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Part Number: [0876651001](#)
Status: **Active**
Overview: [extreme_powerplus_ssi](#)
Description: 6.35mm (.250") Pitch, Power, 2.54mm (.100") Pitch, Signal, EXTreme PowerPlus™ (SSI) MPS Receptacle, Press-fit, Vertical, Power Beta 6, Signal 24, Power Alpha 5, 35 Circuits, Leadfree

Documents:

[3D Model](#) [Product Specification PS-87665-006 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

General

Product Family	PCB Receptacles
Series	87665
Application	Board-to-Board
Overview	extreme_powerplus_ssi
Product Literature Order No	987650-3002
Product Name	EXTreme PowerPlus™

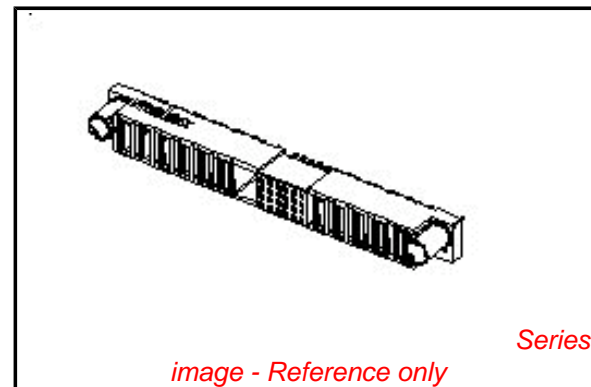
Physical

Circuits (Loaded)	35
Circuits Detail	Power Beta 6, Signal 24, Power Alpha 5
Color - Resin	Black
Durability (mating cycles max)	100
Glow-Wire Compliant	No
Guide to Mating Part	Yes
Lock to Mating Part	Yes
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	4
Orientation	Vertical
PC Tail Length (in)	0.135 In
PC Tail Length (mm)	3.43 mm
PCB Locator	No
PCB Retention	Yes
PCB Thickness Recommended (in)	0.093 In
PCB Thickness Recommended (mm)	2.40 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)	30.4
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
Surface Mount Compatible (SMC)	N/A
Temperature Range - Operating	-20°C to +70°C
Termination Interface: Style	Through Hole - Compliant Pin

Electrical

Current - Maximum per Contact	2.5A, 30A
Voltage - Maximum	50V DC

Material Info



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

[87665Series](#)

Mates With

[87615](#) EXTreme PowerPlus™ (SSI) MPS Header

Reference - Drawing Numbers

Application Specification

Product Specification

Sales Drawing

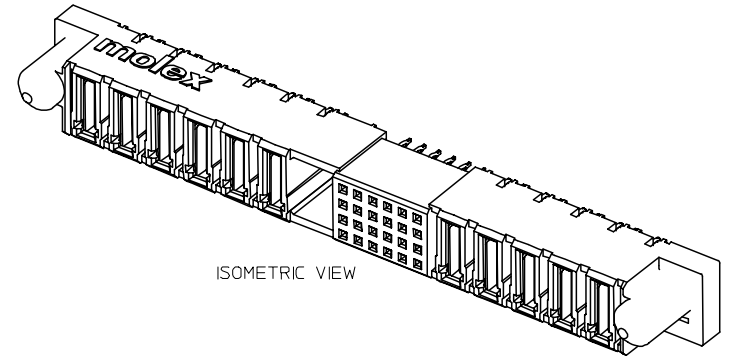
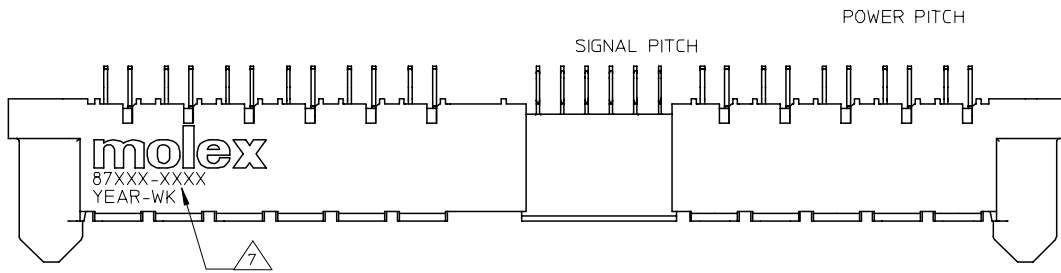
AS-87631-018, AS-87633-007

PS-87665-006

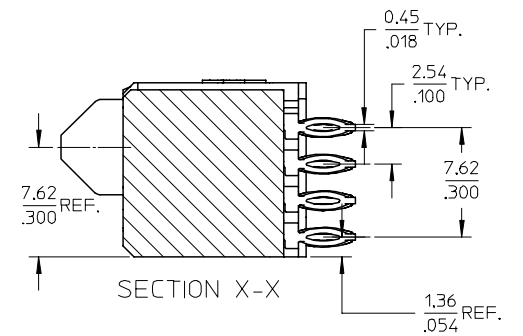
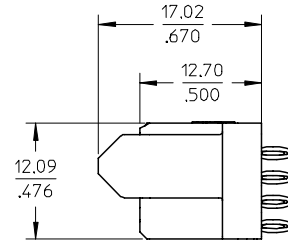
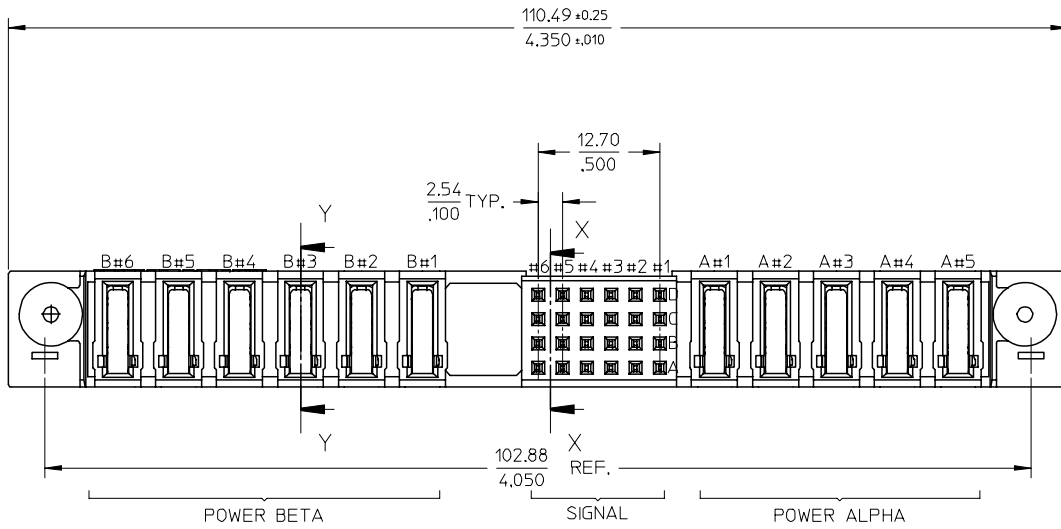
SD-87665-011

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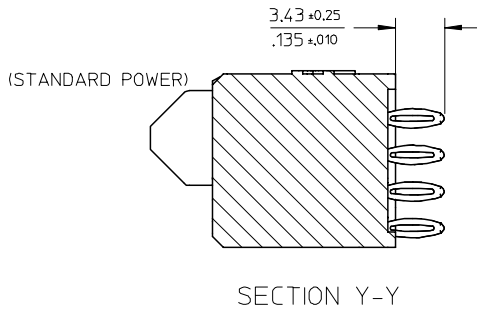
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ISOMETRIC VIEW



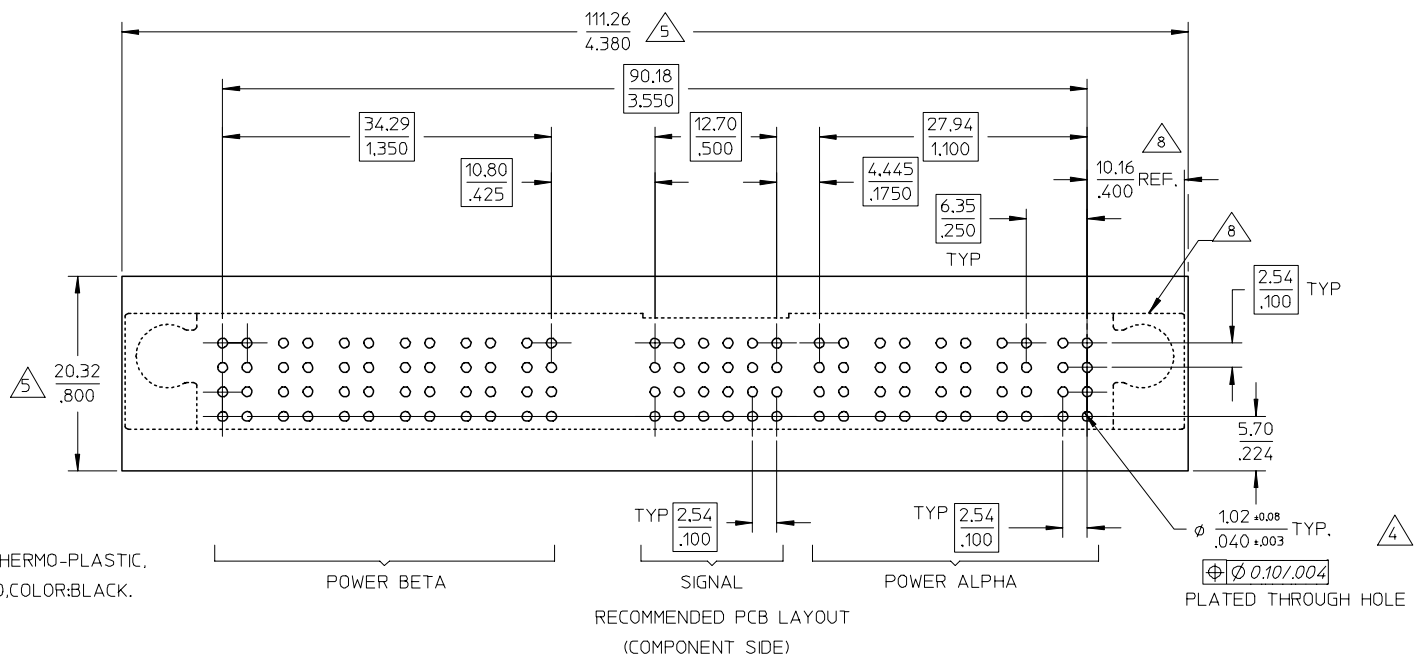
SECTION X-X



SECTION Y-Y

ADD ASSY P/N FOR L/F EC NO: S2005-0109 DRWN:NRVITAP 2004/08/20 CHKD:BH LOW 2004/08/20 APPR:SCLOW 2004/08/20	QUALITY SYMBOLS ▽ = 0 ▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION REVISE ON CAD ONLY	
		mm	INCH	NTS	METRIC		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.13 ± --- 1 PLACE ± 0.25 ± --- ANGULAR ± 3 °		DIMENSION STYLE		TITLE	
		DRAFT WHERE APPLICABLE		MM/IN		MPS CONNECTOR, RECPT P(B)-S-P(A) CONFIG. VERTICAL PRESS-FIT	
MUST REMAIN WITHIN DIMENSIONS	REV	APPROVED BY	DATE	MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
		SKTOH	2002/11/26	SEE TABLE	SD-87665-011	1 OF 2	
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

10	9
PART NUMBER	PLATING OPTION
87665-0001	TIN/LEAD
87665-1001	TIN



CONNECTOR - NOTES

1. MATERIALS :

- HOUSING - HIGH TEMPERATURE THERMO-PLASTIC, GLASS FILLED, UL94-0,COLOR:BLACK.
- POWER PIN - COPPER ALLOY
- BOARD-LOCK - COPPER ALLOY

2. PLATING :

- POWER CONTACTS
- 0.76 MICROMETER MINIMUM GOLD (Au) AT CONTACT AREA AND 2.54 MICROMETER MINIMUM TIN/LEAD OR TIN AT SOLDERTAIL AREA OVER 1.27um MIN, NICKEL (Ni) UNDERPLATE.

3. PRODUCT SPECIFICATION: PS-87665-006.

- PCB NOTE FOR DIAMETER 1.02/.040 PLATED HOLE.
 - DRILLED HOLE SIZE IS 1.151/.0453
 - PLATE WITH 0.007/.0003 MINIMUM TIN/LEAD OR 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.

- COMPONENT STAY AWAY ZONE FROM CONNECTOR.
- 6P(B)-24S-5P(A) CONFIGURATION IS SHOWN FOR ILLUSTRATION ONLY.
- MANUFACTURER LOGO,PART NUMBER AND YEAR-WEEK CODE.
- IMAGINARY LINE & DIMENSION TO POSITION AND PROVIDE CONNECTOR ORIENTATION W.R.T. TO PCB LAYOUT.
- CONNECTORS ARE PACKED IN TRAY.

POWER BETA SIGNAL POWER ALPHA

RECOMMENDED PCB LAYOUT (COMPONENT SIDE)

ADD ASSY P/N FOR L/F EC NO: S2005-0109 DRWN:NRVITAP2004/08/20 CHKD:BH LOW 2004/08/20 APPR:SCLOW 2004/08/20	QUALITY SYMBOLS ▽ = 0 ▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY	
			mm	INCH	DIMENSION STYLE MM/IN		TITLE	
		4 PLACES	± ---	± ---	DRAWN BY	DATE	MPS CONNECTOR, RECT P(B)-S-P(A) CONFIG. VERTICAL PRESS-FIT	
		3 PLACES	± ---	± ---	KMGOH	2002/10/04		
2 PLACES	± 0.13	± ---	CHECKED BY	DATE	MOLEX INCORPORATED			
1 PLACE	± 0.25	± ---	PTLIM	2002/11/25				
	ANGULAR ± 3 °		APPROVED BY		MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
	DRAFT WHERE APPLICABLE		SKTOH		SEE TABLE	SD-87665-011	2 OF 2	
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