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Part Number: [0459846931](#)
Status: **Active**
Overview: [extreme_lphpower](#)
Description: EXTreme LPHPower™ Receptacle Header, Right Angle, 6 Power Contacts, Select Gold (Au) Plating, for 1.57mm (.062") Thick PC Board

Documents:

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

Agency Certification

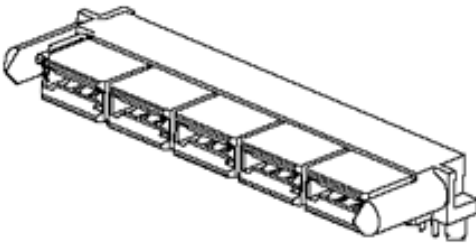
CSA	LR19980
UL	E29179

General

Product Family	PCB Receptacles
Series	45984
Application	Board-to-Board
Comments	6 Power Blades
Overview	extreme_lphpower
Product Name	EXTreme LPHPower™

Physical

Circuits (Loaded)	6
Circuits (maximum)	6
Circuits Detail	6 Power, No Signal
Color - Resin	Black
Durability (mating cycles max)	250
Flammability	94V-0
Glow-Wire Compliant	No
Guide to Mating Part	No
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)	0.114 In
PC Tail Length (mm)	2.90 mm
PCB Locator	No
PCB Retention	None
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.57 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



Series

image - Reference only

EU RoHS

**ELV and RoHS
Compliant**
REACH SVHC
Contains SVHC: No
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

[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	27A
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

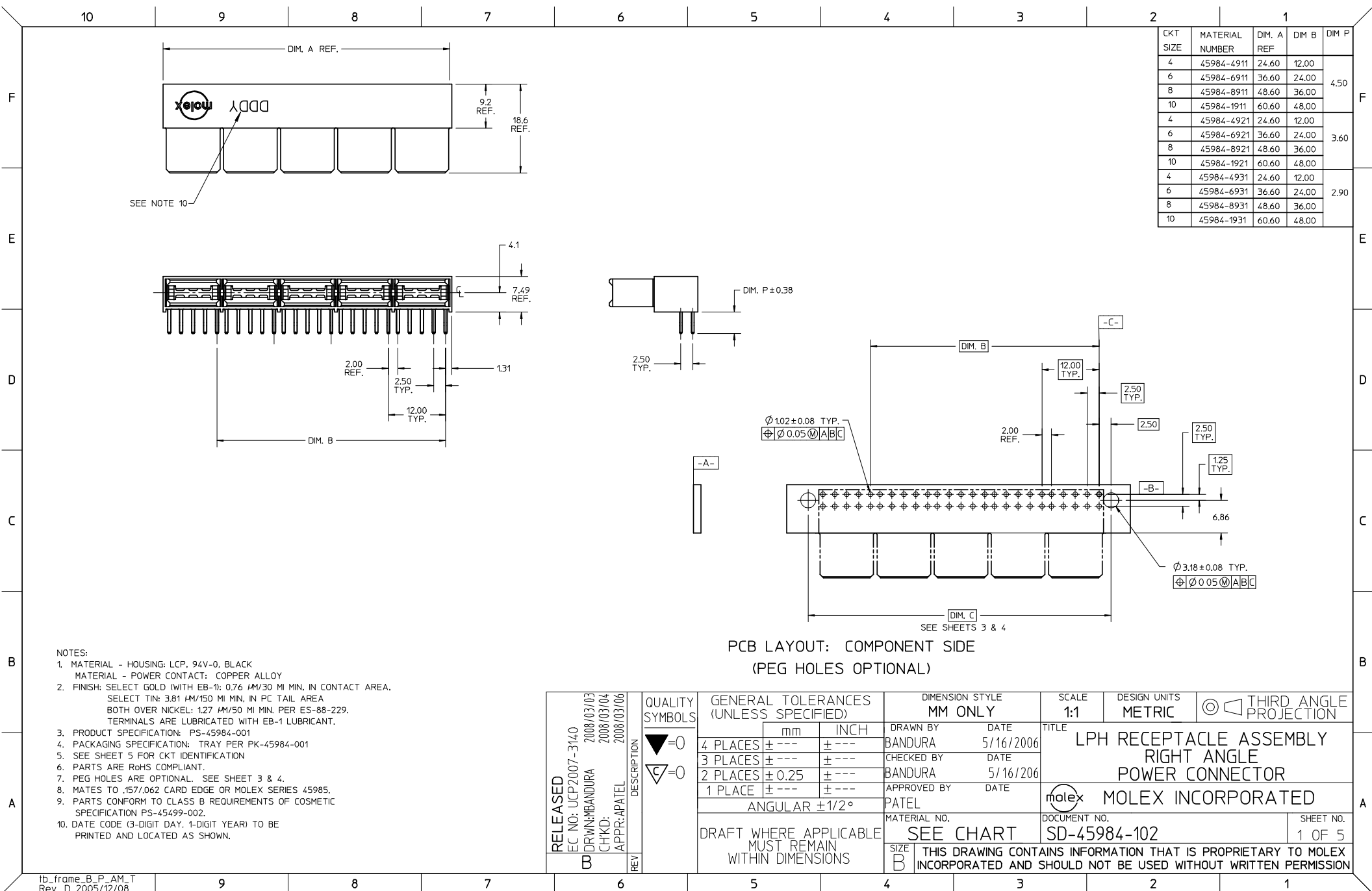
Material Info

Reference - Drawing Numbers

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

This document was generated on 05/21/2010

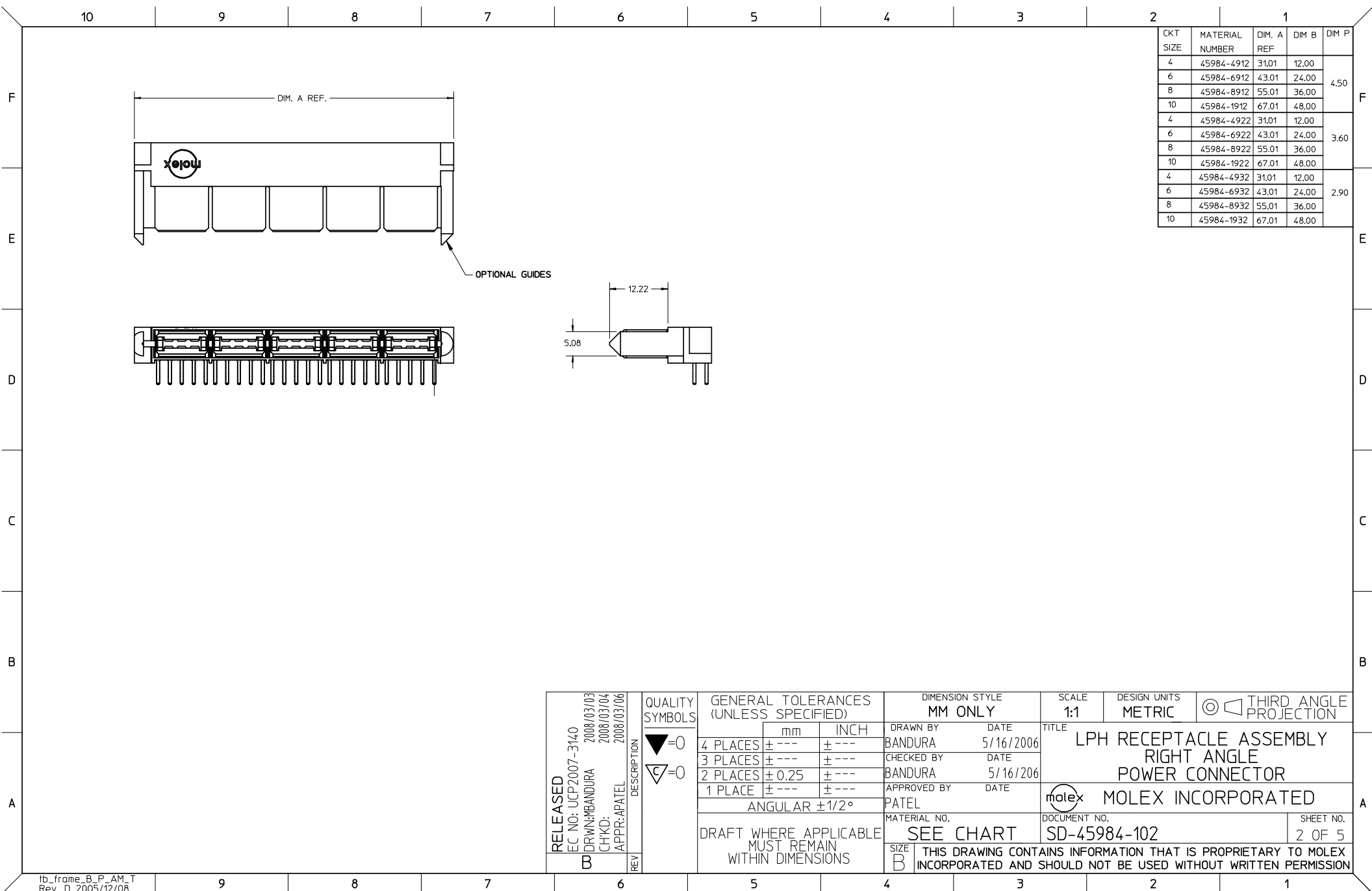
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CKT SIZE	MATERIAL NUMBER	DIM. A REF.	DIM B	DIM P
4	45984-4911	24.60	12.00	4.50
6	45984-6911	36.60	24.00	
8	45984-8911	48.60	36.00	
10	45984-1911	60.60	48.00	
4	45984-4921	24.60	12.00	3.60
6	45984-6921	36.60	24.00	
8	45984-8921	48.60	36.00	
10	45984-1921	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 μ M/30 MI MIN. IN CONTACT AREA.
SELECT TIN: 3.81 μ M/150 MI MIN. IN PC TAIL AREA
BOTH OVER NICKEL: 1.27 μ M/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 CHKD: 2008/03/06 APPR:APATEL	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		▽=0			DRAWN BY	DATE	TITLE LPH RECEPTACLE ASSEMBLY RIGHT ANGLE POWER CONNECTOR	MOLEX MOLEX INCORPORATED	SHEET NO. 1 OF 5	
		▽C=0	4 PLACES	± --- ± ---	CHECKED BY	DATE				
			3 PLACES	± --- ± ---	BANDURA	5/16/206				
			2 PLACES	± 0.25 ± ---	APPROVED BY	DATE				
			1 PLACE	± --- ± ---	PATEL					
			ANGULAR ±1/2°		MATERIAL NO.		DOCUMENT NO.			
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		SD-45984-102			
			SIZE B	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						
			REV							



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

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

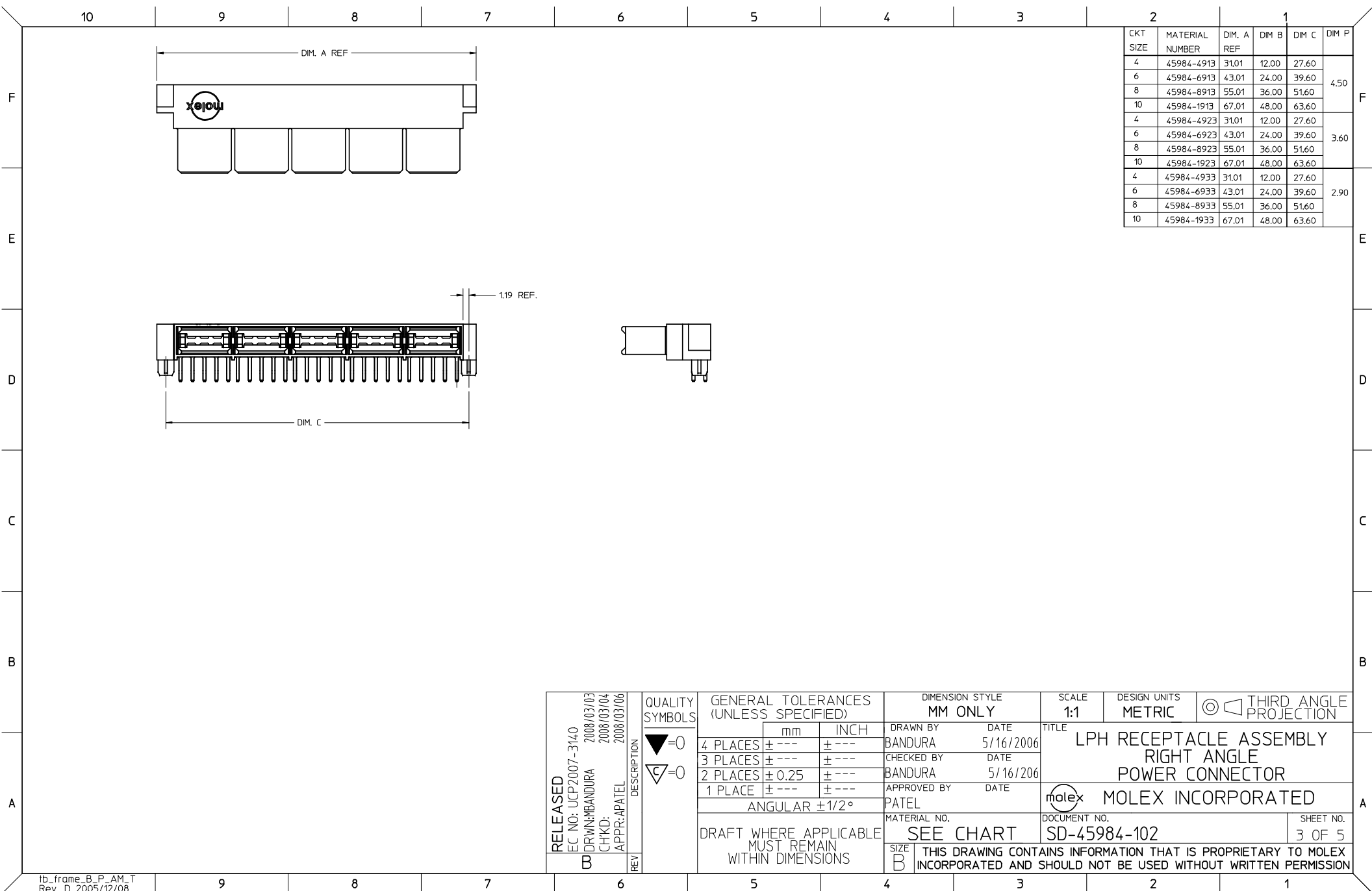
DESCRIPTION
REV

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

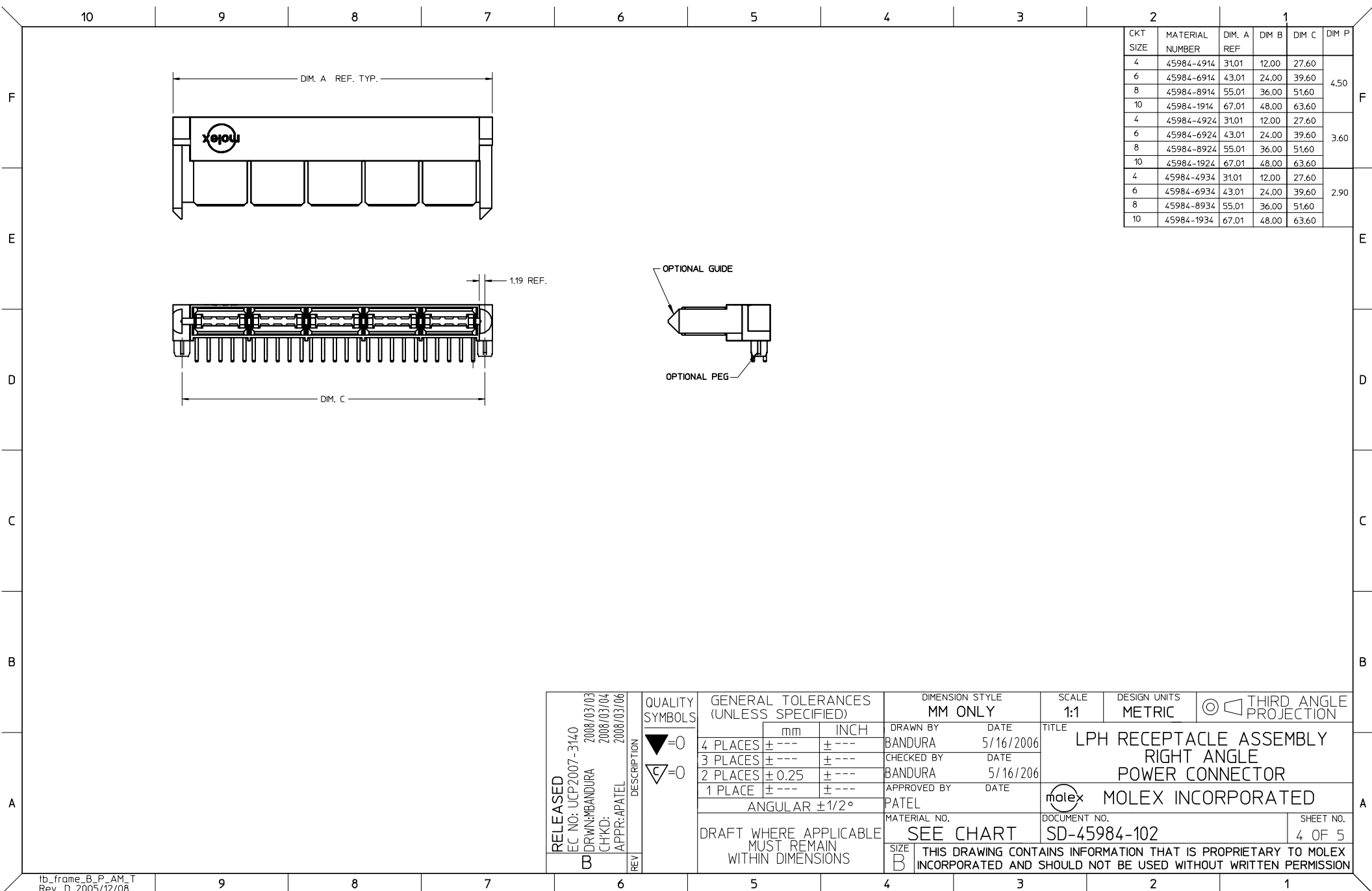
DIMENSION STYLE
MM ONLY
DRAWN BY DATE
BANDURA 5/16/2006
CHECKED BY DATE
BANDURA 5/16/206
APPROVED BY DATE
PATEL
MATERIAL NO.
SEE CHART
SIZE B

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



RELEASED

EC NO: UCP2007-3140

DRWN: BANDURA

CHKD: BANDURA

APPR: APATEL

REV

2008/03/03

2008/03/04

2008/03/06

DESCRIPTION

QUALITY SYMBOLS

$\nabla=0$

$\nabla=0$

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	$\pm$ ---	$\pm$ ---
3 PLACES	$\pm$ ---	$\pm$ ---
2 PLACES	$\pm$ 0.25	$\pm$ ---
1 PLACE	$\pm$ ---	$\pm$ ---

ANGULAR $\pm 1/2^\circ$

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

SCALE

1:1

DESIGN UNITS

METRIC

THIRD ANGLE PROJECTION

RIGHT ANGLE

LPH RECEPTACLE ASSEMBLY

POWER CONNECTOR

molex

MOLEX INCORPORATED

DOCUMENT NO.

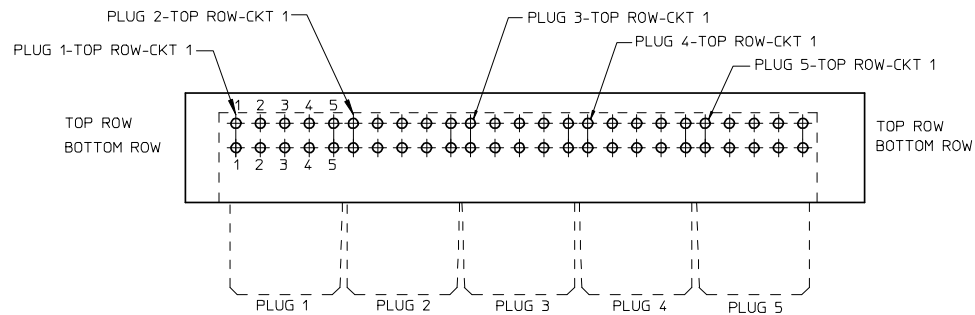
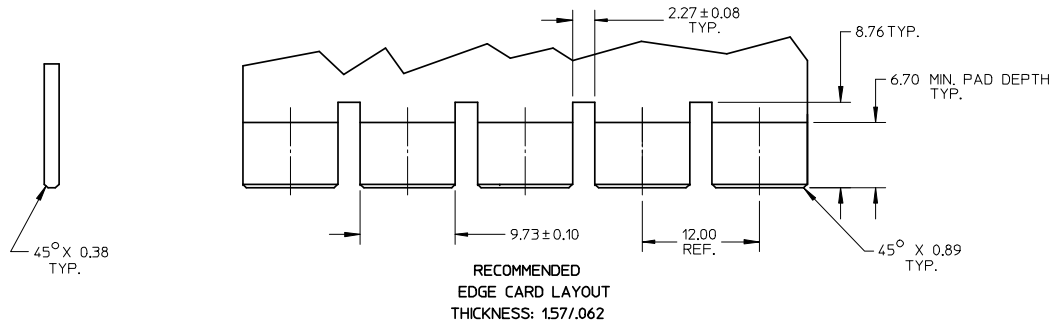
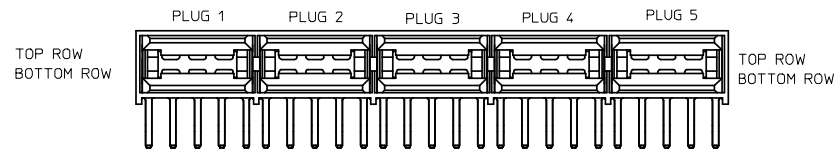
SD-45984-102

SHEET NO.

4 OF 5

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10 9 8 7 6 5 4 3 2 1



PCB LAYOUT: COMPONENT SIDE
SEE SHEET 1 FOR DIMENSIONS

RELEASED EC NO: UCP2007-3140 DRAWN: BANDURA CHKD: CHKD APPR: APATEL REV B	QUALITY SYMBOLS ▽=0 ▽=0	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
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			3 PLACES	± ---	± ---	CHECKED BY	DATE					
			2 PLACES	± 0.25	± ---	BANDURA	5/16/2006	MOLEX INCORPORATED				
			1 PLACE	± ---	± ---	APPROVED BY	DATE					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			ANGULAR ±1/2°		PATEL		molex					
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			SEE CHART		SD-45984-102		5 OF 5					
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9 8 7 6 5 4 3 2 1