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**Part Number:** [0878072011](#)  
**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, Beveled Metal Pins, 34 Circuits, Signal 24, Power Beta 10, Recessed Signal Pins: A2, A4, B4, C4, D6, Lead-free

**Documents:**

[Drawing \(PDF\)](#)

[RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

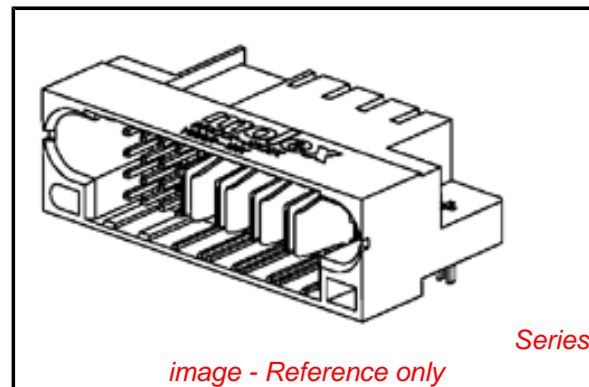
CSA LR19980

**General**

Product Family	PCB Headers
Series	<a href="#">87807</a>
Application	Board-to-Board
Comments	Recessed Signal Pins: A2, A4, B4, C4, D6
Overview	<a href="#">extreme_powerplus_ssi</a>
Product Name	EXTreme PowerPlus™

**Physical**

Breakaway	No
Circuits (Loaded)	34
Circuits Detail	Signal 24 Power Beta 10
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
Termination Interface: Style	Through Hole



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**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**

[87807Series](#)

**Electrical**

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

**Solder Process Data**

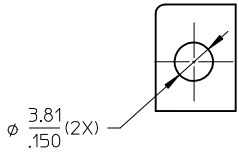
Duration at Max. Process Temperature (seconds) 10  
Lead-free Process Capability SMC & Wave Capable (TH only)  
Max. Cycles at Max. Process Temperature 3  
Process Temperature max. C 260

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

Sales Drawing SD-87807-001

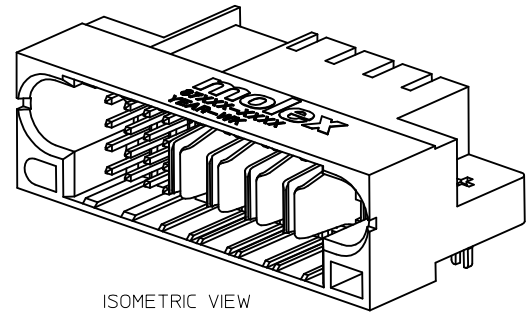
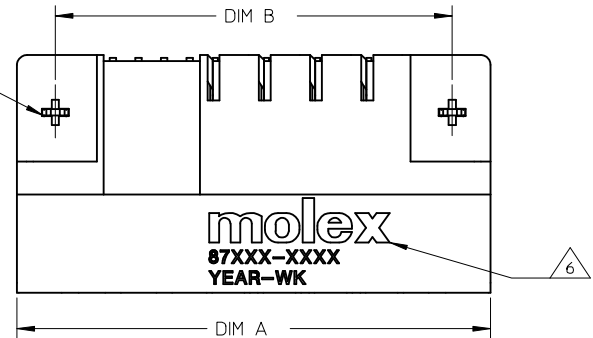
This document was generated on 05/26/2010

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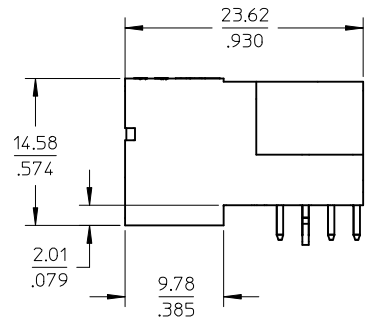
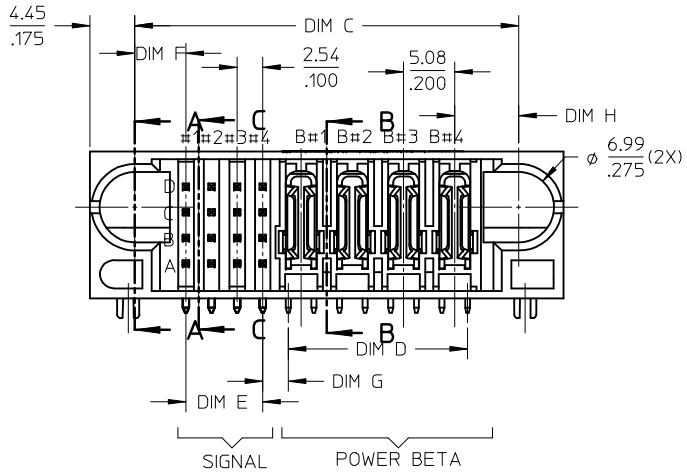


SCREWMOUNT OPTION  
(SEE TABLE/SHEET 3)

REFER TO OPTION AT  
TABLE/SHEET 3

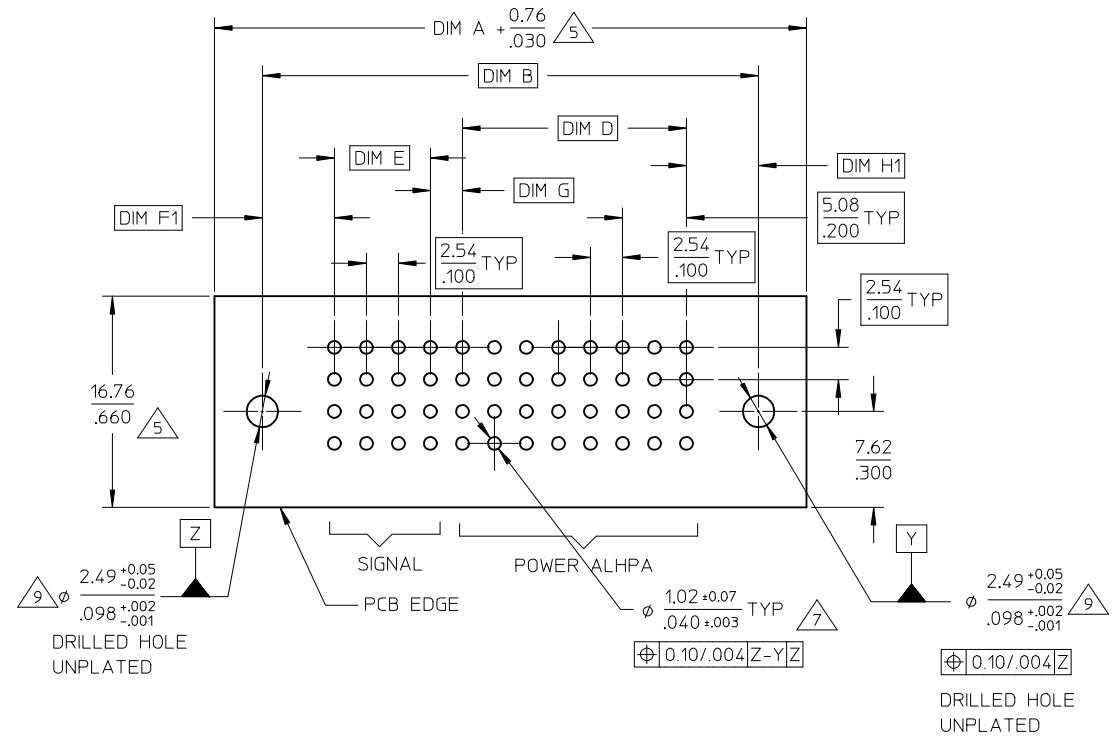
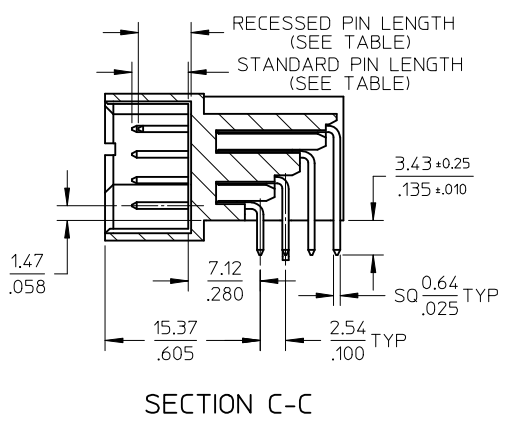
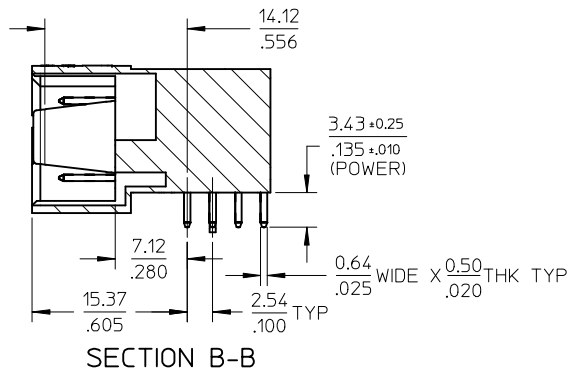
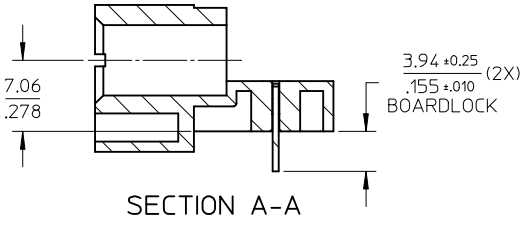


ISOMETRIC VIEW



- NOTES:
- MATERIALS: HOUSING - LCP, GLASS FILLED, UL94V-0, COLOUR: BLACK  
POWER PINS - COPPER ALLOY  
SIGNAL PINS - COPPER ALLOY  
BOARDLOCK - COPPER ALLOY
  - 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.
  - 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 TO 0.08/.003 COPPER PLATING TO ACHIEVE  
1.02±0.08/.040±.003 HOLE.
  - 16 SIGNAL-4P BETA CONFIGURATION IS SHOWN FOR ILLUSTRATION.
  - FOR SCREWMOUNT OPTION, THE DRILLED HOLE DIAMETER IS 4.01MM/.158".

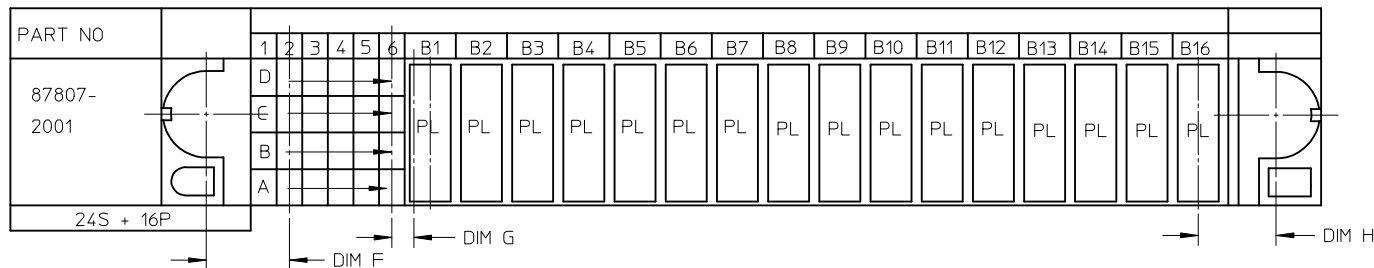
ADD P/N(87807-2011) EC NO: S2009-0688 DRWN: YCHONG CHKD: ATSEE APPR: MLONG 2009/03/27 2009/03/30 2009/03/30	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY NRVITAP	DATE 2004/03/26	TITLE POWER CONNECTOR HEADER 5.08MM VERSION S-P(B), R/A, T/H			
		4 PLACES	± ---	± ---	CHECKED BY BHLOW	DATE 2004/04/14	MOLEX INCORPORATED DOCUMENT NO. SD-87807-001 SHEET NO. 1 OF 3			
		3 PLACES	± ---	± .010	APPROVED BY SCLOW	DATE 2004/04/19				
2 PLACES	± 0.25	± ---	MATERIAL NO.		SIZE SEE TABLE					
1 PLACE	± ---	± ---	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					



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	
	$\nabla=0$ $\sphericalangle=0$	4 PLACES	mm	INCH	DRAWN BY NRVITTAP	DATE 2004/03/26	TITLE POWER CONNECTOR HEADER 5.08MM VERSION S-P(B), R/A, T/H		
		3 PLACES	± ---	± .010	CHECKED BY BHLOW	DATE 2004/04/14	MOLEX INCORPORATED		
		2 PLACES	± 0.25	± ---	APPROVED BY SCLOW	DATE 2004/04/19	DOCUMENT NO. SD-87807-001		SHEET NO. 2 OF 3
	1 PLACE	± ---	± ---	ANGULAR ± 3 °		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE					

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



<b>ADD P/N(87807-2011)</b> 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	MM/IN	NTS	METRIC	
		4 PLACES ± --- ± ---	DRAWN BY DATE	TITLE		
		3 PLACES ± --- ± .010	NRVITTAP 2004/03/26	POWER CONNECTOR HEADER		
		2 PLACES ± 0.25 ± ---	CHECKED BY DATE	5.08MM VERSION		
	1 PLACE ± --- ± ---	BHLOW 2004/04/14	S-P(B), R/A, T/H			
	ANGULAR ± 3 °	APPROVED BY DATE	MOLEX INCORPORATED			
		SCLOW 2004/04/19	MATERIAL NO. DOCUMENT NO.			
			SEE TABLE SD-87807-001			
			SHEET NO. 3 OF 3			
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			