NIL	TRAY
87874-3002	4	20	50.80 2.000	43.18 1.700	41.91 1.650	17.78 .700	10.16 .400	D C B A	1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 NIL	6.86/.270	D C B A	NIL NIL NIL 1,2,3,4,5	5.59/.220	NIL	TRAY



PDR#S-001762-00-00 EC NO: S2008-0747 DRWN:SKANG 2008/03/28 CHKD:ATSEE 2008/03/31 APPR:MLONG 2008/03/31	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION																		
		$\nabla=0$ $\sphericalcap=0$	<table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <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> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± .010	2 PLACES	± 0.25	± ---	1 PLACE	± ---	± ---	MM/IN	NTS	METRIC				
			mm	INCH																					
		4 PLACES	± ---	± ---																					
3 PLACES	± ---	± .010																							
2 PLACES	± 0.25	± ---																							
1 PLACE	± ---	± ---																							
<table border="1"> <tr> <td>DRAWN BY</td> <td>DATE</td> <td>TITLE</td> </tr> <tr> <td>KFL IM</td> <td>2007/01/25</td> <td>POWER CONNECTOR HEADER P(A)-S CONFIG. R/A, T/H, S/M</td> </tr> <tr> <td>CHECKED BY</td> <td>DATE</td> <td></td> </tr> <tr> <td>GMENARLY</td> <td>2007/02/02</td> <td></td> </tr> <tr> <td>APPROVED BY</td> <td>DATE</td> <td></td> </tr> <tr> <td>MLONG</td> <td>2007/02/02</td> <td></td> </tr> </table>	DRAWN BY	DATE	TITLE	KFL IM	2007/01/25	POWER CONNECTOR HEADER P(A)-S CONFIG. R/A, T/H, S/M	CHECKED BY	DATE		GMENARLY	2007/02/02		APPROVED BY	DATE		MLONG	2007/02/02		<table border="1"> <tr> <td>MATERIAL NO.</td> <td>DOCUMENT NO.</td> <td>SHEET NO.</td> </tr> <tr> <td>SEE TABLE</td> <td>SD-87874-014</td> <td>3 OF 3</td> </tr> </table>	MATERIAL NO.	DOCUMENT NO.	SHEET NO.	SEE TABLE	SD-87874-014	3 OF 3
DRAWN BY	DATE	TITLE																							
KFL IM	2007/01/25	POWER CONNECTOR HEADER P(A)-S CONFIG. R/A, T/H, S/M																							
CHECKED BY	DATE																								
GMENARLY	2007/02/02																								
APPROVED BY	DATE																								
MLONG	2007/02/02																								
MATERIAL NO.	DOCUMENT NO.	SHEET NO.																							
SEE TABLE	SD-87874-014	3 OF 3																							
<table border="1"> <tr> <td>SIZE</td> <td colspan="2">THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</td> </tr> <tr> <td>A3</td> <td colspan="2"></td> </tr> </table>	SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		A3																					
SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																								
A3																									