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Part Number:

0876912002

Status:

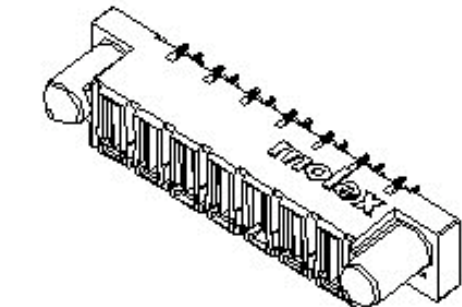
Active

Overview:

extreme\_powerplus\_ssi

Description:

6.35mm (.250") Pitch, Power, EXTreme PowerPlus™ All Power Receptacle, Press-fit, Vertical, 5 Circuits, Leadfree



Series

image - Reference only

Documents:

- [3D Model](#)
- [Drawing \(PDF\)](#)
- [RoHS Certificate of Compliance \(PDF\)](#)

General

|                             |                                       |
|-----------------------------|---------------------------------------|
| Product Family              | PCB Receptacles                       |
| Series                      | 87691                                 |
| Application                 | Board-to-Board                        |
| Comments                    | Recessed Power Circuit Position: 1, 5 |
| Overview                    | extreme_powerplus_ssi                 |
| Product Literature Order No | 987650-3002                           |
| Product Name                | EXTreme PowerPlus™                    |

Physical

|                                |                                |
|--------------------------------|--------------------------------|
| Circuits (Loaded)              | 5                              |
| Circuits Detail                | Power 5                        |
| 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

EU RoHS

ELV and RoHS  
Compliant

REACH SVHC

Not Reviewed

Halogen-Free

Status

Halogen-Free

China RoHS



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

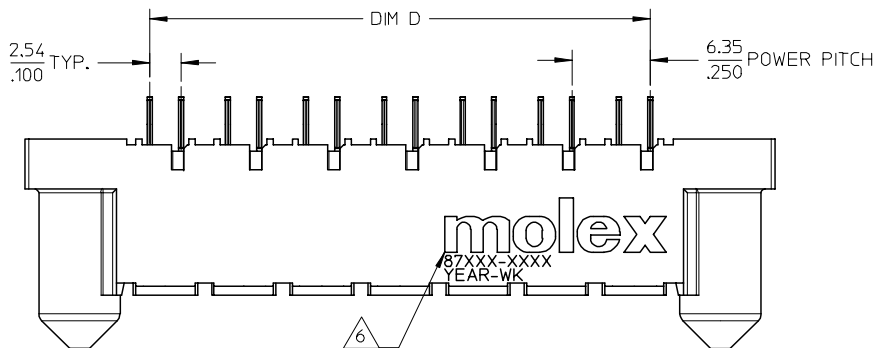
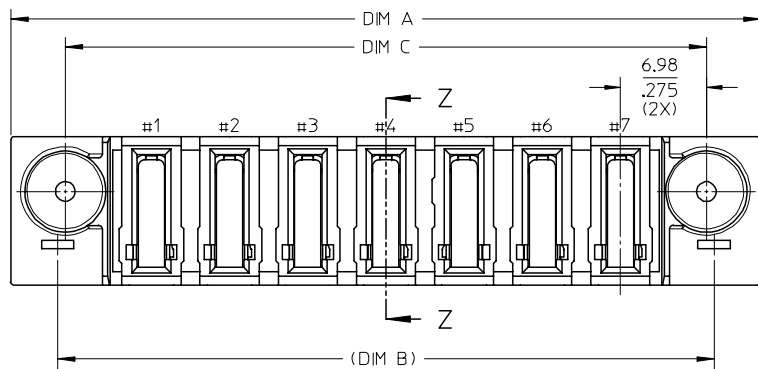
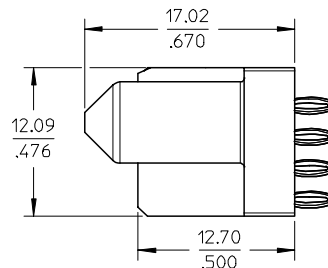
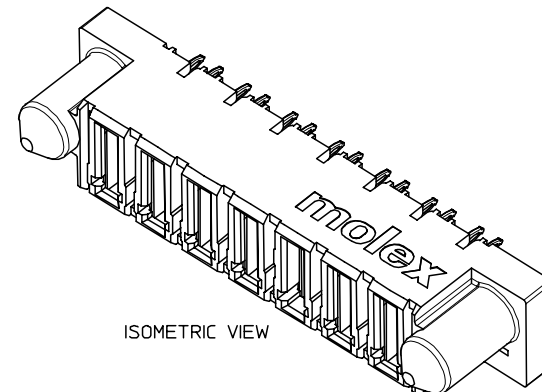
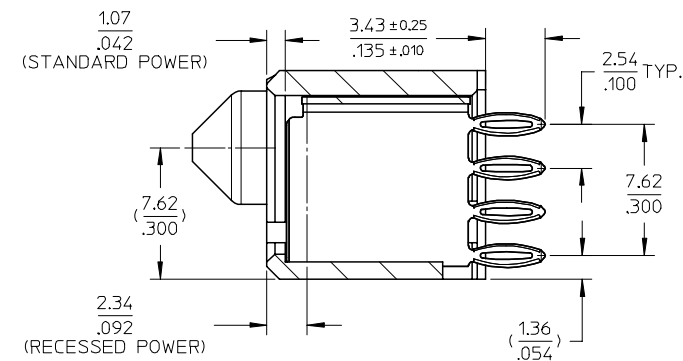
**Reference - Drawing Numbers**

Application Specification  
Sales Drawing

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

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SECTION Z-Z

|                                                                                                                     |     |             |
|---------------------------------------------------------------------------------------------------------------------|-----|-------------|
| PDR#S-001440-00-00<br>EC NO: S2007-0448<br>DRWN:KELIM 2006/11/17<br>CHKD:M LONG 2006/11/20<br>APPR:SKTOH 2006/11/20 | REV | DESCRIPTION |
|                                                                                                                     | D   |             |
|                                                                                                                     |     |             |
|                                                                                                                     |     |             |

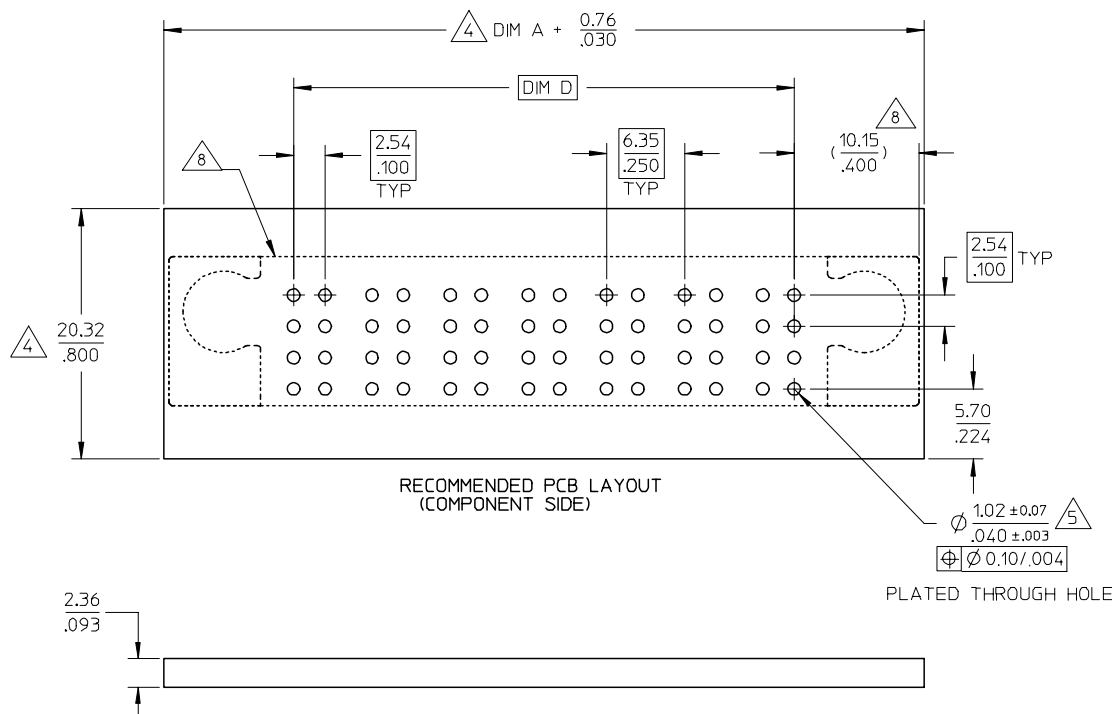
| QUALITY SYMBOLS |
|-----------------|
| $\nabla = 0$    |
| $\nabla C = 0$  |

| GENERAL TOLERANCES (UNLESS SPECIFIED)                |            |             |
|------------------------------------------------------|------------|-------------|
|                                                      | MM         | INCH        |
| 4 PLACES                                             | $\pm .005$ | $\pm .0004$ |
| 3 PLACES                                             | $\pm .005$ | $\pm .0004$ |
| 2 PLACES                                             | $\pm 0.13$ | $\pm .005$  |
| 1 PLACE                                              | $\pm 0.25$ | $\pm .010$  |
| ANGULAR $\pm 3^\circ$                                |            |             |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |            |             |

| DIMENSION STYLE MM/IN |            |
|-----------------------|------------|
| DRAWN BY              | DATE       |
| KMG0H                 | 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 NTS | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION                                                  |           |
|-----------|---------------------|-------------------------------------------------------------------------|-----------|
|           |                     | POWER CONN. RECEPTACLE<br>ALL POWER CONFIGURATION<br>VERTICAL PRESS-FIT |           |
|           |                     | MOLEX INCORPORATED                                                      |           |
|           |                     | DOCUMENT NO.                                                            | SHEET NO. |
|           |                     | SD-87691-010                                                            | 1 OF 2    |

|             | 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<br>2.400 | 53.34<br>2.100 | 52.07<br>2.050 | 40.64<br>1.600 | TRAY      | TIN            |   |   |
| 87691-2002  | 5                       | #1 & #5                | 48.26<br>1.900 | 40.64<br>1.600 | 39.37<br>1.550 | 27.94<br>1.100 |           |                |   |   |
| 87691-2003  | 2                       | NIL                    | 29.21<br>1.150 | 21.59<br>0.850 | 20.32<br>0.800 | 8.89<br>0.350  |           |                |   |   |



#### CONNECTOR - NOTES

##### 1. MATERIALS :

HOUSING - LCP, GLASS FILLED, UL94-0,COLOR:BLACK.  
POWER PIN - COPPER ALLOY

##### 2. FINISH :

POWER CONTACTS  
0.76 MICROMETER MINIMUM GOLD (Au) AT CONTACT AREA AND  
2.54 MICROMETER MINIMUM TIN AT SOLDER TAIL AREA  
OVER 1.27um MIN. NICKEL (Ni) UNDERPLATE.

##### 3. PRODUCT SPECIFICATION: PS-87633-006.

4. COMPONENT STAY AWAY ZONE FROM CONNECTOR.

5. 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.

6. MANUFACTURER LOGO,PART NUMBER AND YEAR-WEEK CODE.

7. 7 POWER CIRCUIT CONFIGURATION IS SHOWN FOR ILLUSTRATION.

8. IMAGINARY LINE & DIMENSION TO POSITION AND PROVIDE CONNECTOR ORIENTATION W.R.T. PCB LAYOUT.

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

| 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       |
| KMG0H           | 2002/09/23 |
| CHECKED BY      | DATE       |
| PTL IM          | 2002/10/30 |
| APPROVED BY     | DATE       |
| SKTOH           | 2002/10/30 |
| MATERIAL NO.    |            |
| SIZE            | A3         |

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