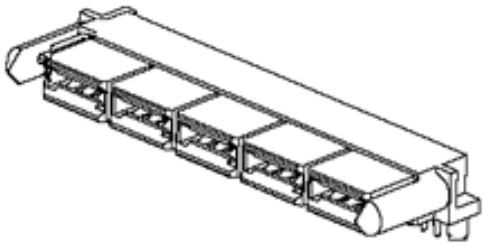
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# PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

**Part Number:** 0459848922
**Status:** Active
**Overview:** extreme_lphpower
**Description:** EXTreme LPHPower™ Receptacle Header, Right Angle, 8 Power Contacts, Select Gold (Au) Plating, for 2.36mm (.093") Thick PC Board with Guide



*Series image - Reference only*

**Documents:**

3D Model
Drawing (PDF)
Product Specification PS-45984-001 (PDF)
RoHS Certificate of Compliance (PDF)

## Agency Certification

| | |
|---|---|
| CSA | LR19980 |
| UL | E29179 |

## General

| | |
|---|---|
| Product Family | PCB Receptacles |
| Series | 45984 |
| Application | Board-to-Board |
| Comments | 8 Power Blades |
| Overview | extreme_lphpower |
| Product Name | EXTreme LPHPower™ |

## Physical

| | |
|---|---|
| Circuits (Loaded) | 8 |
| Circuits (maximum) | 8 |
| Circuits Detail | 8 Power, No Signal |
| Color - Resin | Black |
| Durability (mating cycles max) | 250 |
| Flammability | 94V-0 |
| Glow-Wire Compliant | No |
| Guide to Mating Part | Yes |
| Keying to Mating Part | Yes |
| Lock to Mating Part | No |
| Material - Metal | High Performance Alloy (HPA) |
| Material - Plating Mating | Gold |
| Material - Plating Termination | Tin |
| Material - Resin | High Temperature Thermoplastic |
| Number of Rows | 2 |
| Orientation | Right Angle |
| PC Tail Length (in) | 0.142 In |
| PC Tail Length (mm) | 3.60 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) | 0.472 In |
| Pitch - Mating Interface (mm) | 12.00 mm |
| Pitch - Term. Interface (in) | 0.079 In, 0.098 In |
| Pitch - Term. Interface (mm) | 2.00 mm, 2.50 mm |
| Plating min: Mating (µin) | 30 |
| Plating min: Mating (µm) | 0.75 |
| Plating min: Termination (µin) | 150 |
| Plating min: Termination (µm) | 3.75 |
| Polarized to Mating Part | Yes |
| Polarized to PCB | No |

**EU RoHS**
ELV and RoHS Compliant
**REACH SVHC**
Contains SVHC: No
**Halogen-Free Status**
Halogen-Free

**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**
45984Series

**Mates With**
45985 EXTreme LPHPower™ Headers

| | |
|---|---|
| Stackable | No |
| Surface Mount Compatible (SMC) | Yes |
| Temperature Range - Operating | -40°C to +105°C |
| Termination Interface: Style | Through Hole |

## Electrical

| | |
|---|---|
| Current - Maximum per Contact | 23A |
| Grounding to PCB | No |
| Voltage - Maximum | 250V AC (RMS)/DC |

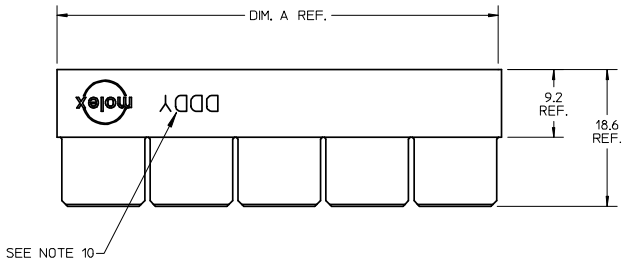
## Solder Process Data

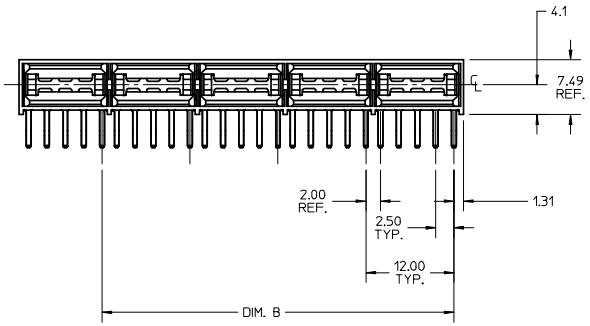
| | |
|---|---|
| Duration at Max. Process Temperature (seconds) | 15 |
| Lead-free Process Capability | SMC & Wave Capable (TH only) |
| Max. Cycles at Max. Process Temperature | 3 |
| Process Temperature max. C | 230 |

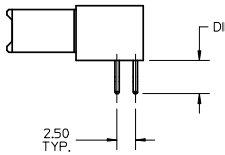
## Material Info

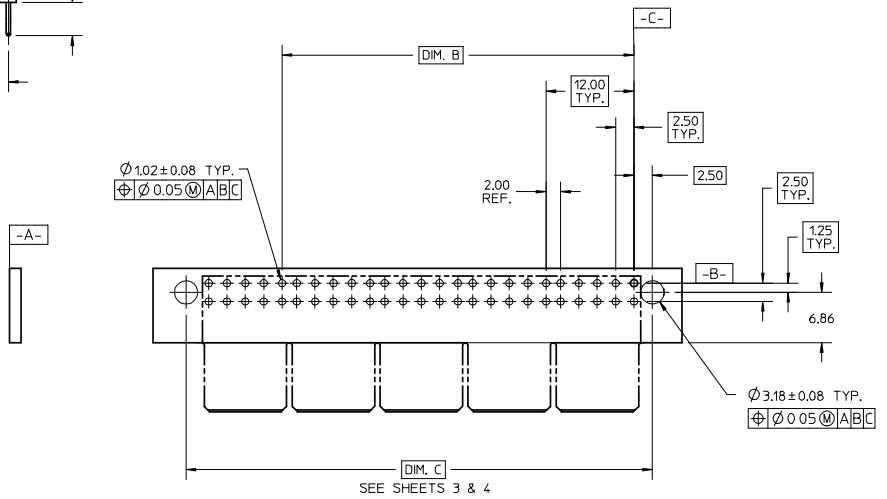
## Reference - Drawing Numbers

| | |
|---|---|
| Packaging Specification | PK-45984-001 |
| Product Specification | PS-45984-001 |
| Sales Drawing | SD-45984-102 |




PCB LAYOUT: COMPONENT SIDE
(PEG HOLES OPTIONAL)

| CKT SIZE | MATERIAL NUMBER | DIM. A REF | DIM B | DIM P |
|---|---|---|---|---|
| 4 | 45984-4911 | 24.60 | 12.00 | 4.50 |
| 6 | 45984-6911 | 36.60 | 24.00 | |
| 8 | 45984-8911 | 48.60 | 36.00 | |
| 10 | 45984-1911 | 60.60 | 48.00 | |
| 4 | 45984-4921 | 24.60 | 12.00 | 3.60 |
| 6 | 45984-6921 | 36.60 | 24.00 | |
| 8 | 45984-8921 | 48.60 | 36.00 | |
| 10 | 45984-1921 | 60.60 | 48.00 | |
| 4 | 45984-4931 | 24.60 | 12.00 | 2.90 |
| 6 | 45984-6931 | 36.60 | 24.00 | |
| 8 | 45984-8931 | 48.60 | 36.00 | |
| 10 | 45984-1931 | 60.60 | 48.00 | |

NOTES:
1. MATERIAL - HOUSING: LCP, 94V-0, BLACK
   MATERIAL - POWER CONTACT: COPPER ALLOY
2. FINISH: SELECT GOLD (WITH EB-1): 0.76 µM/30 MI MIN, IN CONTACT AREA.
   SELECT TIN: 3.81 µM/150 MI MIN, IN PC TAIL AREA
   BOTH OVER NICKEL: 1.27 µM/50 MI MIN. PER ES-88-229.
   TERMINALS ARE LUBRICATED WITH EB-1 LUBRICANT.
3. PRODUCT SPECIFICATION: PS-45984-001
4. PACKAGING SPECIFICATION: TRAY PER PK-45984-001
5. SEE SHEET 5 FOR CKT IDENTIFICATION
6. PARTS ARE RoHS COMPLIANT.
7. PEG HOLES ARE OPTIONAL. SEE SHEET 3 & 4.
8. MATES TO .157/.062 CARD EDGE OR MOLEX SERIES 45985.
9. PARTS CONFORM TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.
10. DATE CODE (3-DIGIT DAY, 1-DIGIT YEAR) TO BE PRINTED AND LOCATED AS SHOWN.

RELEASED
EC NO: UCP2007-3140 2008/03/03
DRWN:MBANDURA 2008/03/04
CH'KD: APPR:APATEL 2008/03/06
DESCRIPTION
B
REV

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± 0.25 | ± --- |
| 1 PLACE | ± --- | ± --- |
| ANGULAR ±1/2° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: BANDURA DATE: 5/16/2006
CHECKED BY: BANDURA DATE: 5/16/206
APPROVED BY: PATEL DATE:

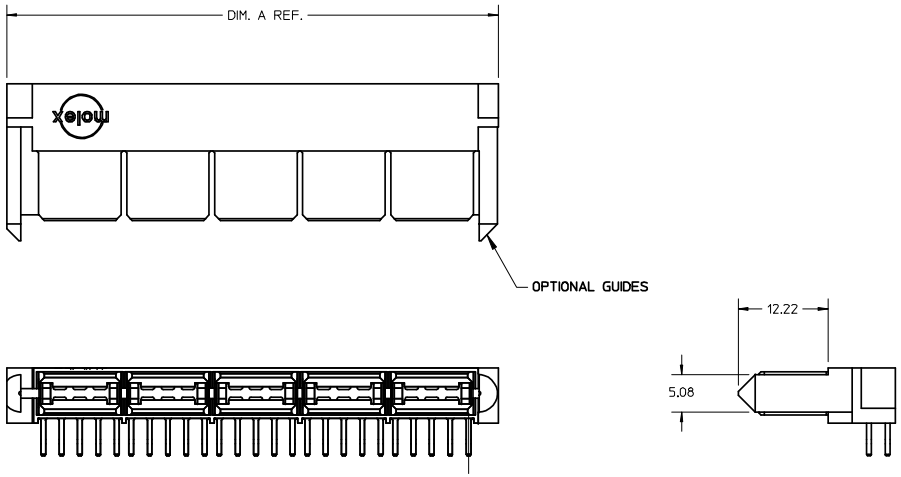
TITLE: LPH RECEPTACLE ASSEMBLY
RIGHT ANGLE
POWER CONNECTOR

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MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-45984-102
SHEET NO.: 1 OF 5

SIZE B

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| CKT SIZE | MATERIAL NUMBER | DIM. A REF | DIM B | DIM P |
|---|---|---|---|---|
| 4 | 45984-4912 | 31.01 | 12.00 | 4.50 |
| 6 | 45984-6912 | 43.01 | 24.00 | |
| 8 | 45984-8912 | 55.01 | 36.00 | |
| 10 | 45984-1912 | 67.01 | 48.00 | |
| 4 | 45984-4922 | 31.01 | 12.00 | 3.60 |
| 6 | 45984-6922 | 43.01 | 24.00 | |
| 8 | 45984-8922 | 55.01 | 36.00 | |
| 10 | 45984-1922 | 67.01 | 48.00 | |
| 4 | 45984-4932 | 31.01 | 12.00 | 2.90 |
| 6 | 45984-6932 | 43.01 | 24.00 | |
| 8 | 45984-8932 | 55.01 | 36.00 | |
| 10 | 45984-1932 | 67.01 | 48.00 | |

RELEASED
EC NO: UCP2007-3140 2008/03/03
DRWN:MBANDURA 2008/03/04
CH'KD: 2008/03/06
APPR:APATEL
DESCRIPTION
REV
B

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± 0.25 | ± --- |
| 1 PLACE | ± --- | ± --- |
| ANGULAR ±1/2° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: BANDURA DATE: 5/16/2006
CHECKED BY: BANDURA DATE: 5/16/206
APPROVED BY: PATEL DATE:

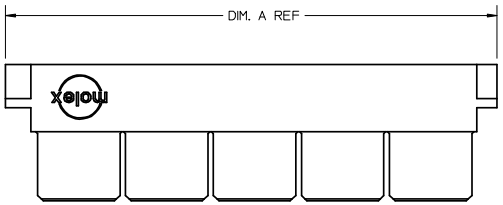
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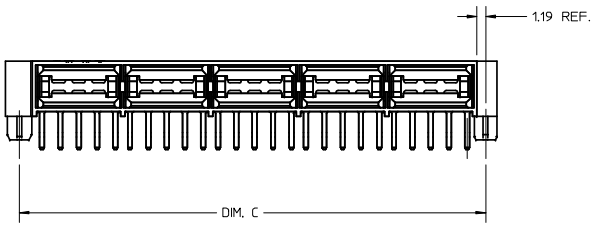
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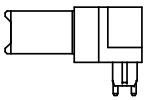
MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-45984-102
SHEET NO.: 2 OF 5

SIZE B

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| CKT SIZE | MATERIAL NUMBER | DIM. A REF | DIM B | DIM C | DIM P |
|---|---|---|---|---|---|
| 4 | 45984-4913 | 31.01 | 12.00 | 27.60 | 4.50 |
| 6 | 45984-6913 | 43.01 | 24.00 | 39.60 | |
| 8 | 45984-8913 | 55.01 | 36.00 | 51.60 | |
| 10 | 45984-1913 | 67.01 | 48.00 | 63.60 | |
| 4 | 45984-4923 | 31.01 | 12.00 | 27.60 | 3.60 |
| 6 | 45984-6923 | 43.01 | 24.00 | 39.60 | |
| 8 | 45984-8923 | 55.01 | 36.00 | 51.60 | |
| 10 | 45984-1923 | 67.01 | 48.00 | 63.60 | |
| 4 | 45984-4933 | 31.01 | 12.00 | 27.60 | 2.90 |
| 6 | 45984-6933 | 43.01 | 24.00 | 39.60 | |
| 8 | 45984-8933 | 55.01 | 36.00 | 51.60 | |
| 10 | 45984-1933 | 67.01 | 48.00 | 63.60 | |

RELEASED
EC NO: UCP2007-3140 2008/03/03
DRWN:MBANDURA 2008/03/04
CH'KD:
APPR:APATEL 2008/03/06
DESCRIPTION
REV B

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
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| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± 0.25 | ± --- |
| 1 PLACE | ± --- | ± --- |
| ANGULAR ±1/2° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: BANDURA DATE: 5/16/2006
CHECKED BY: BANDURA DATE: 5/16/206
APPROVED BY: PATEL DATE:

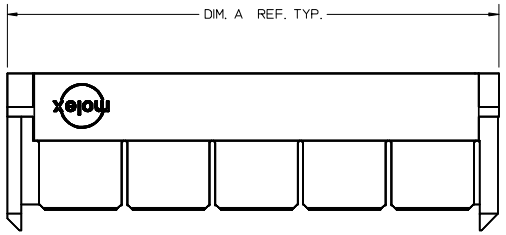
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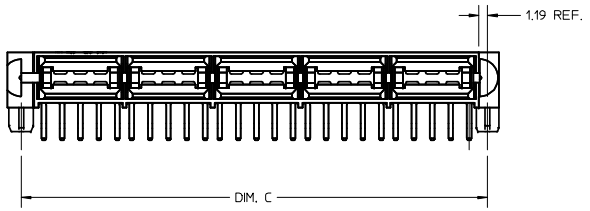
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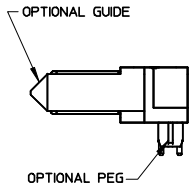
MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-45984-102
SHEET NO.: 3 OF 5

SIZE B

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| CKT SIZE | MATERIAL NUMBER | DIM. A REF | DIM B | DIM C | DIM P |
|---|---|---|---|---|---|
| 4 | 45984-4914 | 31.01 | 12.00 | 27.60 | 4.50 |
| 6 | 45984-6914 | 43.01 | 24.00 | 39.60 | |
| 8 | 45984-8914 | 55.01 | 36.00 | 51.60 | |
| 10 | 45984-1914 | 67.01 | 48.00 | 63.60 | |
| 4 | 45984-4924 | 31.01 | 12.00 | 27.60 | 3.60 |
| 6 | 45984-6924 | 43.01 | 24.00 | 39.60 | |
| 8 | 45984-8924 | 55.01 | 36.00 | 51.60 | |
| 10 | 45984-1924 | 67.01 | 48.00 | 63.60 | |
| 4 | 45984-4934 | 31.01 | 12.00 | 27.60 | 2.90 |
| 6 | 45984-6934 | 43.01 | 24.00 | 39.60 | |
| 8 | 45984-8934 | 55.01 | 36.00 | 51.60 | |
| 10 | 45984-1934 | 67.01 | 48.00 | 63.60 | |

RELEASED
EC NO: UCP2007-3140 2008/03/03
DRWN:MBANDURA 2008/03/04
CH'KD: 2008/03/06
APPR:APATEL
DESCRIPTION
B
REV

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
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| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± 0.25 | ± --- |
| 1 PLACE | ± --- | ± --- |
| ANGULAR ±1/2° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: BANDURA DATE: 5/16/2006
CHECKED BY: BANDURA DATE: 5/16/206
APPROVED BY: PATEL DATE:

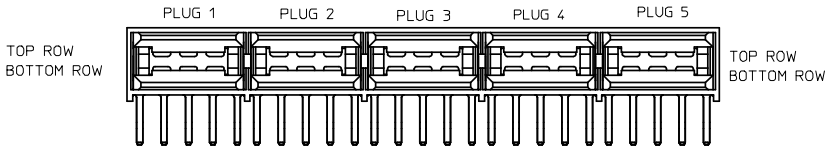
TITLE: LPH RECEPTACLE ASSEMBLY RIGHT ANGLE POWER CONNECTOR

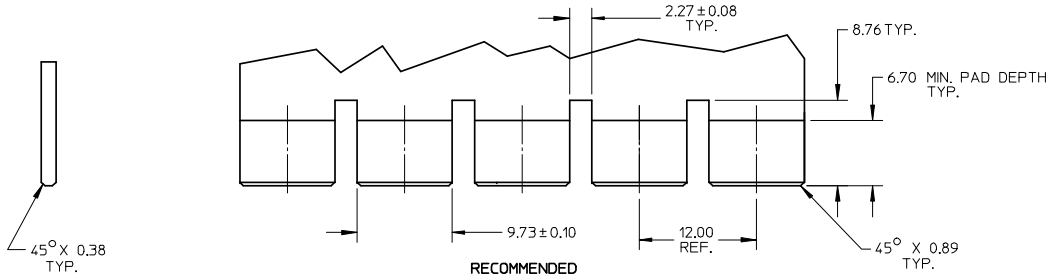
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MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-45984-102
SHEET NO.: 4 OF 5

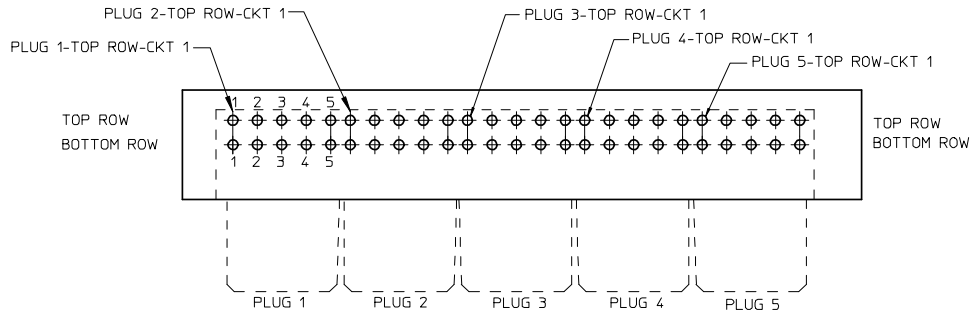
SIZE B

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**RECOMMENDED**
**EDGE CARD LAYOUT**
**THICKNESS: 1.57/.062**




**PCB LAYOUT: COMPONENT SIDE**
**SEE SHEET 1 FOR DIMENSIONS**

RELEASED
EC NO: UCP2007-3140 2008/03/03
DRWN:MBANDURA 2008/03/04
CH'KD:
APPR:APATEL 2008/03/06
DESCRIPTION
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| 2 PLACES | ± 0.25 | ± --- |
| 1 PLACE | ± --- | ± --- |
| ANGULAR ±1/2° | | |

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DIMENSION STYLE: MM ONLY
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: BANDURA DATE: 5/16/2006
CHECKED BY: BANDURA DATE: 5/16/206
APPROVED BY: PATEL DATE:

TITLE: LPH RECEPTACLE ASSEMBLY
RIGHT ANGLE
POWER CONNECTOR

MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-45984-102
SHEET NO.: 5 OF 5

SIZE: B

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