

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

**Part Number:** [0876912003](#)  
**Status:** **Active**  
**Overview:** [extreme powerplus\\_ssi](#)  
**Description:** 6.35mm (.250") Pitch, Power EXTreme PowerPlus™ All Power Receptacle, Press-fit, Vertical, 2 Circuits, Leadfree

**Documents:**

[3D Model](#) [Product Specification PS-87633-006 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family	PCB Receptacles
Series	<a href="#">87691</a>
Application	Board-to-Board
Comments	No Recessed Power Circuit
Overview	<a href="#">extreme powerplus_ssi</a>
Product Name	EXTreme PowerPlus™

**Physical**

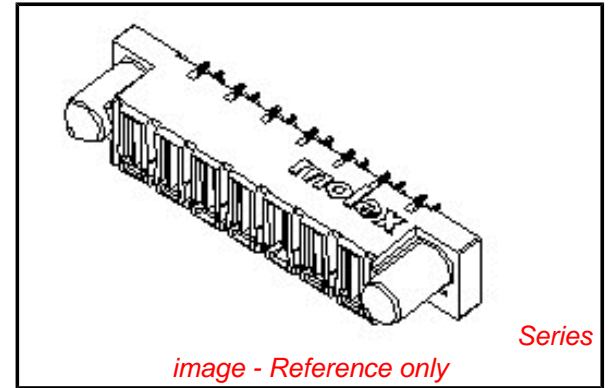
Circuits (Loaded)	2
Circuits Detail	All Power
Color - Resin	Black
Durability (mating cycles max)	100
Glow-Wire Compliant	No
Guide to Mating Part	Yes
Keying to Mating Part	Yes
Material - Metal	Copper Alloy
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	1
Orientation	Vertical
PC Tail Length (in)	0.135 In
PC Tail Length (mm)	3.43 mm
PCB Locator	No
PCB Retention	None
PCB Thickness Recommended (in)	0.093 In
PCB Thickness Recommended (mm)	2.36 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)	100
Plating min: Termination (µm)	2.54
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Temperature Range - Operating	-20°C to +105°C
Termination Interface: Style	Through Hole - Compliant Pin

**Electrical**

Current - Maximum per Contact	50A
Voltage - Maximum	250V DC

**Material Info**

**Reference - Drawing Numbers**



**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**

[87691Series](#)

**Mates With**

[87658 EXTreme PowerPlus™ Header](#)

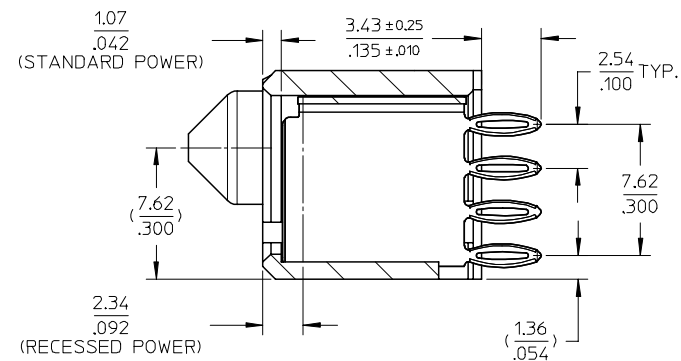
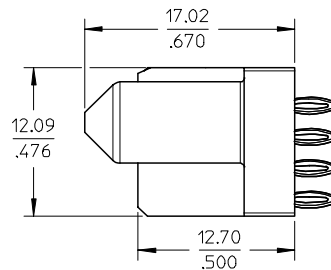
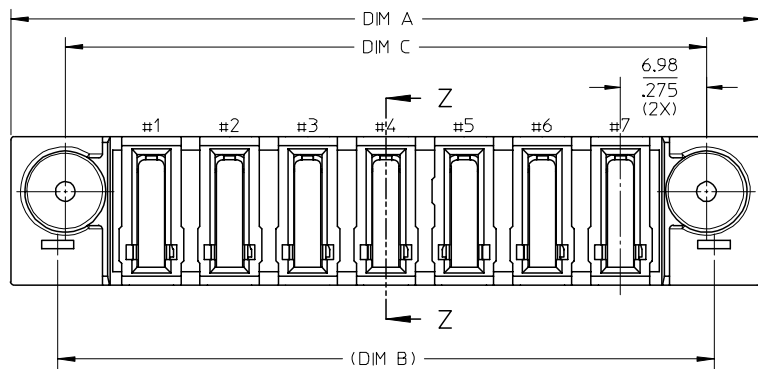
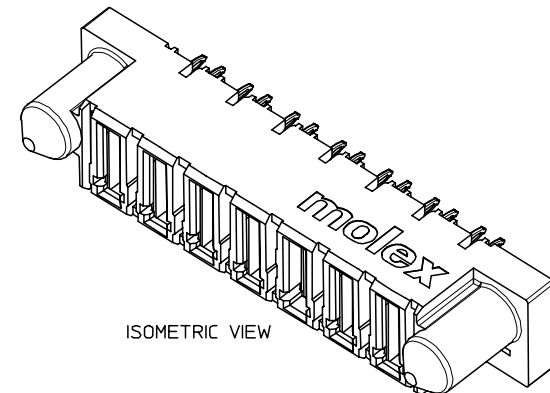
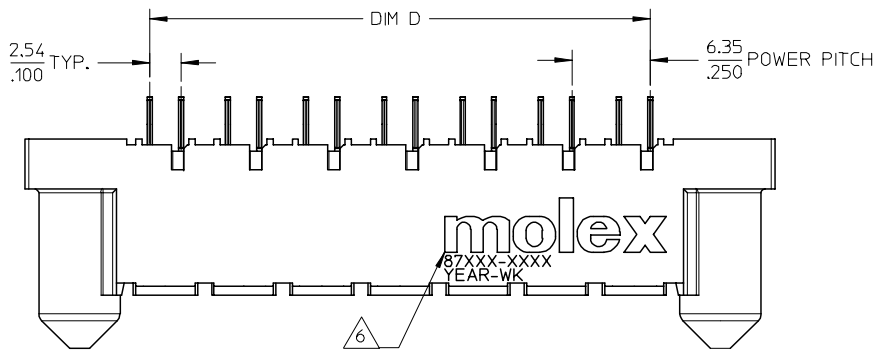
Application Specification  
Product Specification  
Sales Drawing

AS-87631-018, AS-87633-007  
PS-87633-006  
SD-87691-010

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10 9 8 7 6 5 4 3 2 1



PDR#S-001440-00-00	2006/11/17
EC NO: S2007-0448	2006/11/20
DRWN:KELIM	2006/11/20
CHKD:MLONG	2006/11/20
APPR:SKTOH	2006/11/20

QUALITY SYMBOLS	DESCRIPTION
▽=0	
∇=0	

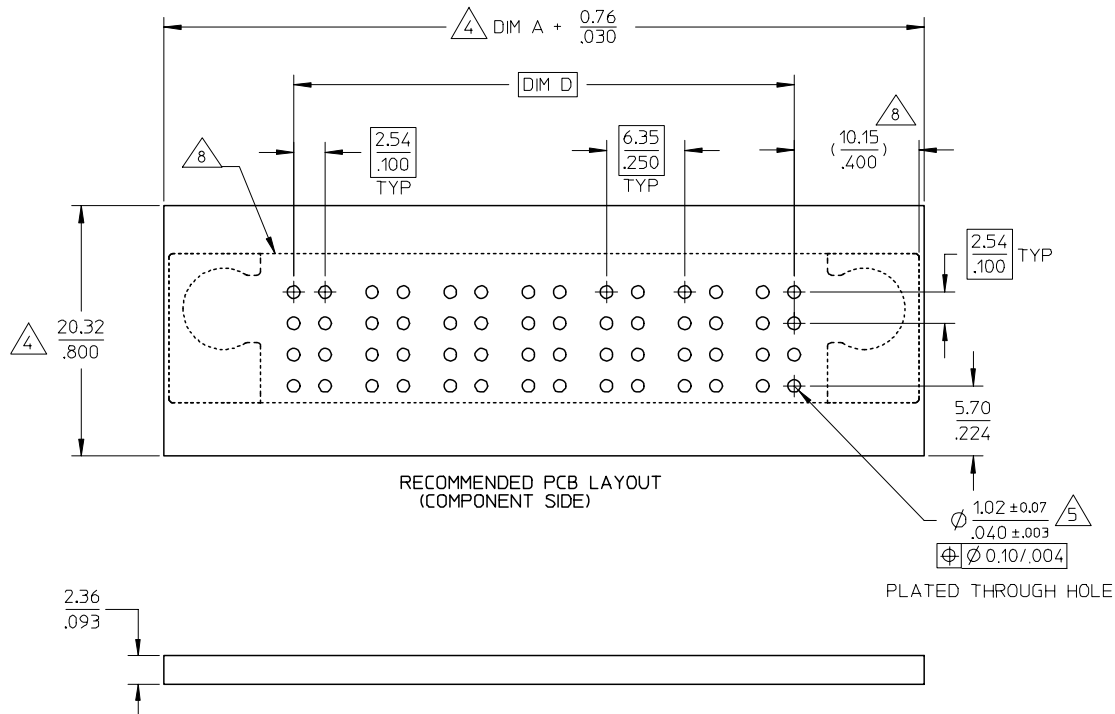
GENERAL TOLERANCES (UNLESS SPECIFIED)	
	MM INCH
4 PLACES	± --- ± ---
3 PLACES	± --- ± ---
2 PLACES	± 0.13 ± ---
1 PLACE	± 0.25 ± ---
ANGULAR ± 3 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE	
MM/IN	
DRAWN BY	DATE
KMGOH	2002/09/23
CHECKED BY	DATE
PTL IM	2002/10/30
APPROVED BY	DATE
SKTOH	2002/10/30
MATERIAL NO.	
SEE TABLE	
SIZE	
A3	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	
TITLE		
POWER CONN. RECEPTACLE ALL POWER CONFIGURATION VERTICAL PRESS-FIT		
MOLEX INCORPORATED		
DOCUMENT NO.	SHEET NO.	
SD-87691-010	1 OF 2	

9 8 7 6 5 4 3 2 1

	10	9	8	7	6	5	4	3	2	1
PART NUMBER	ALL POWER CONFIGURATION	RECESSED POWER CIRCUIT	DIM A	DIM B	DIM C	DIM D	PACKAGING	PLATING OPTION		
87691-1007	7	NIL	60.96 2.400	53.34 2.100	52.07 2.050	40.64 1.600	TRAY	TIN		
87691-2002	5	#1 & #5	48.26 1.900	40.64 1.600	39.37 1.550	27.94 1.100				
87691-2003	2	NIL	29.21 1.150	21.59 0.850	20.32 0.800	8.89 0.350				



CONNECTOR - NOTES

- MATERIALS :  
HOUSING - LCP, GLASS FILLED, UL94-0,COLOR:BLACK.  
POWER PIN - COPPER ALLOY
- FINISH :  
POWER CONTACTS  
0.76 MICROMETER MINIMUM GOLD (Au) AT CONTACT AREA AND  
2.54 MICROMETER MINIMUM TIN AT SOLDER TAIL AREA  
OVER 1.27µm MIN. NICKEL (Ni) UNDERPLATE.
- PRODUCT SPECIFICATION: PS-87633-006.
- COMPONENT STAY AWAY ZONE FROM CONNECTOR.
- PCB NOTE FOR DIAMETER 1.02/.040 PLATED HOLE.  
- DRILLED HOLE SIZE IS 1.151/.0453  
- PLATE 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.  
SEE SHEET 2 FOR RECOMMENDED PCB LAYOUT.
- MANUFACTURER LOGO,PART NUMBER AND YEAR-WEEK CODE.
- 7 POWER CIRCUIT CONFIGURATION IS SHOWN FOR ILLUSTRATION.
- IMAGINARY LINE & DIMENSION TO POSITION AND PROVIDE CONNECTOR ORIENTATION W.R.T. PCB LAYOUT.

PDR#S-001440-00-00	2006/11/17	2006/11/20	2006/11/20
EC NO: S2007-0448	DRWN:KELIM	CHKD:M LONG	APPR:SKTOH
REV	DESCRIPTION	QUALITY SYMBOLS	
D		▽=0 ▽C=0	

GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	mm	INCH	NTS	METRIC	
4 PLACES ± ---	± ---	DRAWN BY	DATE	TITLE	POWER CONN. RECEPTACLE ALL POWER CONFIGURATION VERTICAL PRESS-FIT
3 PLACES ± ---	± ---	KMGOH	2002/09/23		
2 PLACES ± 0.13	± ---	CHECKED BY	DATE		MOLEX INCORPORATED
1 PLACE ± 0.25	± ---	PTL IM	2002/10/30		
ANGULAR ± 3 °		APPROVED BY	DATE		
		SKTOH	2002/10/30		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE	MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
	A3	SEE TABLE	SD-87691-010	2 OF 2	
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