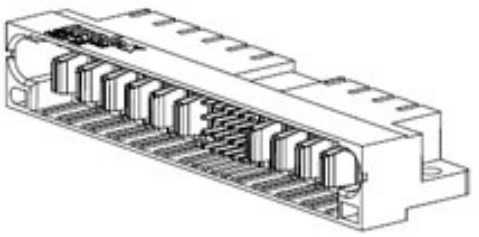
This document was generated on 05/25/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: 0876312014
Status: Active
Overview: extreme_powerplus_ssi
Description: 6.35mm (.250") Pitch Power, 2.54mm (.100") Pitch Signal, EXTreme PowerPlus™ P-S-P Header, Through Hole, Right Angle, Long Contacts, 22 Circuits, Power Alpha 4, Signal 16, Power Beta 2, Recessed Signal Pins A1, A2, A4, B1, B3, C2, C4, D1, D2, D3, D4, Leadf



Series image - Reference only

Documents:

3D Model
Drawing (PDF)
Product Specification PS-87631-006 (PDF)
RoHS Certificate of Compliance (PDF)

Agency Certification

CSA	LR19980
TUV	R50078473

General

Product Family	PCB Headers
Series	87631
Application	Board-to-Board
Comments	<LI>Long Contacts|<LI>Recessed Signal Pins: A1, A2, A4, B1, B3, C2, C4, D1, D2, D3, D4
Overview	extreme_powerplus_ssi
Product Name	EXTreme PowerPlus™

Physical

Breakaway	No
Circuits (Loaded)	22
Circuits Detail	Power Alpha 4, Signal 16, Power Beta 2
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 Retention	Yes
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.60 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.100 In, 0.250 In
Pitch - Mating Interface (mm)	2.54 mm, 6.35 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

EU RoHS
ELV and RoHS Compliant
REACH SVHC
Not Reviewed
Halogen-Free Status
Halogen-Free

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
87631Series

Mates With
87633 Vertical Press-Fit Receptacle. 87622 Vertical Through Hole Receptacle. 87632 Right Angle Through Hole Receptacle

Polarized to PCB	Yes
Shrouded	Fully
Stackable	No
Temperature Range - Operating	-20°C to +105°C
Termination Interface: Style	Through Hole

Electrical

Current - Maximum per Contact	2.5A, 30A
Voltage - Maximum	250V DC

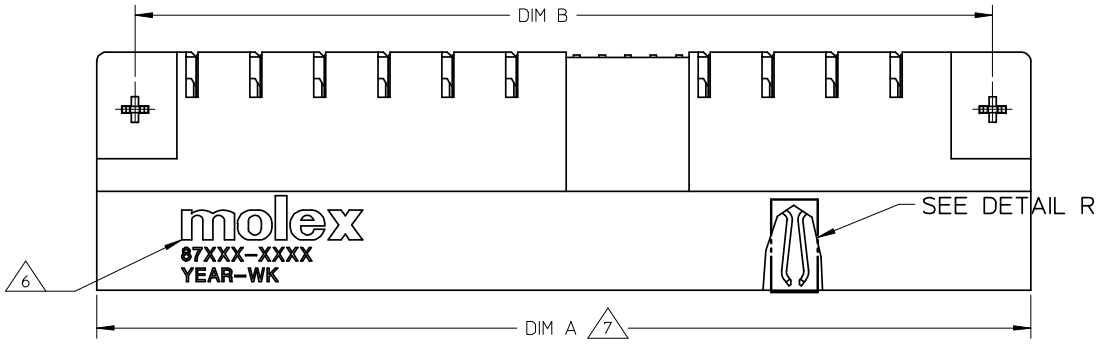
Solder Process Data

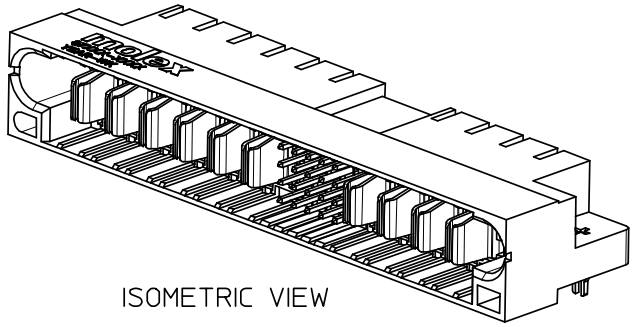
Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	260

Material Info

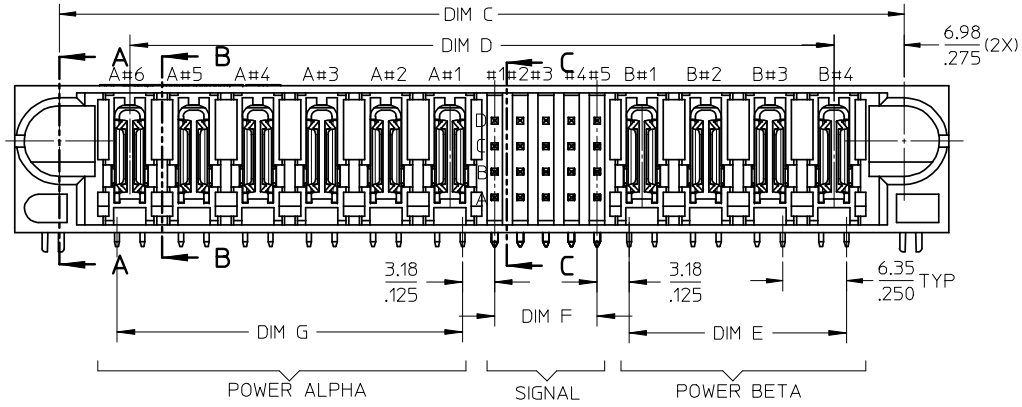
Reference - Drawing Numbers

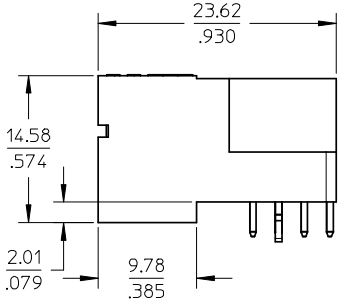
Application Specification	AS-87631-018
Product Specification	PS-87631-006
Sales Drawing	SD-87631-014

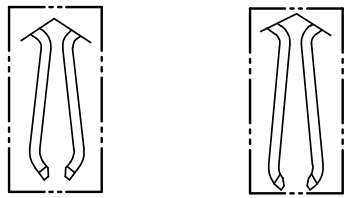




ISOMETRIC VIEW







SHORT BLADE OPTION LONG BLADE OPTION

DETAIL R
(SEE TABLE FOR BLADE OPTION)

NOTES:

1. MATERIALS: LCP GLASS FILLED , UL94V-0, COLOUR: 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 THE PC TAIL AREA
   THICKNESS= 2.54 MICROMETER/100 MICROINCH MINIMUM
   1.27um NICKEL OVERALL.
3. PRODUCT SPECIFICATION: PS-87631-006.
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. 6P ALPHA-20 SIGNAL-4P BETA CONFIGUARTION IS SHOWN FOR ILLUSTRATION. P-S-P CONFIGURATION IS AVAILABLE UP TO 203mm/8 INCHES. PLEASE CONTACT MOLEX SALES PERSONNEL FOR OTHER CONFIGURATION AND OPTION NEEDED.

REV	DESCRIPTION	
D6	PDR#S-001800-00-00	2008/06/13
	EC NO: S2008-1060	2008/06/13
	DRWN:ATSEE CH'KD:SKANG APPR:MLONG	2008/06/13

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± ---
1 PLACE	± ---	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE	MM/IN
SCALE	NTS
DESIGN UNITS	METRIC
	THIRD ANGLE PROJECTION
DRAWN BY	BHLOW
DATE	2002/09/24
CHECKED BY	KCLING
DATE	2002/09/30
APPROVED BY	SKTOH
DATE	2002/10/03
MATERIAL NO.	SEE TABLE
SIZE	A3

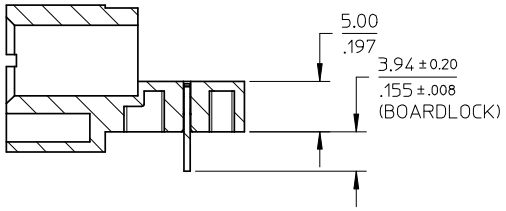
TITLE: POWER CONNECTOR HEADER P(A)-S-P(B) CONFIG. R/A, T/H, BOARD-LOCK

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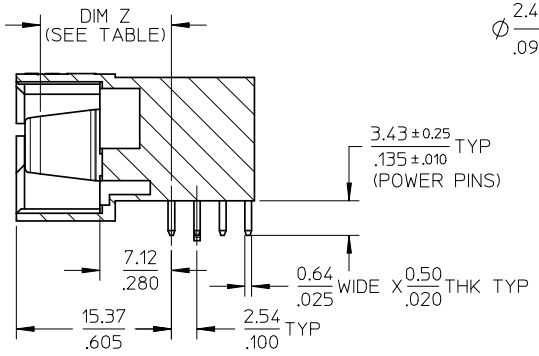
DOCUMENT NO. SD-87631-014

SHEET NO. 1 OF 3

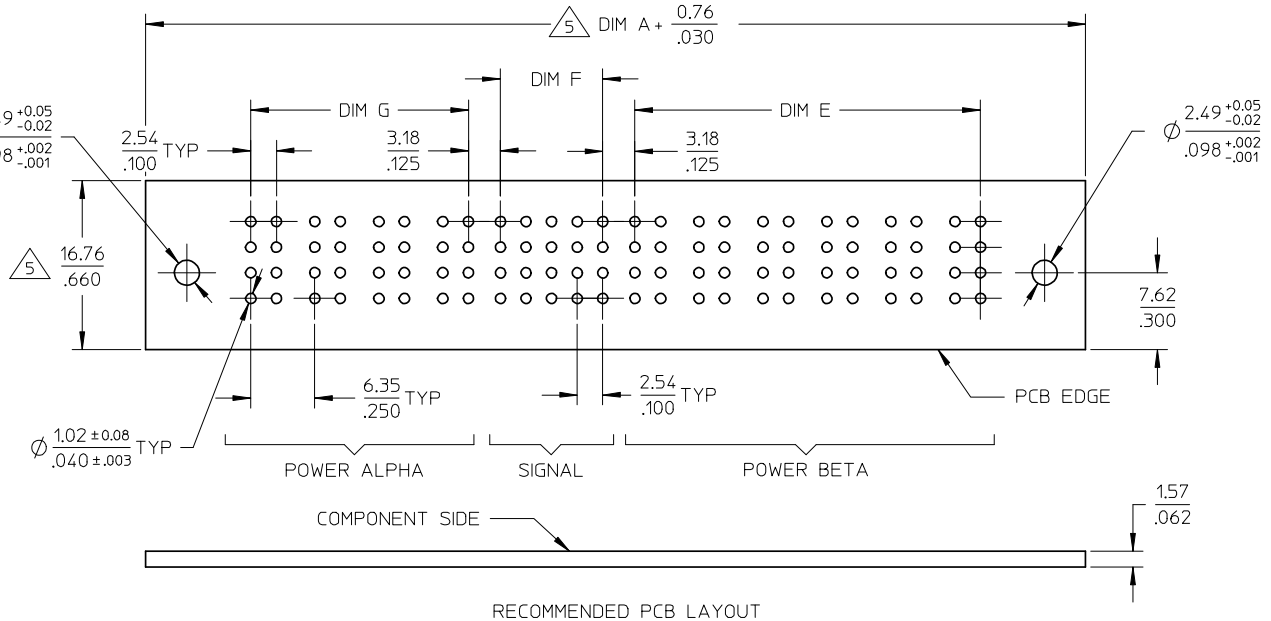
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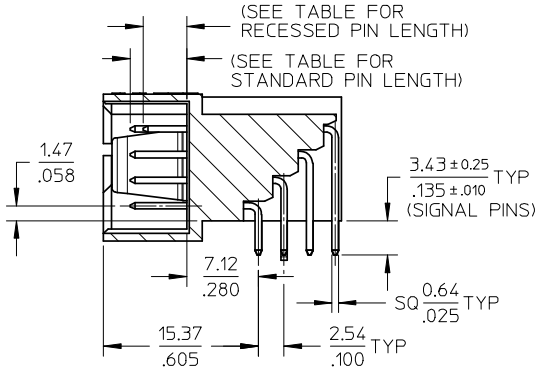
SECTION A-A



SECTION B-B



RECOMMENDED PCB LAYOUT



SECTION C-C

PDR#S-001800-00-00	2008/06/13	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)
EC NO: S2008-1060	2008/06/13		▼=0	mm / INCH
DRWN:ATSEE	2008/06/13		Ⓒ=0	4 PLACES ± --- / ± ---
CHKD:SKANG				3 PLACES ± --- / ±.010
APPR:MLONG				2 PLACES ± 0.25 / ± ---
D6		REV		1 PLACE ± --- / ± ---
				ANGULAR ± 3 °
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM/IN	SCALE: NTS	DESIGN UNITS: METRIC	THIRD ANGLE PROJECTION
DRAWN BY: BHLOW — DATE: 2002/09/24	TITLE: POWER CONNECTOR HEADER P(A)-S-P(B) CONFIG. R/A, T/H, BOARD-LOCK		
CHECKED BY: KCLING — DATE: 2002/09/30			
APPROVED BY: SKTOH — DATE: 2002/10/03	MOLEX INCORPORATED		
MATERIAL NO.: SEE TABLE	DOCUMENT NO.: SD-87631-014	SHEET NO.: 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	DIM F	DIM G	POWER TYPE	BLADE OPTIONS DIM Z±0.13/.005	STANDARD SIGNAL PIN LENGTH	RECESSED SIGNAL PIN		VOID SIGNAL LOCATION	PACKAGING
	POWER ALPHA	SIGNAL	POWER BETA											LENGTH	LOCATION		
87631-2001	2	48	2	72.38 / 2.850	64.77 / 2.550	63.49 / 2.500	49.53 / 1.950	8.89 / .350	27.94 / 1.100	8.89 / .350	SHORT CONTACT	13.32/.524	5.59/.220	4.32/.170	A1,A12,D1,D12	NIL	TRAY
87631-2002	7	32	6	119.38 / 4.700	111.76 / 4.400	110.48 / 4.350	96.52 / 3.800	34.29 / 1.350	17.78 / .700	40.64 / 1.600	SHORT CONTACT	13.32/.524	5.59/.220	4.32/.170	A3,B6,C3,D5	NIL	
87631-2003	7	32	6	119.38 / 4.700	111.76 / 4.400	110.48 / 4.350	96.52 / 3.800	34.29 / 1.350	17.78 / .700	40.64 / 1.600	LONG CONTACT	14.12/.556	6.86/.270	5.59/.220	A3,B6,C3,D5	NIL	
87631-2004	5	32	5	100.33 / 3.950	92.71 / 3.650	91.44 / 3.600	77.47 / 3.050	27.94 / 1.100	17.78 / .700	27.94 / 1.100	LONG CONTACT	14.12/.556	6.45/.254	NIL	NIL	NIL	
87631-2005	2	24	2	57.15 / 2.250	49.53 / 1.950	48.26 / 1.900	34.29 / 1.350	8.89 / .350	12.70 / .500	8.89 / .350	LONG CONTACT	14.12/.556	6.86/.270	5.59/.220	B3,D3	A6,B6,C5,D5	
87631-2006	4	28	4	85.09 / 3.350	77.47 / 3.050	76.20 / 3.000	62.23 / 2.450	21.59 / .850	15.24 / .600	21.59 / .850	LONG CONTACT	14.12/.556	6.86/.270	5.59/.220	A1	NIL	
87631-2010	1	16	1	39.37 / 1.550	31.75 / 1.250	30.48 / 1.200	16.51 / .650	2.54 / .100	7.62 / .300	2.54 / .100	LONG CONTACT	14.12/.556	6.86/.270	5.59/.220	B1	NIL	
87631-2013	4	40	4	92.71 / 3.650	85.09 / 3.350	83.82 / 3.300	69.85 / 2.750	21.59 / .850	22.86 / .900	21.59 / .850	LONG CONTACT	14.12/.556	6.86/.270	5.59/.220	A1,A10	NIL	
87631-2014	4	16	2	64.77 / 2.550	57.15 / 2.250	55.88 / 2.200	41.91 / 1.650	8.89 / .350	7.62 / .300	21.59 / .850	LONG CONTACT	14.12/.556	6.86/.270	5.59/.220	A1,A2,A4,B1,B3,C2, C4,D1,D2,D3,D4	NIL	
87631-2019	2	24	2	57.15 / 2.250	49.53 / 1.950	48.26 / 1.900	34.29 / 1.350	8.89 / .350	12.70 / .500	8.89 / .350	LONG CONTACT	14.12/.556	6.86/.270	5.59/.220	A6,B6,C6.D6	NIL	
87631-2020	2	16	2	52.08 / 2.050	44.45 / 1.750	43.19 / 1.700	29.22 / 1.150	8.89 / .350	7.62 / .300	8.89 / .350	LONG CONTACT	14.12/.556	6.86/.270	5.59/.220	NIL	NIL	
87631-2021	4	24	2	69.84 / 2.750	62.23 / 2.450	60.95 / 2.400	46.99 / 1.850	8.89 / .350	12.70 / .500	21.59 / .850	LONG CONTACT	14.12/.556	6.86/.270	5.59/.220	C1	NIL	
87631-2022	6	24	6	107.95 / 4.250	100.33 / 3.950	99.06 / 3.900	85.09 / 3.350	34.29 / 1.350	12.70 / .500	34.29 / 1.350	LONG CONTACT	14.12/.556	6.86/.270	5.59/.220	B4	NIL	
87631-2023	3	24	3	69.85 / 2.750	62.23 / 2.450	60.96 / 2.400	46.99 / 1.850	15.24 / 0.600	12.70 / .500	15.24 / 0.600	LONG CONTACT	14.12/.556	6.86/.270	5.59/.220	B3,D6	NIL	
87631-2025	6	60	6	130.81 / 5.150	123.19 / 4.850	121.92 / 4.800	107.95 / 4.250	34.29 / 1.350	35.56 / 1.400	34.29 / 1.350	LONG CONTACT	14.12/.556	6.86/.270	NIL	NIL	NIL	
87631-2026	4	24	4	82.55 / 3.250	74.93 / 2.950	73.66 / 2.900	59.69 / 2.350	21.59 / .850	12.70 / .500	21.59 / .850	LONG CONTACT	14.12/.556	6.86/.270	NIL	NIL	NIL	
87631-2028	3	24	3	69.85 / 2.750	62.23 / 2.450	60.96 / 2.400	46.99 / 1.850	15.24 / 0.600	12.70 / .500	15.24 / 0.600	LONG CONTACT	14.12/.556	6.86/.270	5.59/.220	D2	NIL	
87631-2030	2	24	2	57.15 / 2.250	49.53 / 1.950	48.26 / 1.900	34.29 / 1.350	8.89 / .350	12.70 / .500	8.89 / .350	LONG CONTACT	14.12/.556	6.86/.270	5.59/.220	C6	NIL	
87631-2032	4	16	2	64.77 / 2.550	57.15 / 2.250	55.88 / 2.200	41.91 / 1.650	8.89 / .350	7.62 / .300	21.59 / .850	LONG CONTACT	14.12/.556	6.86/.270	5.59/.220	A1,A2,A3,A4,B2, B4,C1,C3,D1,D2,D4	NIL	

PDR#S-001800-00-00
EC NO: S2008-1060 2008/06/13
DRWN:ATSEE 2008/06/13
CH'KD:SKANG 2008/06/13
APPR:MLONG 2008/06/13
DESCRIPTION
REV
D6

QUALITY SYMBOLS
▼=0
Ⓒ▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± ---
1 PLACE	± ---	± ---

ANGULAR ± 3 °

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM/IN
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: BHLOW DATE: 2002/09/24
CHECKED BY: KCLING DATE: 2002/09/30
APPROVED BY: SKTOH DATE: 2002/10/03

TITLE: POWER CONNECTOR HEADER P(A)-S-P(B) CONFIG. R/A, T/H, BOARD-LOCK

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87631-014
SHEET NO.: 3 OF 3
SIZE: A3

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