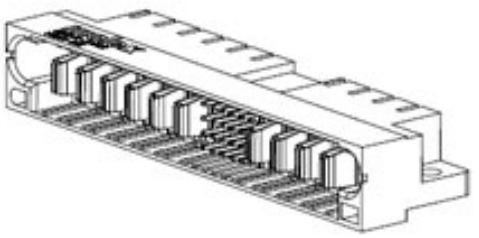
molex
one company > a world of innovation

This document was generated on 05/25/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: 0876313028
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, 28 Circuits, Power Alpha 2, Signal 24, Power Beta 2, Recessed Signal Pin C6, Lead-free



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 Pin: C6
Overview	extreme_powerplus_ssi
Product Name	EXTreme PowerPlus™

Physical

Breakaway	No
Circuits (Loaded)	28
Circuits Detail	Power Alpha 2, Signal 24, 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 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

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
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

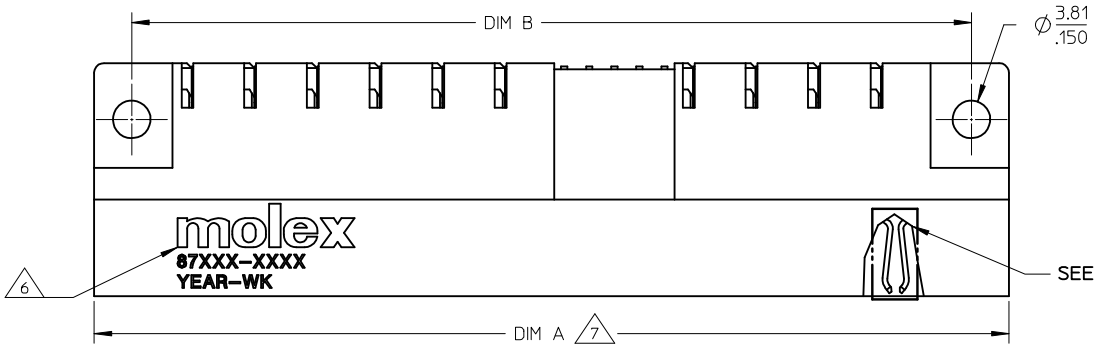
Material Info

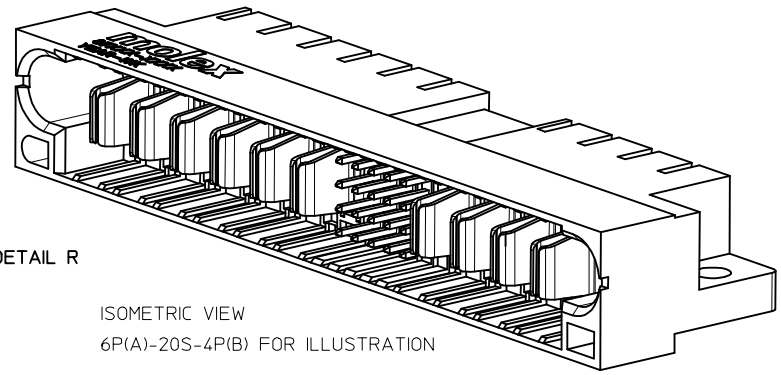
Reference - Drawing Numbers

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

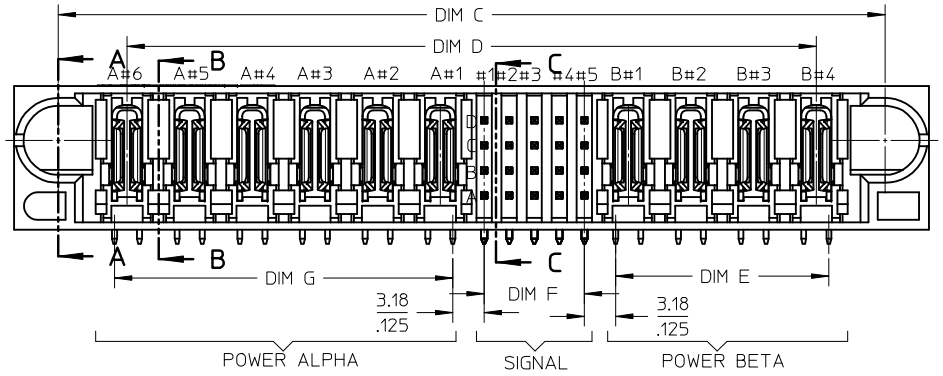
This document was generated on 05/25/2010

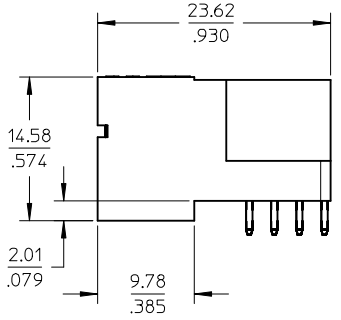
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION





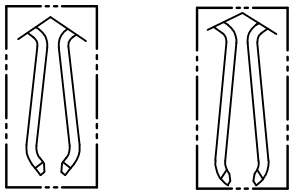
ISOMETRIC VIEW
6P(A)-20S-4P(B) FOR ILLUSTRATION





NOTES:

1. MATERIALS: HOUSING- 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 IN 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.



SHORT BLADE OPTION LONG BLADE OPTION

DETAIL R

(SEE TABLE FOR BLADE OPTION)

ADD P/N 87631-3050	2009/02/09	DESCRIPTION
EC NO: S2009-0538	2009/02/09	
DRWN:SKANG	2009/02/13	
CHKD:ATSEE		
APPR:MLONG		
C13		REV

QUALITY SYMBOLS
▼=0
Ⓒ=0

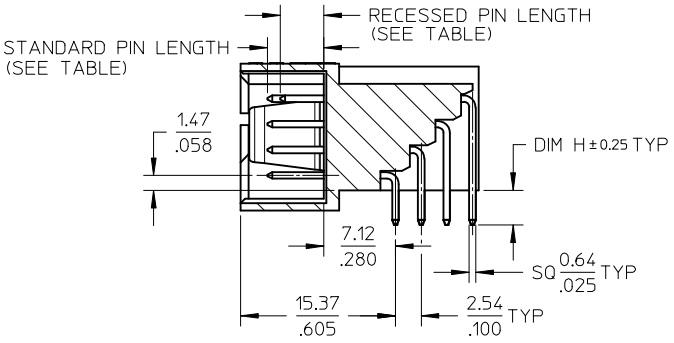
GENERAL TOLERANCES (UNLESS SPECIFIED)

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

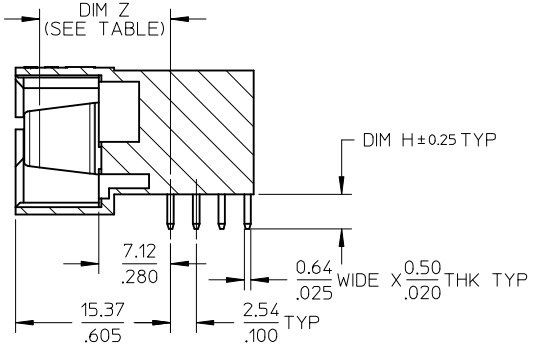
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE	MM/IN
SCALE	NTS
DESIGN UNITS	METRIC
	THIRD ANGLE PROJECTION
DRAWN BY	BHLOW
DATE	2002/11/25
CHECKED BY	PTLIM
DATE	2002/11/26
APPROVED BY	SKTOH
DATE	2002/11/27
MATERIAL NO.	SEE TABLE
TITLE	POWER CONNECTOR HEADER P(A)-S-P(B) CONFIG. R/A, T/H, SCREW-MOUNT
	MOLEX INCORPORATED
DOCUMENT NO.	SD-87631-013
SHEET NO.	1 OF 4
SIZE	A3

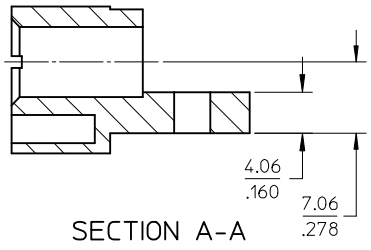
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION



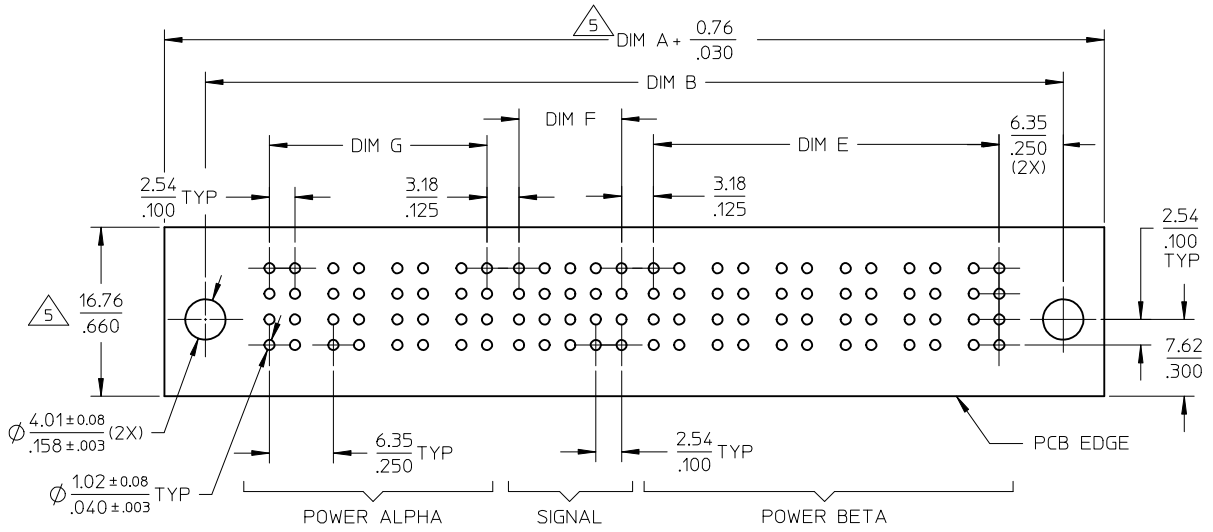
SECTION C-C

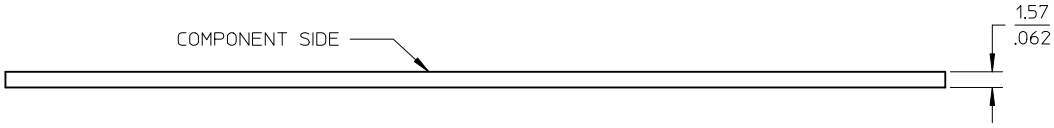


SECTION B-B



SECTION A-A





RECOMMENDED PCB LAYOUT

ADD P/N 87631-3050
EC NO: S2009-0538 2009/02/09
DRWN:SKANG 2009/02/09
CH'KD:ATSEE 2009/02/13
APPR:MLONG
DESCRIPTION
C13
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
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: BHLOW DATE: 2002/11/25
CHECKED BY: PTLIM DATE: 2002/11/26
APPROVED BY: SKTOH DATE: 2002/11/27

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

molex MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87631-013
SHEET NO.: 2 OF 4
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	DIM H	POWER BLADE OPTIONS		STANDARD SIGNAL	RECESSED SIGNAL PIN		VOID SIGNAL	PACKAGING
	POWER ALPHA	SIGNAL	POWER BETA									TYPE	DIM Z ±0.13/.005	PIN LENGTH	LENGTH	LOCATION	LOCATION	
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
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
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
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
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
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
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
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
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
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

ADD P/N 87631-3050
EC NO: S2009-0538 2009/02/09
DRWN:SKANG 2009/02/09
CH'KD:ATSEE 2009/02/13
APPR:MLONG DESCRIPTION
C13 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
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: BHLOW DATE: 2002/11/25
CHECKED BY: PTLIM DATE: 2002/11/26
APPROVED BY: SKTOH DATE: 2002/11/27
MATERIAL NO.: SEE TABLE

TITLE: POWER CONNECTOR HEADER P(A)-S-P(B) CONFIG. R/A, T/H, SCREW-MOUNT
MOLEX INCORPORATED
DOCUMENT NO.: SD-87631-013
SHEET NO.: 3 OF 4
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	DIM H	POWER BLADE OPTIONS		STANDARD SIGNAL	RECESSED SIGNAL PIN		VOID	PACKAGING
	POWER ALPHA	SIGNAL	POWER BETA									TYPE	DIM Z ±0.13/.005	PIN LENGTH	LENGTH	LOCATION	SIGNAL 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		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		TRAY
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		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
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

ADD P/N 87631-3050
EC NO: S2009-0538 2009/02/09
DRWN:SKANG 2009/02/09
CH'KD:ATSEE 2009/02/13
APPR:MLONG
DESCRIPTION
C13
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
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: BHLOW DATE: 2002/11/25
CHECKED BY: PTLIM DATE: 2002/11/26
APPROVED BY: SKTOH DATE: 2002/11/27

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

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87631-013
SHEET NO.: 4 OF 4
SIZE: A3

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION