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Part Number: [0878072007](#)
Status: **Active**
Overview: [extreme_powerplus_ssi](#)
Description: 5.08mm (.200") Pitch Power, 2.54mm (.100") Pitch Signal, EXTreme PowerPlus™ S-P(B) Header, Through Hole, Right Angle, Screw Mount, 30 Circuits, Signal 24, Power Beta 6, Recessed Signal Pins: A1 to A6, Lead-free

Documents:

[3D Model](#) [Product Specification PS-87805-006 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

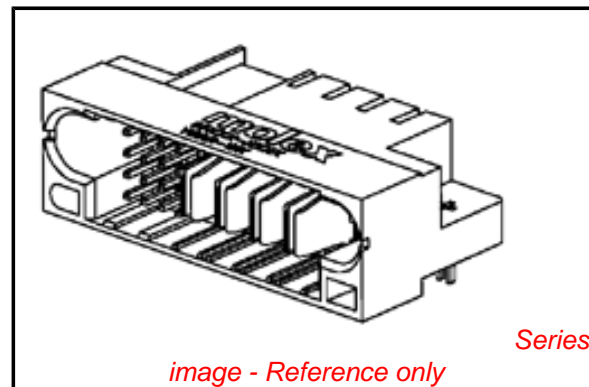
UL E29179

General

Product Family PCB Headers
 Series [87807](#)
 Application Board-to-Board
 Comments Recessed Signal Pins: A1 to A6
 Overview [extreme_powerplus_ssi](#)
 Product Name EXTreme PowerPlus™

Physical

Breakaway No
 Circuits (Loaded) 30
 Circuits Detail Signal 24|Power Beta 6
 Color - Resin Black
 Durability (mating cycles max) 100
 First Mate / Last Break Yes
 Flammability 94V-0
 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 No
 PCB Retention Yes
 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



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
[87807Series](#)

Termination Interface: Style Through Hole

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

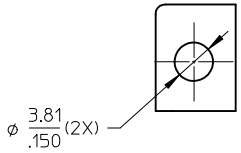
Material Info

Reference - Drawing Numbers

Application Specification AS-87631-018
Product Specification PS-87805-006
Sales Drawing SD-87807-001

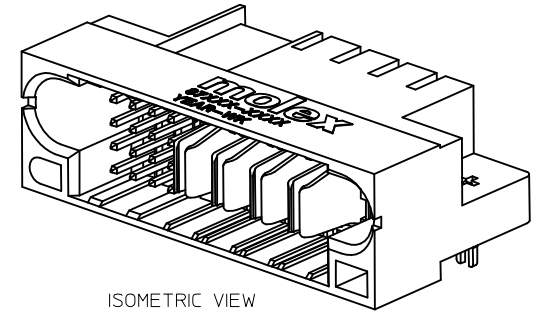
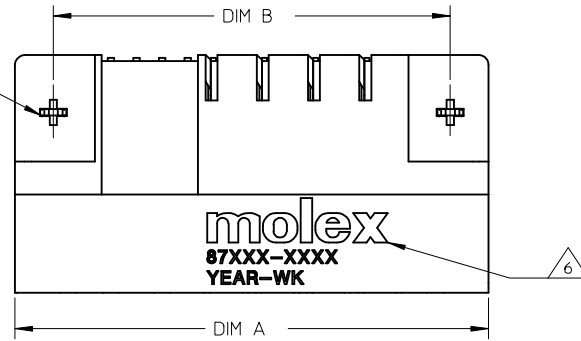
This document was generated on 05/26/2010

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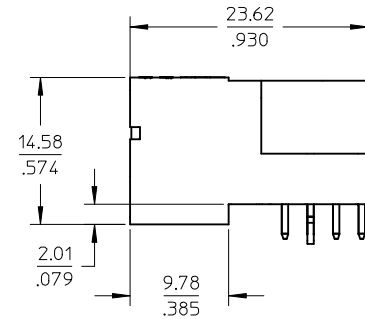
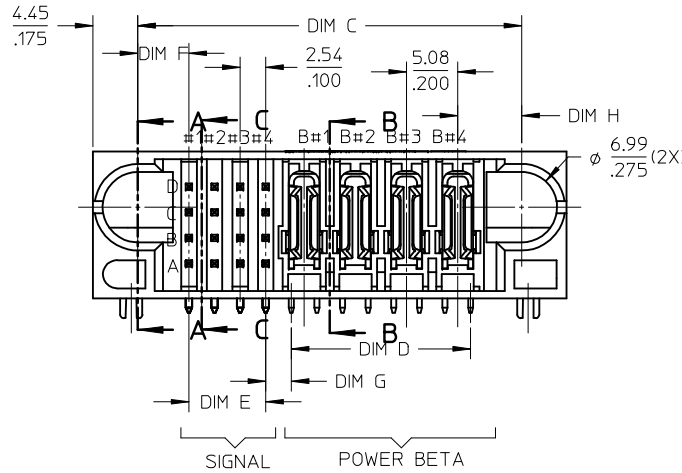


SCREWMOUNT OPTION
(SEE TABLE/SHEET 3)

REFER TO OPTION AT
TABLE/SHEET 3



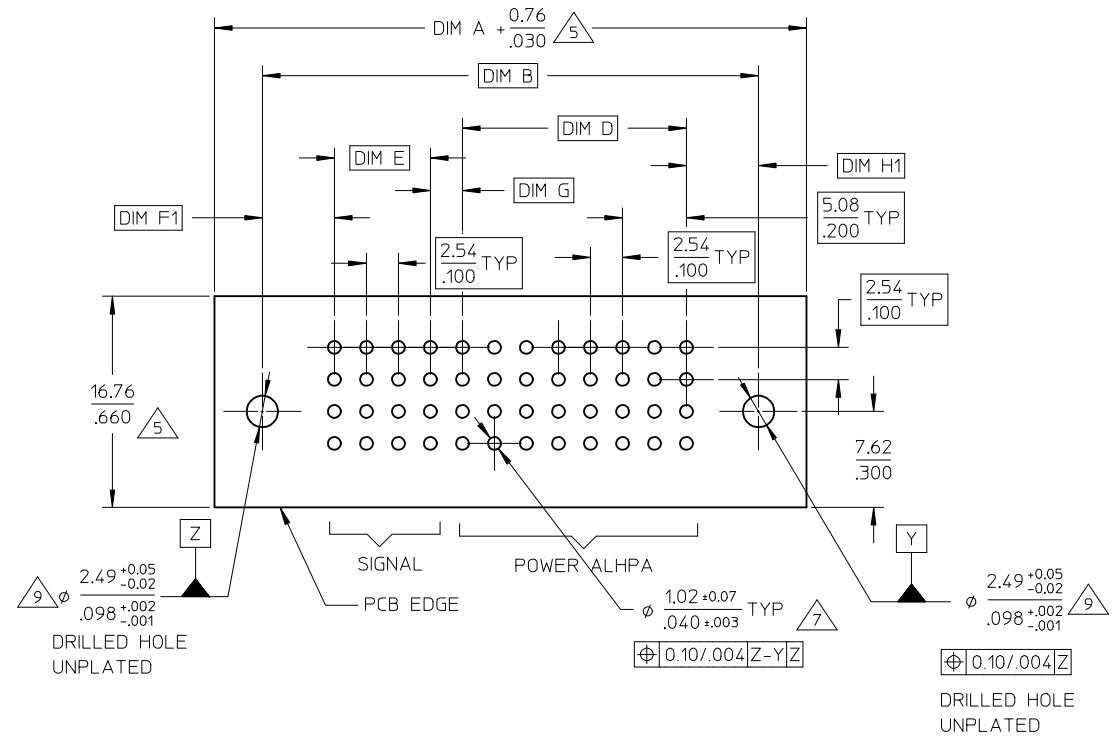
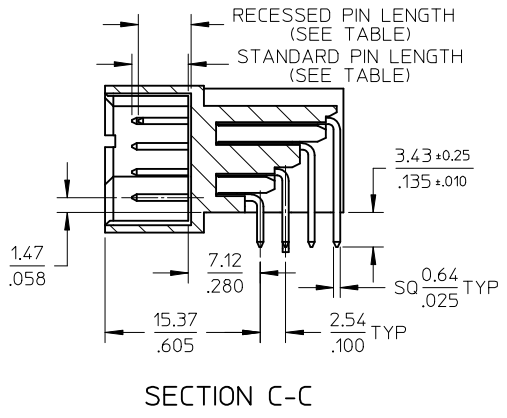
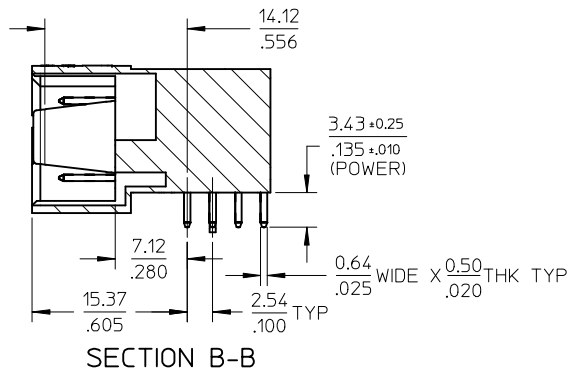
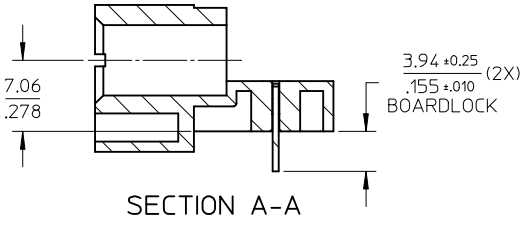
ISOMETRIC VIEW



NOTES:

1. MATERIALS: HOUSING - LCP, GLASS FILLED, UL94V-0,
COLOUR: BLACK
POWER PINS - COPPER ALLOY
SIGNAL PINS - COPPER ALLOY
BOARDLOCK - COPPER ALLOY
2. FINISHES: POWER & SIGNAL PINS:
SELECTIVE GOLD IN CONTACT AREA.
THICKNESS= 0.76 MICROMETER/ 30 MICROINCH MINIMUM
SELECTIVE TIN ALLOY IN THE PC TAIL AREA
THICKNESS= 2.54 MICROMETER/100 MICROINCH MINIMUM
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 TO 0.08/.003 COPPER PLATING TO ACHIEVE
1.02±0.08/.040±.003 HOLE.
8. 16 SIGNAL-4P BETA CONFIGURATION IS SHOWN FOR ILLUSTRATION.
9. FOR SCREWMOUNT OPTION, THE DRILLED HOLE DIAMETER IS
4.01MM/.158".

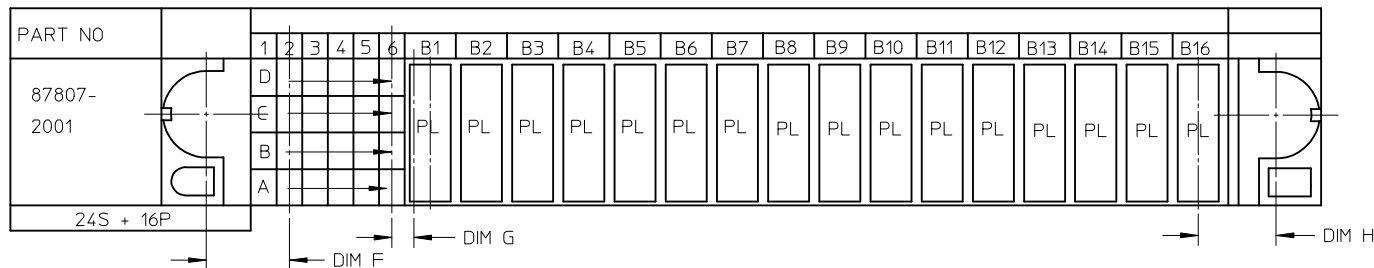
ADD P/N(87807-2011) EC NO: S2009-0688 DRWN: YMC HONG 2009/03/27 CHKD: ATSEE 2009/03/30 APPR: MLONG 2009/03/30	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY NRVITAP	DATE 2004/03/26	TITLE POWER CONNECTOR HEADER 5.08MM VERSION S-P(B), R/A, T/H			
		4 PLACES	± ---	± ---	CHECKED BY BHLOW	DATE 2004/04/14	MOLEX INCORPORATED			
		3 PLACES	± ---	± .010	APPROVED BY SCLOW	DATE 2004/04/19	MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		ANGULAR ± 3 °		SIZE A3		SEE TABLE				
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										



RECOMMENDED PCB LAYOUT
PCB THICKNESS 1.57mm/0.062"

ADD P/N(87807-2011) EC NO: S2009-0688 DRWN: YMCHONG 2009/03/27 CHKD: ATSEE 2009/03/30 APPR: MLONG 2009/03/30	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	▽=0	4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE		
	∇=0	3 PLACES	± ---	± .010	CHECKED BY	DATE	POWER CONNECTOR HEADER 5.08MM VERSION S-P(B), R/A, T/H		
		2 PLACES	± 0.25	± ---	APPROVED BY	DATE	MOLEX INCORPORATED		
		1 PLACE	± ---	± ---	SCLOW	DATE	DOCUMENT NO. SD-87807-001		
		ANGULAR ± 3 °		MATERIAL NO.		SHEET NO.			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		2 OF 3			
				SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

PART NUMBER	P-S-P CONFIGURATION		DIM A	DIM B	DIM C	DIM D	DIM E	STANDARD SIGNAL PIN LENGTH	RECESSED SIGNAL PIN		PACKAGING	DIM F	DIM F1	DIM G	DIM H	DIM H1	BOARDLOCK OR SCREWMOUNT OPTION
	SIGNAL	POWER BETA							LENGTH	LOCATION							
87807-2001	24	16	114.3 4.500	106.68 4.200	105.41 4.150	78.74 3.100	12.70 .500	6.86/.270	5.59/.220	B3, C1, D1	TRAY	5.08 .200	5.72 .225	3.18 .125	6.98 .275	6.35 .250	SCREWMOUNT
87807-2002	16	6	58.42 2.300	50.80 2.000	49.53 1.950	27.94 1.100	7.62 .300	6.86/.270	5.59/.220	A1	TRAY	5.08 .200	5.72 .225	3.18 .125	6.98 .275	6.35 .250	SCREWMOUNT
87807-2003	24	6	63.51 2.500	55.89 2.200	54.61 2.150	27.94 1.100	12.70 .500	6.86/.270	5.59/.220	A1	TRAY	5.08 .200	5.72 .225	3.18 .125	6.98 .275	6.35 .250	BOARDLOCK
87807-2004	24	6	63.51 2.500	55.89 2.200	54.61 2.150	27.94 1.100	12.70 .500	6.86/.270	5.59/.220	A1	TRAY	5.08 .200	5.72 .225	3.18 .125	6.98 .275	6.35 .250	SCREWMOUNT
87807-2005	24	6	63.51 2.500	55.89 2.200	54.61 2.150	27.94 1.100	12.70 .500	6.86/.270	5.59/.220	A1, B5, C5	TRAY	5.08 .200	5.72 .225	3.18 .125	6.98 .275	6.35 .250	SCREWMOUNT
87807-2006	24	6	63.51 2.500	55.89 2.200	54.61 2.150	27.94 1.100	12.70 .500	6.86/.270	5.59/.220	A1, B5, C5, C6	TRAY	5.08 .200	5.72 .225	3.18 .125	6.98 .275	6.35 .250	SCREWMOUNT
87807-2007	24	6	63.51 2.500	55.89 2.200	54.61 2.150	27.94 1.100	12.70 .500	6.86/.270	5.59/.220	A1 TO A6	TRAY	5.08 .200	5.72 .225	3.18 .125	6.98 .275	6.35 .250	SCREWMOUNT
87807-2010	24	10	83.83 3.300	76.21 3.000	74.93 2.950	48.26 1.900	12.70 .500	6.86/.270	5.59/.220	A2, A4, B4, C4, D6	TRAY	5.08 .200	5.72 .225	3.18 .125	6.98 .275	6.35 .250	SCREWMOUNT
87807-2011	24	10	83.83 3.300	76.21 3.000	74.93 2.950	48.26 1.900	12.70 .500	6.86/.270	5.59/.220	A2, A4, B4, C4, D6	TRAY	5.08 .200	5.72 .225	3.18 .125	6.98 .275	6.35 .250	BOARDLOCK



ADD P/N(87807-2011) EC NO: S2009-0688 DRWN: YCHONG 2009/03/27 CHKD: ATSEE 2009/03/30 APPR: MLONG 2009/03/30 REV C5	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	$\nabla = 0$ $\nabla \square = 0$	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3°	MM/IN	NTS	METRIC		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY	DATE	TITLE		
			NRVITTAP	2004/03/26	POWER CONNECTOR HEADER		
			CHLOW	2004/04/14	5.08MM VERSION		
		APPROVED BY	DATE	S-P(B), R/A, T/H			
		SCLOW	2004/04/19	MOLEX INCORPORATED			
		MATERIAL NO.	DOCUMENT NO.	SHEET NO.			
		SEE TABLE		SD-87807-001			
		SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				