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Part Number: [0876313010](#)
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, Short Contacts, 34 Circuits, Power Alpha 4, Signal 24, Power Beta 6, Recessed Signal Pin B4, Lead-free

Documents:
[3D Model](#) [Product Specification PS-87631-006 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
TUV R50078473

General

Product Family PCB Headers
Series [87631](#)
Application Board-to-Board
Comments Short Contacts|Recessed Signal Pin: B4
Overview [extreme_powerplus_ssi](#)
Product Name EXTreme PowerPlus™

Physical

Breakaway No
Circuits (Loaded) 34
Circuits Detail Power Alpha 4, 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 Yes
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
Polarized to PCB Yes

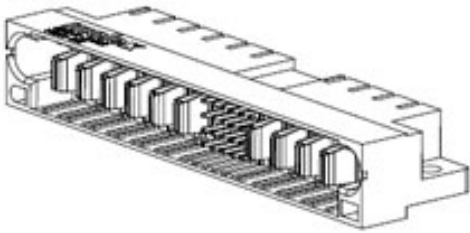


image - Reference only

Series

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
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

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

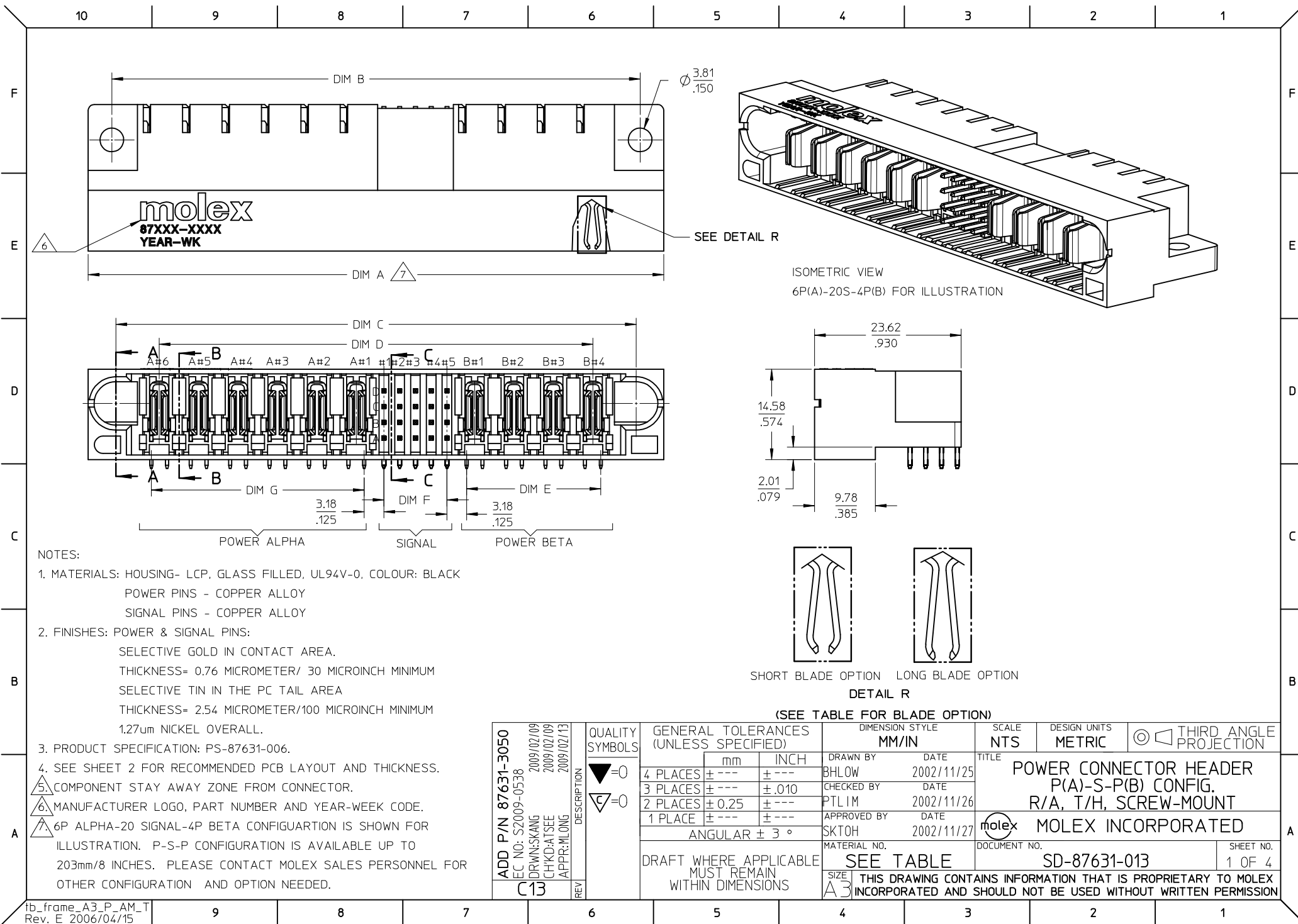
Material Info

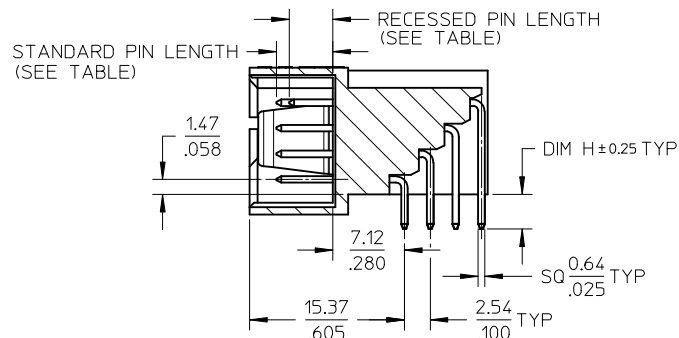
Reference - Drawing Numbers

Application Specification	AS-87631-018
Product Specification	PS-87631-006
Sales Drawing	SD-87631-013

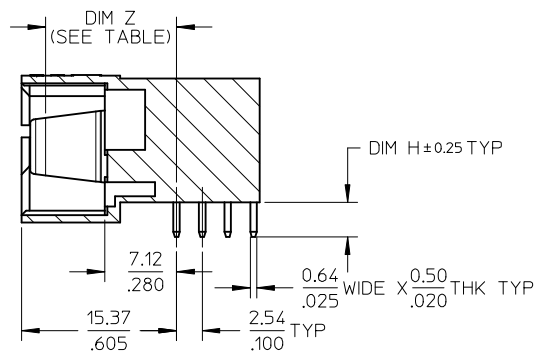
This document was generated on 05/25/2010

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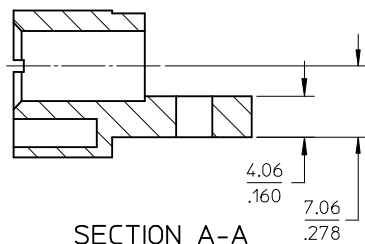




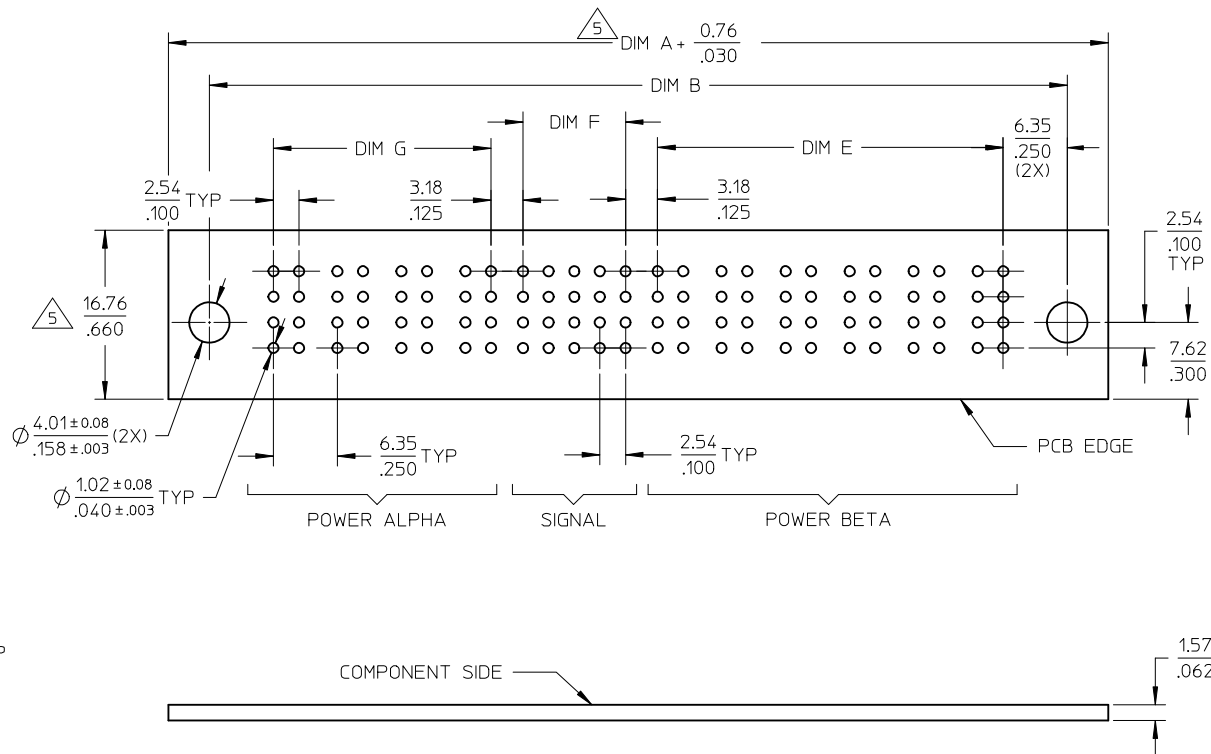
SECTION C-C



SECTION B-B



SECTION A-A



RECOMMENDED PCB LAYOUT

ADD P/N 87631-3050			QUALITY SYMBOLS ▽=0 ◻=0	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		
						MM/IN		NTS	METRIC			
						DRAWN BY DATE		TITLE				
						CHECKED BY DATE						
2009/02/09			mm INCH		BHLW 2002/11/25		POWER CONNECTOR HEADER					
2009/02/09			4 PLACES ± --- ± ---		2002/11/25		P(A)-S-P(B) CONFIG.					
2009/02/13			3 PLACES ± --- ± .010		PTLIM 2002/11/26		R/A, T/H, SCREW-MOUNT					
			2 PLACES ± 0.25 ± ---		APPROVED BY DATE		MOLEX INCORPORATED					
			1 PLACE ± --- ± ---		SKTOH 2002/11/27		MOLEX INCORPORATED					
			ANGULAR ± 3 °		MATERIAL NO.		DOCUMENT NO.		SHEET NO.			
			DRAFT WHERE APPLICABLE		SEE TABLE		SD-87631-013		2 OF 4			
			MUST REMAIN		SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX					
			WITHIN DIMENSIONS		A3		INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
C13			REV									

	10		9		8		7		6		5		4		3		2		1		
	PART NUMBER	P-S-P CONFIGURATION			DIM A	DIM B	DIM C	DIM D	DIM E	DIM F	DIM G	DIM H	POWER BLADE OPTIONS		STANDARD SIGNAL	RECESSED SIGNAL PIN		VOID SIGNAL LOCATION	PACKAGING		
		POWER ALPHA	SIGNAL	POWER BETA									TYPE	DIM Z ±0.13/.005	PIN LENGTH	LENGTH	LOCATION				
F	87631-3000	3	24	5	82.54 3.250	74.93 2.950	73.65 2.900	59.69 2.350	27.94 1.100	12.70 .500	15.24 .600	3.43 .135	SHORT CONTACT	13.32 / .524	5.59 / .220	4.32/.170	NIL	TRAY	F		
	87631-3001	6	20	4	92.71 3.650	85.10 3.350	83.82 3.300	69.86 2.750	21.59 .850	10.16 .400	34.29 1.350						C2	TRAY			
	87631-3002	4	24	4	82.54 3.250	74.93 2.950	73.65 2.900	59.69 2.350	21.59 .850	12.70 .500	21.59 .850						A1	TRAY			
	87631-3003	3	24	3	69.84 2.750	62.23 2.450	60.95 2.400	46.99 1.850	15.24 .600	12.70 .500	15.24 .600						NIL	TRAY			
E	87631-3004	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						NIL	TRAY	E		
	87631-3006	2	32	2	62.23 2.450	54.61 2.150	53.34 2.100	39.37 1.550	8.89 .350	17.78 .700	8.89 .350						NIL	TRAY			
	87631-3008	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						B4	TRAY			
	87631-3009	2	24	4	69.84 2.750	62.23 2.450	60.95 2.400	46.99 1.850	21.59 .850	12.70 .500	8.89 .350						B4	TRAY			
D	87631-3010	4	24	6	95.24 3.750	87.63 3.450	86.35 3.400	72.39 2.850	34.29 1.350	12.70 .500	21.59 .850						B4	TRAY	D		
	87631-3011	6	24	5	101.59 4.000	93.98 3.700	92.70 3.650	78.74 3.100	27.94 1.100	12.70 .500	34.29 1.350						A3, B6, C3, D5	TRAY			
	87631-3013	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		↓	↓	↓	↓	C1	TRAY			
	87631-3020	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		TRAY	
C	87631-3015	4	20	4	80.00 3.150	72.39 2.850	71.11 2.800	57.15 2.250	21.59 .850	10.16 .400	21.59 .850						B3	TRAY	C		
	87631-3021	6	24	5	101.59 4.000	93.98 3.700	92.70 3.650	78.74 3.100	27.94 1.100	12.70 .500	34.29 1.350						A3, B6, C3, D5	TRAY			
	87631-3022	2	12	2	49.53 1.950	41.91 1.650	40.64 1.600	26.67 1.050	8.89 .350	5.08 .200	8.89 .350	↓					B2 C3	TRAY			
	87631-3023	2	12	2	49.53 1.950	41.91 1.650	40.64 1.600	26.67 1.050	8.89 .350	5.08 .200	8.89 .350	2.34 .092					B1 C3	TRAY			
B	87631-3024	1	12	1	36.83 1.450	29.21 1.150	27.94 1.100	13.97 5.50	2.54 .100	5.08 .200	2.54 .100	3.43 .135					NIL	TRAY	B		
	87631-3028	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	3.43 .135					C6	TRAY			
	87631-3031	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	3.43 .135					C1	TRAY			
	87631-3037	3	24	3	69.84 2.750	62.23 2.450	60.95 2.400	46.99 1.850	15.24 .600	12.70 .500	15.24 .600	3.43 .135					ALL EXCEPT A6,B1,C1	TRAY			
	87631-3038	4	16	2	64.77 2.550	57.16 2.250	55.88 2.200	41.92 1.650	8.89 .350	7.62 .300	21.59 .850	3.43 .135					A1,A2,A4,B1,B3 C2,C4,D1,D2,D3,D4	TRAY			
	87631-3041	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	3.43 .135	↓	↓	↓	↓	C3	TRAY			

A

ADD P/N 87631-3050 EC NO: S2009-0538 DRWN:SKANG CHKD:ATSEE APPR:MLONG REV	2009/02/09 2009/02/09 2009/02/13	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽C=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	POWER CONNECTOR HEADER P(A)-S-P(B) CONFIG. R/A, T/H, SCREW-MOUNT MOLEX INCORPORATED	SD-87631-013	SHEET NO. 3 OF 4					
				4 PLACES 3 PLACES 2 PLACES 1 PLACE ANGULAR ± 3 °	mmINCH	DRAWN BY BHL0W CHECKED BY PTL IM APPROVED BY SKT0H	DATE 2002/11/25 2002/11/26 2002/11/27	TITLE	DOCUMENT NO.					SEE TABLE				
															DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

10		9		8		7		6		5		4		3		2		1	
F	PART NUMBER	P-S-P CONFIGURATION			DIM A	DIM B	DIM C	DIM D	DIM E	DIM F	DIM G	DIM H	POWER BLADE OPTIONS		STANDARD SIGNAL PIN LENGTH	RECESSED SIGNAL PIN		VOID SIGNAL LOCATION	PACKAGING
		POWER ALPHA	SIGNAL	POWER BETA									TYPE	DIM Z ±0.13/.005		LENGTH	LOCATION		
87631-3042	2	16	2	52.07 2.050	44.45 1.750	43.18 1.700	29.21 1.150	8.89 .350	7.62 .300	8.89 .350	3.43 .135	LONG CONTACT	14.12 / .556	6.86 / .270	5.59/.220	B3,C4	NIL	TRAY	
87631-3043	7	28	7	123.19 4.850	115.57 4.550	114.30 4.500	100.33 3.950	40.64 1.600	15.24 .600	40.64 1.600	3.43 .135	LONG CONTACT	14.12 / .556	6.86 / .270	5.59/.220	B4,C4	NIL	TRAY	
87631-3044	7	28	7	123.19 4.850	115.57 4.550	114.30 4.500	100.33 3.950	40.64 1.600	15.24 .600	40.64 1.600	3.43 .135	LONG CONTACT	14.12 / .556	6.86 / .270	5.59/.220	NIL	NIL	TRAY	
E	87631-3045	6	28	4	97.79 3.850	90.17 3.550	88.90 3.500	74.93 2.950	21.59 .850	15.24 .600	34.29 1.350	3.43 .135	LONG CONTACT	14.12 / .556	6.86 / .270	5.59/.220	A1	A7,B7,C7,D7	TRAY
	87631-3046	6	24	4	95.25 3.750	87.63 3.450	86.36 3.400	72.39 2.850	21.59 .850	12.70 .500	34.29 1.350	3.43 .135	LONG CONTACT	14.12 / .556	6.86 / .270	5.59/.220	A1	NIL	TRAY
	87631-3047	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	3.43 .135	LONG CONTACT	14.12 / .556	6.86 / .270	5.59/.220	A6,B6,C6,D6	A1,B2,C2,D1	TRAY
	87631-3048	2	16	2	52.07 2.050	44.45 1.750	43.18 1.700	29.21 1.150	8.89 .350	7.62 .300	8.89 .350	3.43 .135	LONG CONTACT	14.12 / .556	6.86 / .270	5.59/.220	A2,D4	A1,B2,C2,D1	TRAY
D	87631-3049	4	24	4	82.54 3.250	74.93 2.950	73.65 2.900	59.69 2.350	21.59 .850	12.70 .500	21.59 .850	3.43 .135	LONG CONTACT	14.12 / .556	6.86 / .270	5.59/.220	A6	NIL	TRAY
	87631-3050	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	3.43 .135	LONG CONTACT	14.12 / .556	6.86 / .270	5.59/.220	A5	NIL	TRAY
C																			
B																			
A																			
ADD P/N 87631-3050 EC NO: S2009-0538 DRWN:SKANG CHKD:ATSEE APPR:W LONG C13 2009/02/09 2009/02/09 2009/02/13 DESCRIPTION REV 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 DRAWN BY DATE BHLOW 2002/11/25 CHECKED BY DATE PTL IM 2002/11/26 APPROVED BY DATE SKTOH 2002/11/27 MATERIAL NO. SIZE A3 SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION TITLE POWER CONNECTOR HEADER P(A)-S-P(B) CONFIG. R/A, T/H, SCREW-MOUNT MOLEX INCORPORATED SD-87631-013 DOCUMENT NO. SHEET NO. 4 OF 4 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																			
tb_frame_A3_P_AM_T Rev. F 2006/04/15	9	8	7	6	5	4	3	2	1										