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**Part Number:** [0459848912](#)  
**Status:** **Active**  
**Overview:** [extreme\\_lphpower](#)  
**Description:** EXTreme LPHPower™ Receptacle Header, Right Angle, 8 Power Contacts, Select Gold (Au) Plating, for 3.18mm (.125") Thick PC Board with Guide

**Documents:**  
[3D Model](#) [Product Specification PS-45984-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [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) 0.177 In  
PC Tail Length (mm) 4.50 mm  
PCB Locator No  
PCB Retention None  
PCB Thickness Recommended (in) 0.125 In  
PCB Thickness Recommended (mm) 3.18 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

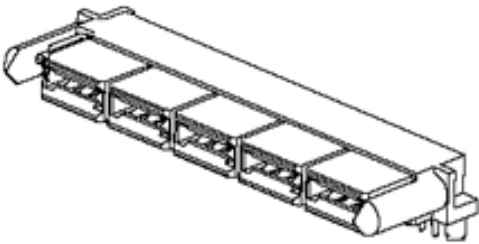


image - Reference only

Series

**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](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**  
[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                          |

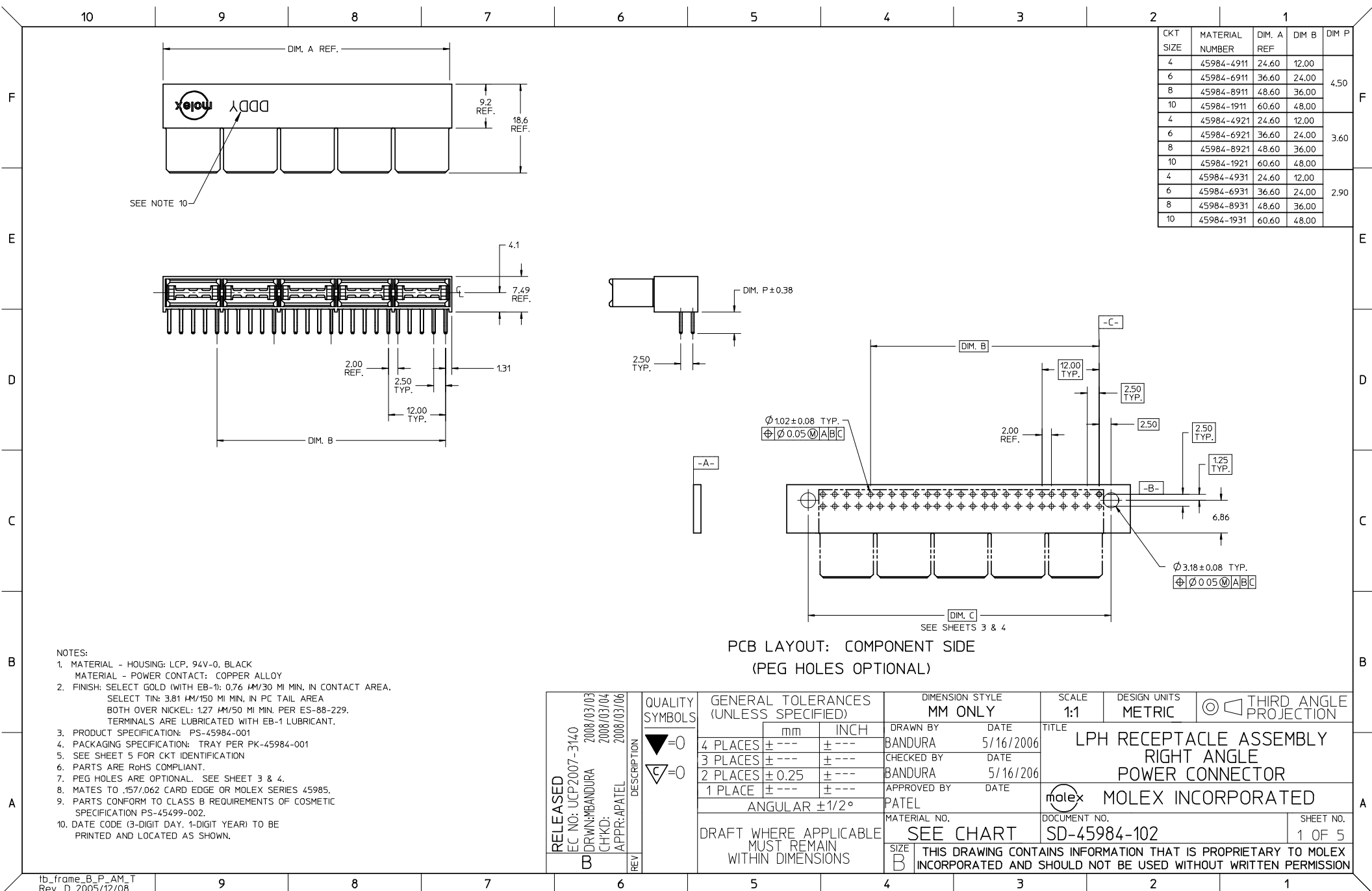
**Material Info**

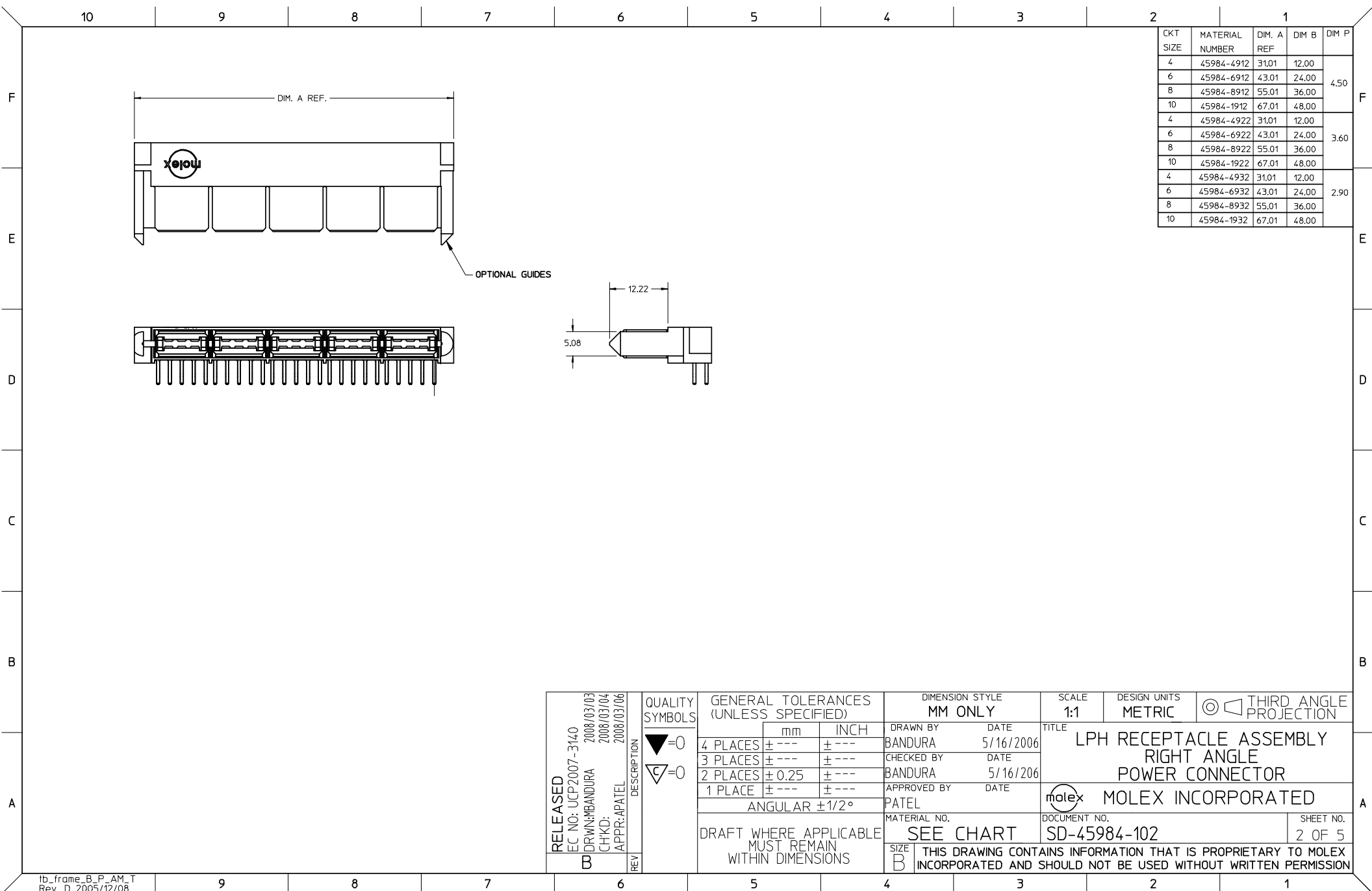
**Reference - Drawing Numbers**

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

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RELEASED  
EC NO: UCP2007-3140  
DRAWN: BANDURA  
CHKD: B  
APPR: APATEL

2008/03/03  
2008/03/04  
2008/03/06

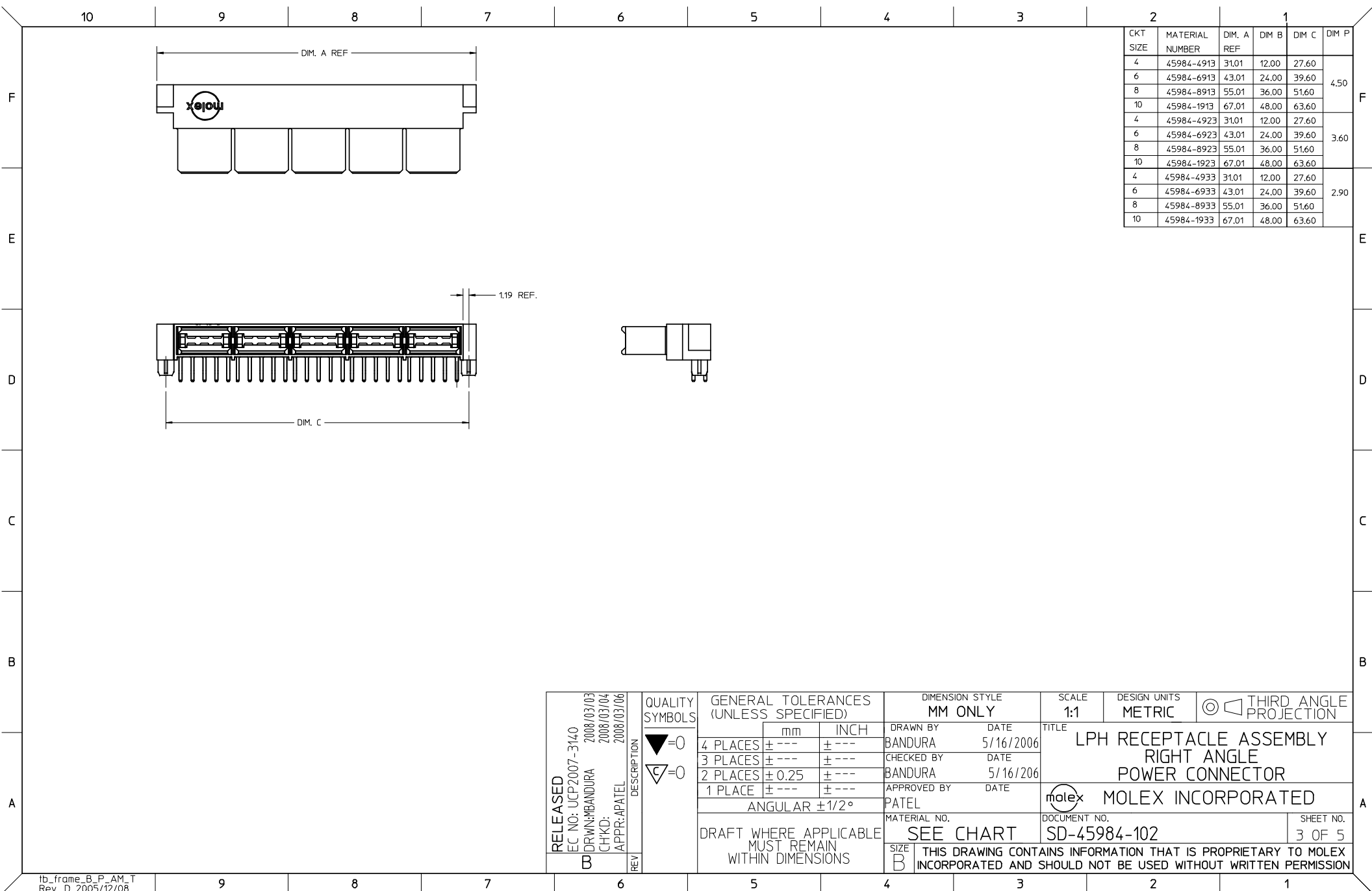
DESCRIPTION  
REV

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

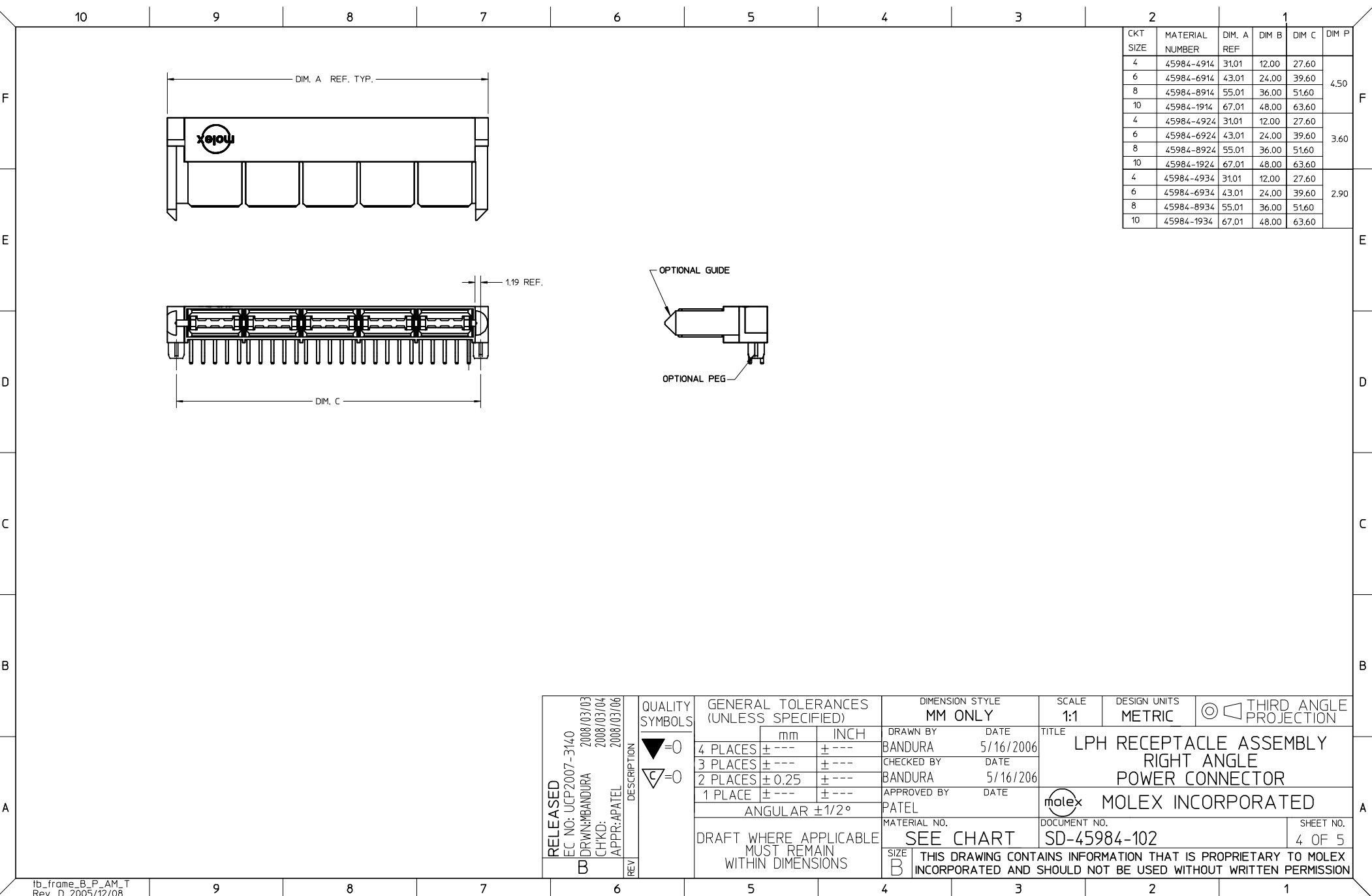
DIMENSION STYLE  
MM ONLY  
DRAWN BY DATE  
BANDURA 5/16/2006  
CHECKED BY DATE  
BANDURA 5/16/206  
APPROVED BY DATE  
PATEL  
MATERIAL NO.  
SEE CHART  
SIZE B

DIMENSION STYLE  
MM ONLY  
SCALE 1:1  
DESIGN UNITS METRIC  
THIRD ANGLE PROJECTION  
TITLE  
LPH RECEPTACLE ASSEMBLY  
RIGHT ANGLE  
POWER CONNECTOR  
MOLEX INCORPORATED  
DOCUMENT NO.  
SD-45984-102  
SHEET NO.  
2 OF 5  
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION



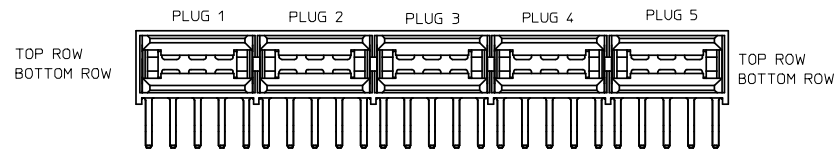
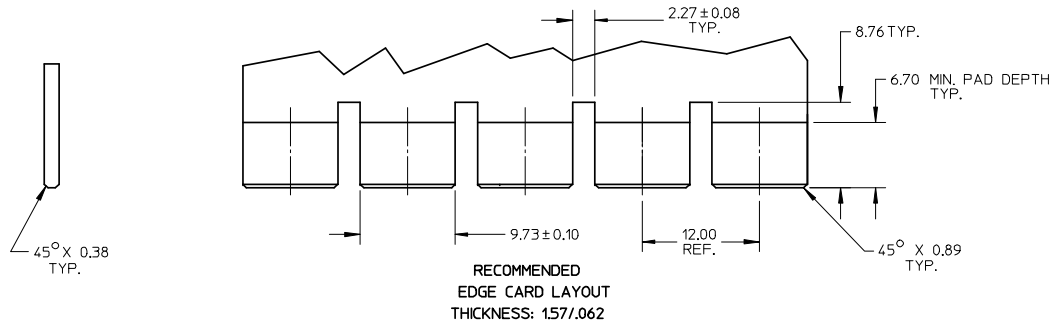
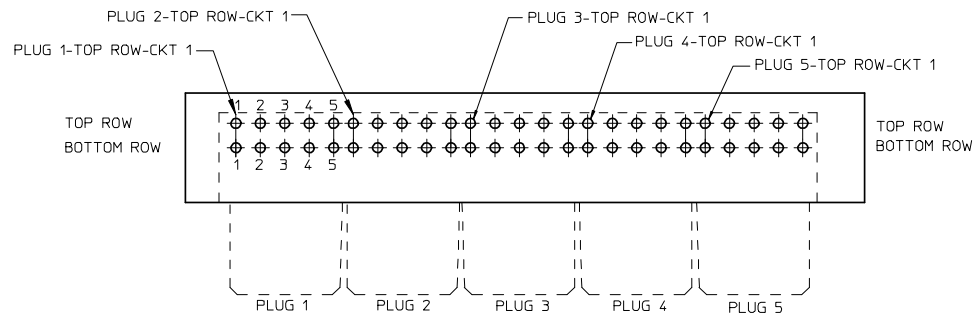
| CKT<br>SIZE | MATERIAL<br>NUMBER | DIM. A<br>REF | DIM B | DIM C | DIM P |
|-------------|--------------------|---------------|-------|-------|-------|
| 4           | 45984-4913         | 31.01         | 12.00 | 27.60 | 4.50  |
| 6           | 45984-6913         | 43.01         | 24.00 | 39.60 |       |
| 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<br>EC NO: UCP2007-3140<br>DRAWN: BANDURA<br>CHKD: B<br>APPR: APATEL | DESCRIPTION<br>REV | QUALITY<br>SYMBOLS<br><br>▽=0<br><br>C=0 | GENERAL TOLERANCES<br>(UNLESS SPECIFIED) |           | DIMENSION STYLE<br>MM ONLY |                                                                                                                                  | SCALE<br>1:1                 | DESIGN UNITS<br>METRIC |  THIRD ANGLE<br>PROJECTION | TITLE<br>LPH RECEPTACLE ASSEMBLY<br>RIGHT ANGLE<br>POWER CONNECTOR | MOLEX INCORPORATED | SHEET NO.<br>3 OF 5 |              |
|                                                                              |                    |                                          | mm                                       | INCH      | DRAWN BY                   | DATE                                                                                                                             | DOCUMENT NO.<br>SD-45984-102 |                        |                                                                                                                 |                                                                    |                    |                     |              |
|                                                                              |                    |                                          | 4 PLACES                                 | ± ---     | ± ---                      | BANDURA                                                                                                                          |                              |                        |                                                                                                                 |                                                                    |                    |                     | 5/16/2006    |
|                                                                              |                    |                                          | 3 PLACES                                 | ± ---     | ± ---                      | CHECKED BY                                                                                                                       |                              |                        |                                                                                                                 |                                                                    |                    |                     | DATE         |
|                                                                              |                    |                                          | 2 PLACES                                 | ± 0.25    | ± ---                      | BANDURA                                                                                                                          |                              |                        |                                                                                                                 |                                                                    |                    |                     | 5/16/2006    |
|                                                                              |                    |                                          | 1 PLACE                                  | ± ---     | ± ---                      | APPROVED BY                                                                                                                      |                              |                        |                                                                                                                 |                                                                    |                    |                     | DATE         |
|                                                                              |                    |                                          | ANGULAR ±1/2°                            |           | PATEL                      |                                                                                                                                  |                              |                        |                                                                                                                 |                                                                    |                    |                     | MATERIAL NO. |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                   |                    |                                          |                                          | SIZE<br>B |                            | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                              |                        |                                                                                                                 |                                                                    |                    |                     |              |



|                                                                             |                    |                                      |                                                            |              |                            |                   |                                                                                                                                  |                        |                                                                                                                 |
|-----------------------------------------------------------------------------|--------------------|--------------------------------------|------------------------------------------------------------|--------------|----------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------|
| RELEASED<br>EC NO: UCP2007-3140<br>DRAWN:MBANDURA<br>CHKD: B<br>APPR:APATEL | DESCRIPTION<br>REV | QUALITY<br>SYMBOLS<br><br>▽=0<br>▽=0 | GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                   |              | DIMENSION STYLE<br>MM ONLY |                   | SCALE<br>1:1                                                                                                                     | DESIGN UNITS<br>METRIC |  THIRD ANGLE<br>PROJECTION |
|                                                                             |                    |                                      |                                                            |              | DRAWN BY<br>BANDURA        | DATE<br>5/16/2006 | TITLE<br>LPH RECEPTACLE ASSEMBLY<br>RIGHT ANGLE<br>POWER CONNECTOR                                                               |                        |                                                                                                                 |
|                                                                             |                    |                                      | 4 PLACES                                                   | ± --- ± ---  | CHECKED BY<br>BANDURA      | DATE<br>5/16/2006 |                                                                                                                                  |                        |                                                                                                                 |
|                                                                             |                    |                                      | 3 PLACES                                                   | ± --- ± ---  | APPROVED BY<br>PATEL       | DATE              |                                                                                                                                  |                        |                                                                                                                 |
|                                                                             |                    |                                      | 2 PLACES                                                   | ± 0.25 ± --- | MATERIAL NO.<br>SEE CHART  |                   | DOCUMENT NO.<br>SD-45984-102                                                                                                     |                        |                                                                                                                 |
|                                                                             |                    |                                      | 1 PLACE                                                    | ± --- ± ---  | SIZE<br>B                  |                   | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                        |                                                                                                                 |
|                                                                             |                    |                                      |                                                            |              | ANGULAR ±1/2°              |                   |                                                                                                                                  |                        |                                                                                                                 |
|                                                                             |                    |                                      | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |              |                            |                   | SHEET NO.<br>4 OF 5                                                                                                              |                        |                                                                                                                 |

10 9 8 7 6 5 4 3 2 1



PCB LAYOUT: COMPONENT SIDE  
SEE SHEET 1 FOR DIMENSIONS

|                                                                                          |                               |                                       |                                                            |  |                   |                                                                    |                                                                                                                                  |  |
|------------------------------------------------------------------------------------------|-------------------------------|---------------------------------------|------------------------------------------------------------|--|-------------------|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--|
| RELEASED<br>EC NO: UCP2007-3140<br>DRAWN: BANDURA<br>CHKD: CHKD<br>APPR: APATEL<br>REV B | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE<br>MM ONLY                                 |  | SCALE<br>1:1      | DESIGN UNITS<br>METRIC                                             | THIRD ANGLE<br>PROJECTION                                                                                                        |  |
|                                                                                          |                               |                                       | DRAWN BY<br>BANDURA                                        |  | DATE<br>5/16/2006 | TITLE<br>LPH RECEPTACLE ASSEMBLY<br>RIGHT ANGLE<br>POWER CONNECTOR |                                                                                                                                  |  |
|                                                                                          |                               |                                       | CHECKED BY<br>BANDURA                                      |  | DATE<br>5/16/2006 | MOLEX INCORPORATED                                                 |                                                                                                                                  |  |
|                                                                                          |                               |                                       | APPROVED BY<br>PATEL                                       |  | DATE              | DOCUMENT NO.<br>SD-45984-102                                       |                                                                                                                                  |  |
|                                                                                          |                               |                                       | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |  | SEE CHART         |                                                                    | SHEET NO.<br>5 OF 5                                                                                                              |  |
|                                                                                          |                               |                                       |                                                            |  | SIZE<br>B         |                                                                    | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |

9 8 7 6 5 4 3 2 1