

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** **0876583005**  
**Status:** **Active**  
**Overview:** extreme\_powerplus\_ssi  
**Description:** 6.35mm (.250") Pitch, EXTreme PowerPlus™ Header, All Power, Through Hole, Right Angle, 5 Circuits, with Screw Hole, Lead-free

**Documents:**

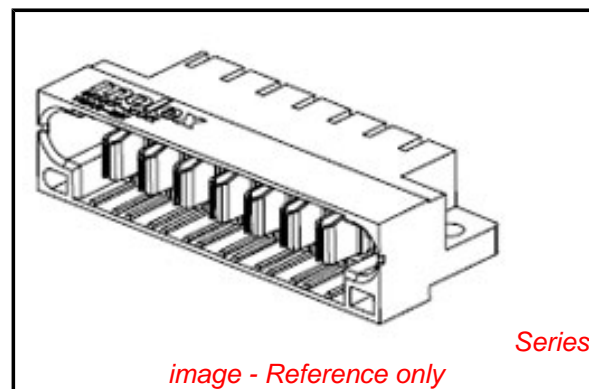
[3D Model](#) [Product Specification PS-87631-006 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family	PCB Headers
Series	87658
Application	Board-to-Board
Overview	<u>extreme_powerplus_ssi</u>
Product Literature Order No	987650-3002
Product Name	EXTreme PowerPlus™

**Physical**

Breakaway	No
Circuits (Loaded)	5
Circuits (maximum)	5
Circuits Detail	Power 5
Color - Resin	Black
Durability (mating cycles max)	100
First Mate / Last Break	No
Glow-Wire Compliant	No
Guide to Mating Part	No
Keying to Mating Part	None
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	1
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)	0.250 In
Pitch - Mating Interface (mm)	6.35 mm
Plating min: Mating (µin)	30
Plating min: Mating (µm)	0.76
Plating min: Termination (µin)	101.6
Plating min: Termination (µm)	2.54
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Shrouded	Fully
Stackable	No
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-20°C to +105°C
Termination Interface: Style	Through Hole



**EU RoHS**

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

**China RoHS**



**Not Reviewed**

**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**

87658Series

**Mates With**

87691 EXTreme PowerPlus™ all Power Receptacle

**Electrical**

Current - Maximum per Contact	30A
Voltage - Maximum	50V 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

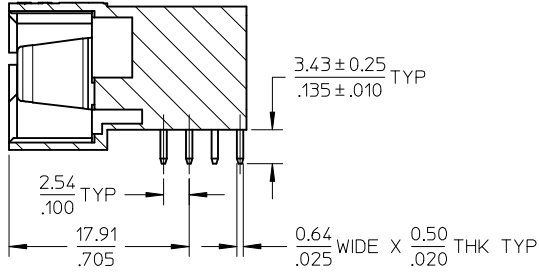
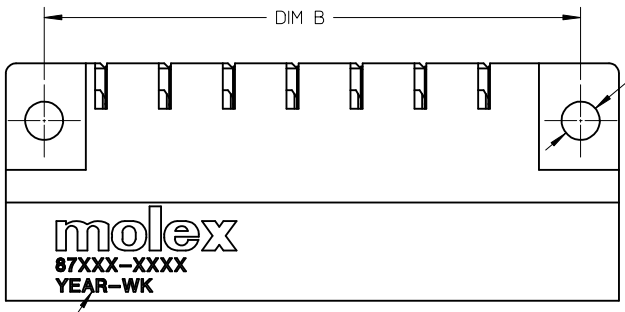
**Material Info****Reference - Drawing Numbers**

Application Specification	AS-87631-018
Product Specification	PS-87631-006
Sales Drawing	SD-87658-010

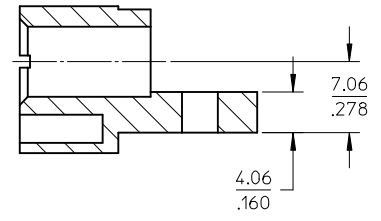
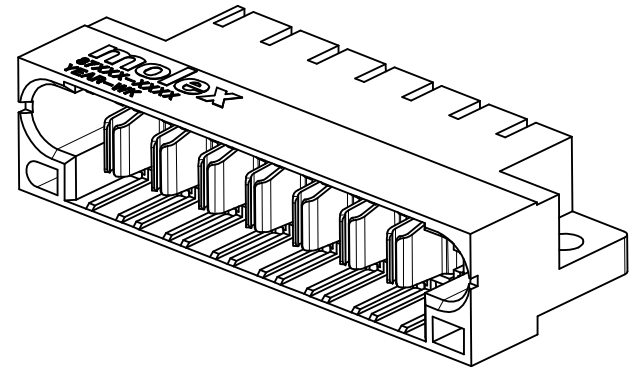
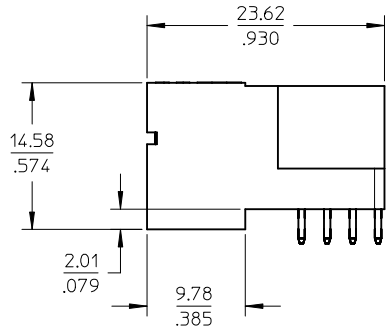
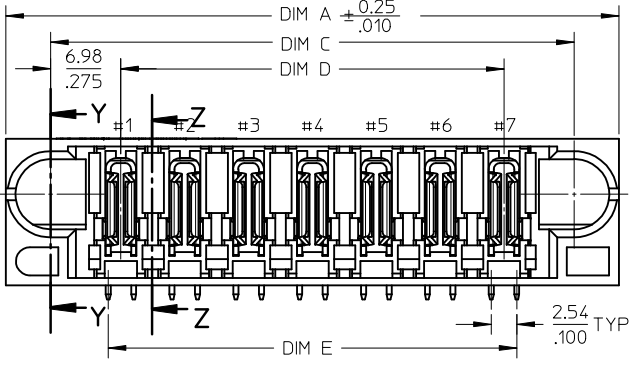
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10 9 8 7 6 5 4 3 2 1



SECTION Z-Z



SECTION Y-Y

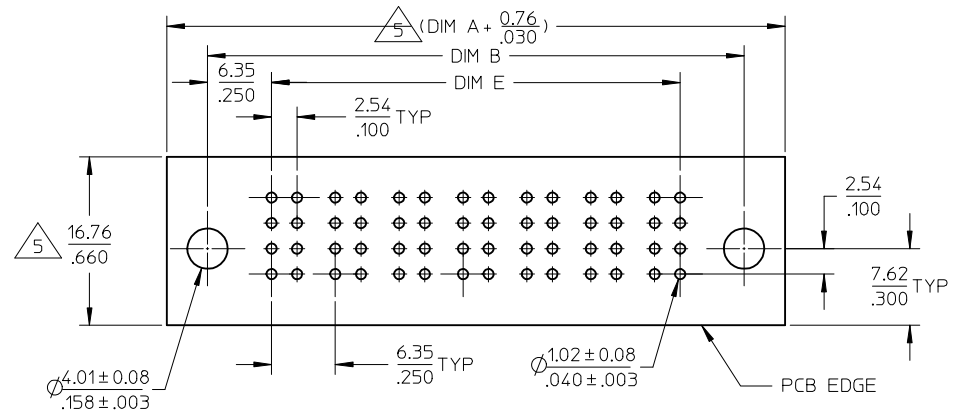
CORRECT PCB HOLE SIZE EC NO: S2009-0475 DRW:SKANG CHKD:ATSEE APPR:MLONG	QUALITY SYMBOLS ▽=0 ∇=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY BHLOW	DATE 2002/11/01	TITLE HEADER	
		4 PLACES	± ---	± ---	CHECKED BY	DATE	ALL POWER CONFIGURATION	
		3 PLACES	± ---	± .010	PTLIM	2002/11/07	SCREW MOUNT, R/A, T/H	
					APPROVED BY	DATE	MOLEX INCORPORATED	
2 PLACES	± 0.25	± ---	SKTOH	2002/11/12	DOCUMENT NO. SD-87658-010			
					ANGULAR ± 3 °		SHEET NO. 1 OF 2	
D1	REV	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			

9 8 7 6 5 4 3 2 1

10	9	8	7	6	5	4	3	2	1
PART NUMBER	PART STATUS	PACKAGING	POWER CONFIGURATION NO. OF POWER	DIM A	DIM B	DIM C	DIM D	DIM E	
				87658-3007	TOOLED	TRAY	7	60.96 2.400	53.34 2.100
87658-3005	TOOLED	TRAY	5	48.26 1.900	40.64 1.600	39.37 1.550	25.40 1.000	27.94 1.100	

NOTES:

- MATERIALS: LCP, GLASS FILLED, UL94V-0, COLOUR: BLACK  
POWER PINS - COPPER ALLOY
- FINISHES: POWER 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  
1.27um MINIMUM NICKEL OVEALL UNDERPLATE.
- PRODUCT SPECIFICATION: PS-87631-006.
- SEE SHEET 2 FOR RECOMMENDED PCB LAYOUT AND THICKNESS.
- COMPONENT STAY AWAY ZONE FROM CONNECTOR.
- MANUFACTURER LOGO, PART NUMBER AND YEAR-WEEK CODE.
- 7 POWER CONFIGURATION IS SHOWN FOR ILLUSTRATION ONLY.  
POWER CONFIGURATION IS AVAILABLE UP TO 203MM/INCH.  
PLEASE CONTACT MOLEX SALES PERSONNEL FOR OTHER CONFIGURATION  
AND OPTION NEEDED.



CORRECT PCB HOLE SIZE	EC NO: S2009-0475	2009/01/16	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		
	DRW:SKANG	2009/01/20		mm	INCH	MM/IN		NTS	METRIC			
	CHKD:ATSEE	2009/01/20		4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE			
	APPR:MLONG	2009/02/05		3 PLACES	± ---	± .010	BHLOW	2002/11/01	HEADER			
				2 PLACES	± 0.25	± ---	CHECKED BY	DATE	ALL POWER CONFIGURATION			
				1 PLACE	± ---	± ---	PTL IM	2002/11/07	SCREW MOUNT, R/A, T/H			
				ANGULAR ± 3 °			APPROVED BY	DATE	MOLEX INCORPORATED			
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SKTOH	2002/11/12	MATERIAL NO. DOCUMENT NO. SHEET NO.			
							SEE TABLE		SD-87658-010		2 OF 2	
							THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					