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Part Number: [0459851921](#)
Status: **Active**
Overview: [extreme_lphpower](#)
Description: 12.00mm (0.472") Pitch, EXTreme LPHPower™ Header, Right Angle, 10 Power Contacts, Select Gold (Au) Plating, for 2.36mm (.093") Thick PC Board

Documents:

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

Agency Certification

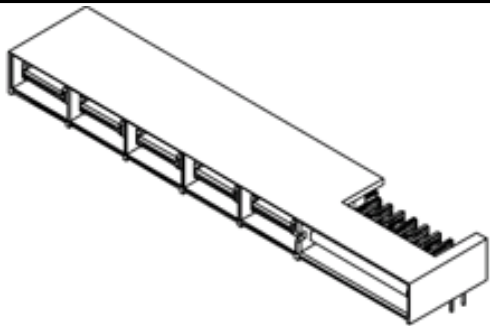
CSA LR19980
TUV 30683046
UL E29179

General

Product Family PCB Headers
Series [45985](#)
Application Board-to-Board
Comments 10 Power Blades
Overview [extreme_lphpower](#)
Product Name EXTreme LPHPower™

Physical

Breakaway No
Circuits (Loaded) 10
Circuits (maximum) 10
Circuits Detail 10 Power, No Signal
Color - Resin Black
Durability (mating cycles max) 250
First Mate / Last Break Yes
Flammability 94V-0
Glow-Wire Compliant No
Guide to Mating Part No
Keying to Mating Part None
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



Series

image - Reference only

EU RoHS
ELV and RoHS
Compliant
REACH SVHC
Not Reviewed
Halogen-Free
Status
Not Reviewed

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

[45985Series](#)

Mates With

[45984](#) EXTreme LPHPower™ PCB Receptacles

Plating min: Termination (µm)	3.75
Polarized to Mating Part	Yes
Polarized to PCB	No
Shrouded	Closed Ends
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	20A
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

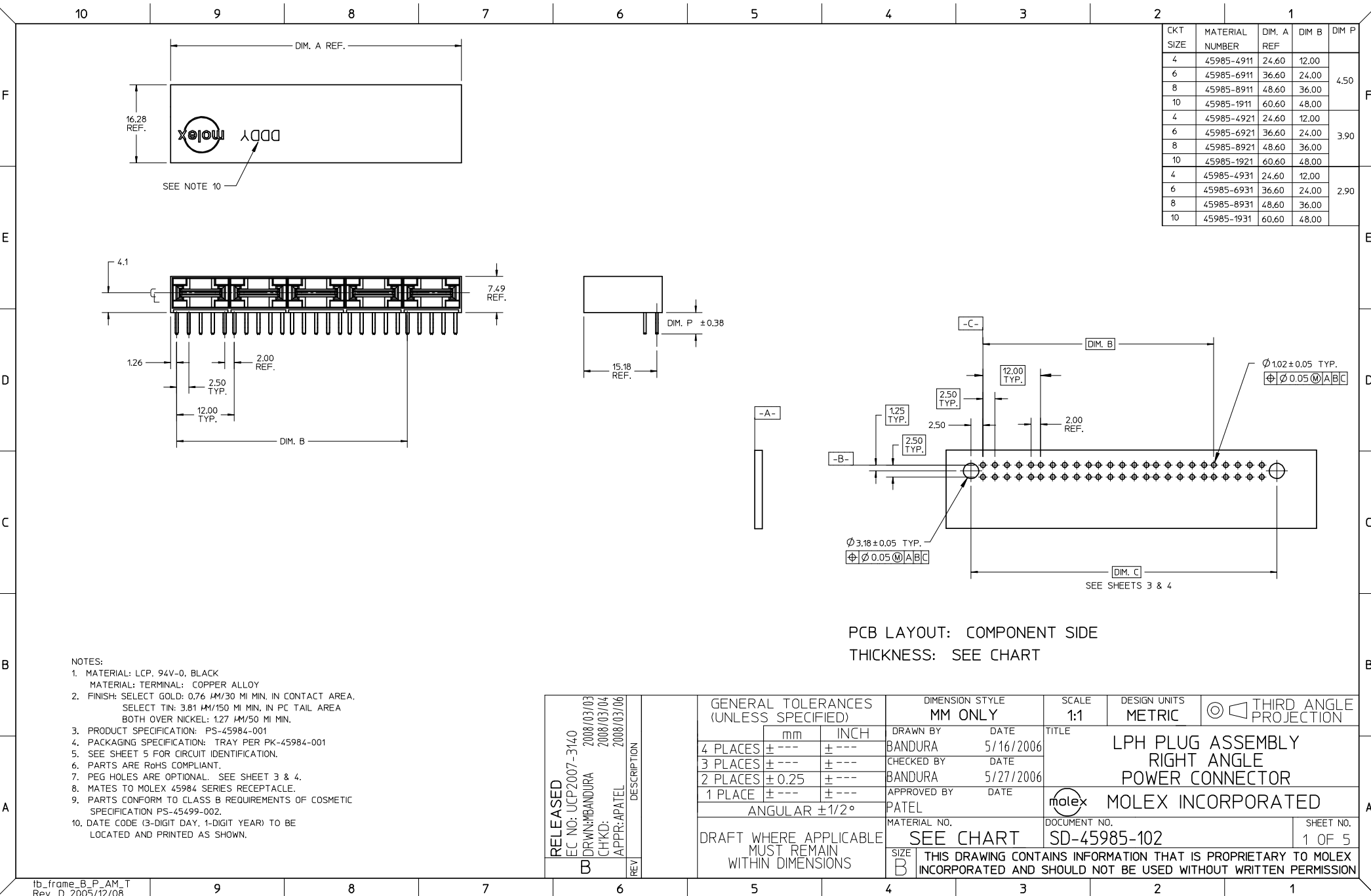
Material Info

Reference - Drawing Numbers

Packaging Specification	PK-45984-001
Product Specification	PS-45984-001
Sales Drawing	SD-45985-102

This document was generated on 05/25/2010

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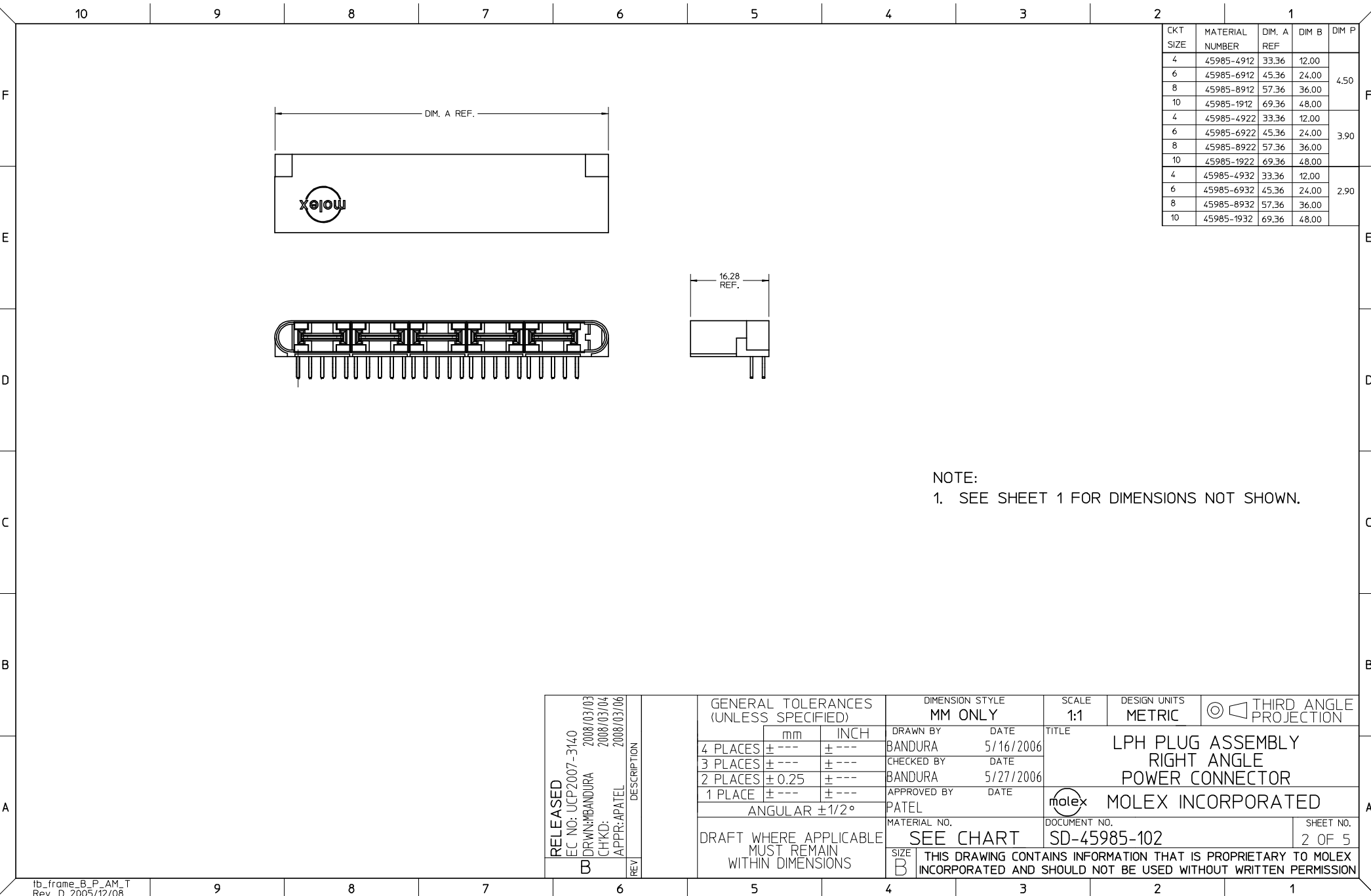


CKT SIZE	MATERIAL NUMBER	DIM. A REF	DIM B	DIM P
4	45985-4911	24.60	12.00	4.50
6	45985-6911	36.60	24.00	
8	45985-8911	48.60	36.00	
10	45985-1911	60.60	48.00	
4	45985-4921	24.60	12.00	3.90
6	45985-6921	36.60	24.00	
8	45985-8921	48.60	36.00	
10	45985-1921	60.60	48.00	
4	45985-4931	24.60	12.00	2.90
6	45985-6931	36.60	24.00	
8	45985-8931	48.60	36.00	
10	45985-1931	60.60	48.00	

- NOTES:
1. MATERIAL: LCP, 94V-0, BLACK
MATERIAL: TERMINAL: COPPER ALLOY
 2. FINISH: SELECT GOLD: 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.
 3. PRODUCT SPECIFICATION: PS-45984-001
 4. PACKAGING SPECIFICATION: TRAY PER PK-45984-001
 5. SEE SHEET 5 FOR CIRCUIT IDENTIFICATION.
 6. PARTS ARE RoHS COMPLIANT.
 7. PEG HOLES ARE OPTIONAL. SEE SHEET 3 & 4.
 8. MATES TO MOLEX 45984 SERIES RECEPTACLE.
 9. PARTS CONFORM TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.
 10. DATE CODE (3-DIGIT DAY, 1-DIGIT YEAR) TO BE LOCATED AND PRINTED AS SHOWN.

PCB LAYOUT: COMPONENT SIDE
THICKNESS: SEE CHART

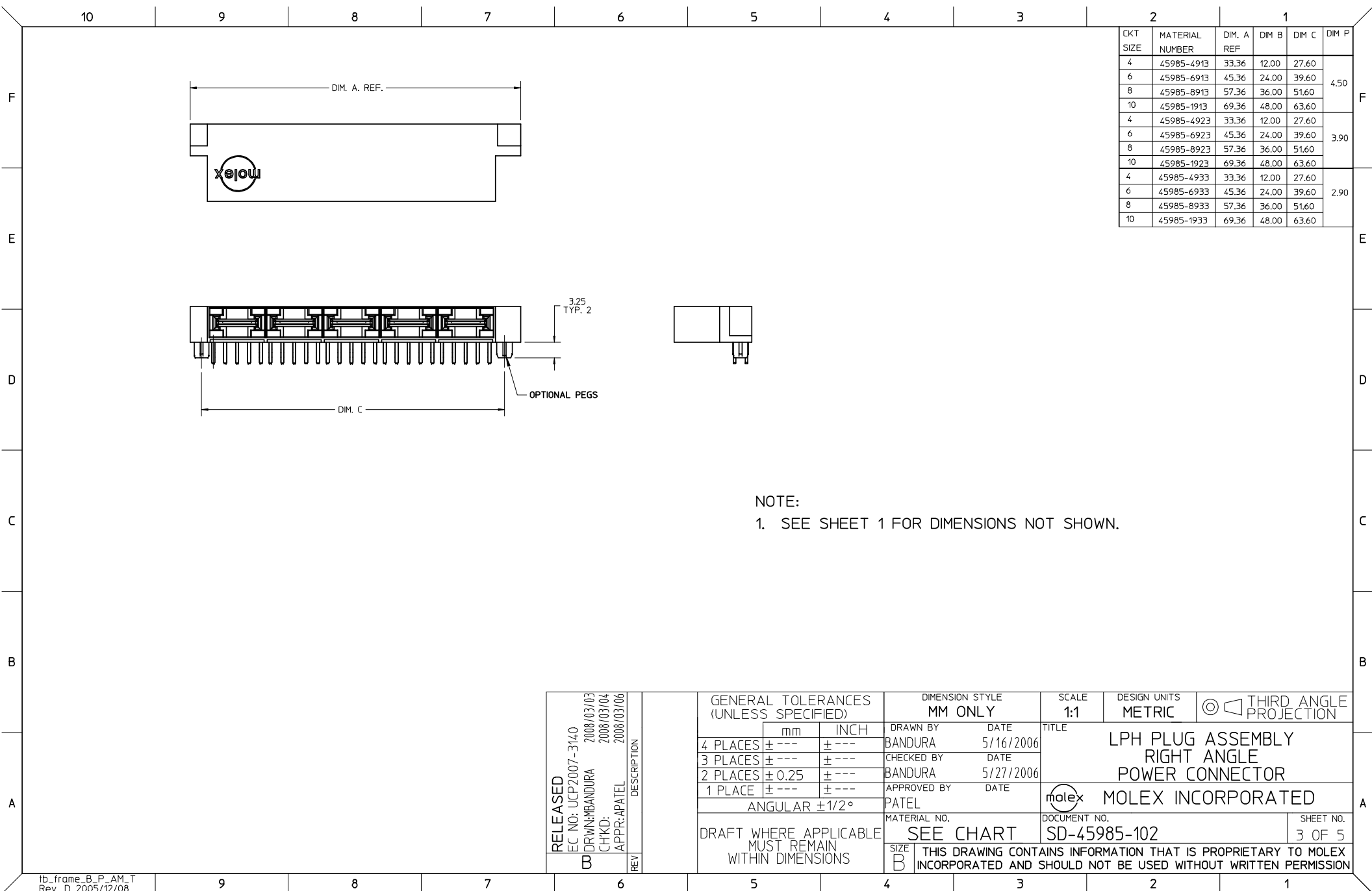
RELEASED EC NO: UCP2007-3140 DRAWN: BANDURA CHKD: APPR: APATEL	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
		mm	INCH	DRAWN BY	DATE	TITLE LPH PLUG ASSEMBLY RIGHT ANGLE POWER CONNECTOR					
		4 PLACES	± ---	± ---	BANDURA						5/16/2006
		3 PLACES	± ---	± ---	CHECKED BY						DATE
		2 PLACES	± 0.25	± ---	BANDURA	5/27/2006	MOLEX INCORPORATED				
		1 PLACE	± ---	± ---	APPROVED BY	DATE					
ANGULAR ±1/2°			PATEL		MOLEX						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NO.		DOCUMENT NO.				SHEET NO.		
			SEE CHART		SD-45985-102				1 OF 5		
B		SIZE B		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							



CKT SIZE	MATERIAL NUMBER	DIM. A REF	DIM B	DIM P
4	45985-4912	33.36	12.00	4.50
6	45985-6912	45.36	24.00	
8	45985-8912	57.36	36.00	
10	45985-1912	69.36	48.00	3.90
4	45985-4922	33.36	12.00	
6	45985-6922	45.36	24.00	
8	45985-8922	57.36	36.00	2.90
10	45985-1922	69.36	48.00	
4	45985-4932	33.36	12.00	
6	45985-6932	45.36	24.00	
8	45985-8932	57.36	36.00	
10	45985-1932	69.36	48.00	

NOTE:
1. SEE SHEET 1 FOR DIMENSIONS NOT SHOWN.

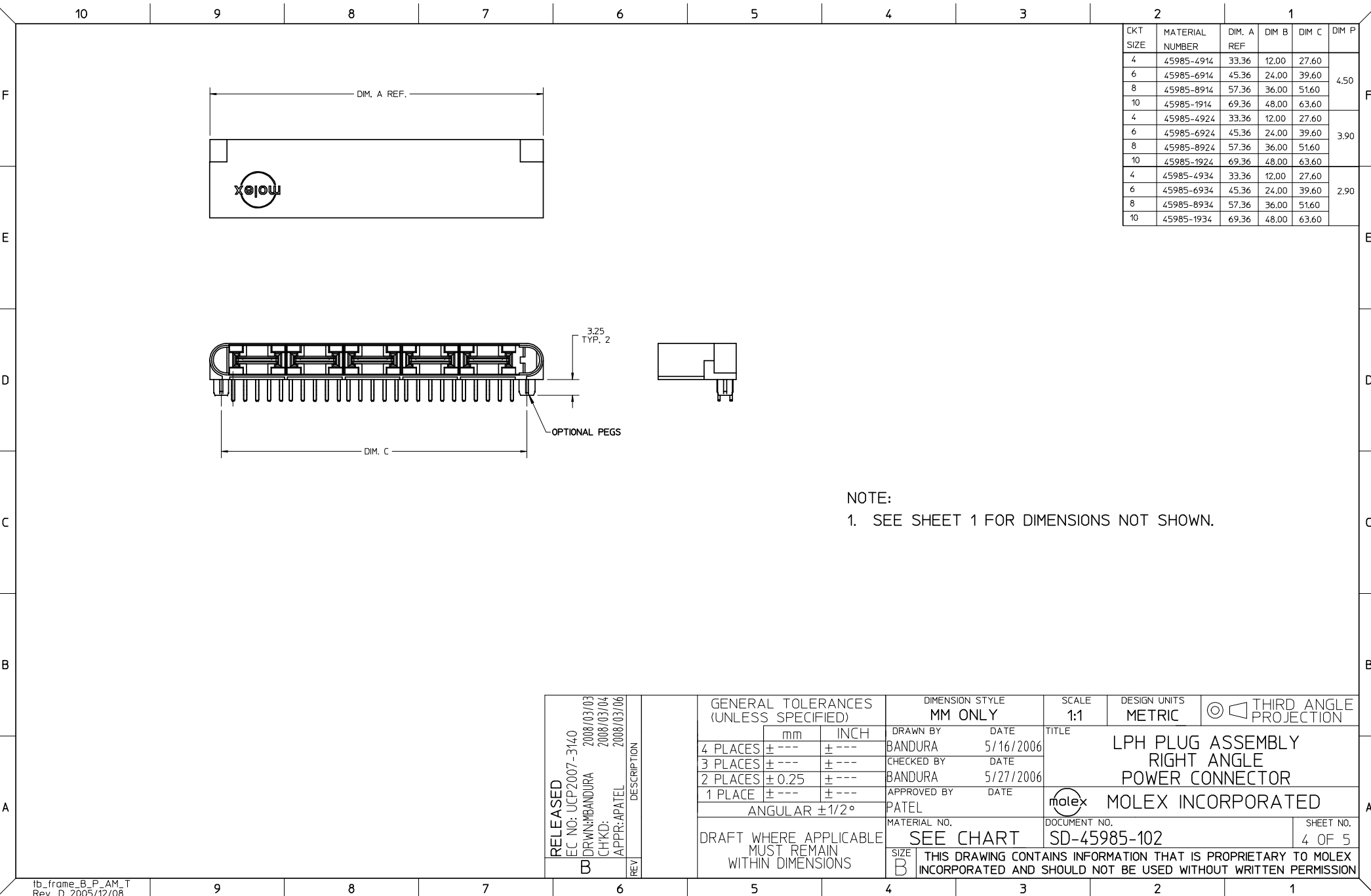
RELEASED EC NO: UCP2007-3140 DRAWN: BANDURA CHKD: BANDURA APPR: APATEL B	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		mm	INCH	DRAWN BY	DATE	TITLE LPH PLUG ASSEMBLY RIGHT ANGLE POWER CONNECTOR			
		4 PLACES ± ---	± ---	BANDURA	5/16/2006				
		3 PLACES ± ---	± ---	CHECKED BY	DATE	MOLEX INCORPORATED			
		2 PLACES ± 0.25	± ---	BANDURA	5/27/2006				
		1 PLACE ± ---	± ---	APPROVED BY	DATE	MOLEX INCORPORATED			
		ANGULAR ±1/2°		PATEL					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		DOCUMENT NO.		SHEET NO.			
		SEE CHART		SD-45985-102		2 OF 5			
		SIZE B	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						



CKT SIZE	MATERIAL NUMBER	DIM. A REF	DIM B	DIM C	DIM P
4	45985-4913	33.36	12.00	27.60	4.50
6	45985-6913	45.36	24.00	39.60	
8	45985-8913	57.36	36.00	51.60	
10	45985-1913	69.36	48.00	63.60	
4	45985-4923	33.36	12.00	27.60	3.90
6	45985-6923	45.36	24.00	39.60	
8	45985-8923	57.36	36.00	51.60	
10	45985-1923	69.36	48.00	63.60	
4	45985-4933	33.36	12.00	27.60	2.90
6	45985-6933	45.36	24.00	39.60	
8	45985-8933	57.36	36.00	51.60	
10	45985-1933	69.36	48.00	63.60	

NOTE:
1. SEE SHEET 1 FOR DIMENSIONS NOT SHOWN.

RELEASED EC NO: UCP2007-3140 DRWN:MBANDURA CHKD: BANDURA APPR:APATEL REV: B	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		mm	INCH	DRAWN BY	DATE	TITLE LPH PLUG ASSEMBLY RIGHT ANGLE POWER CONNECTOR MOLEX INCORPORATED				
		4 PLACES	± ---	± ---	BANDURA				5/16/2006	
		3 PLACES	± ---	± ---	CHECKED BY				DATE	
		2 PLACES	± 0.25	± ---	BANDURA				5/27/2006	
		1 PLACE	± ---	± ---	APPROVED BY				DATE	
ANGULAR ±1/2°				PATEL		MOLEX INCORPORATED				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				MATERIAL NO. SEE CHART		DOCUMENT NO. SD-45985-102		SHEET NO. 3 OF 5		
				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						



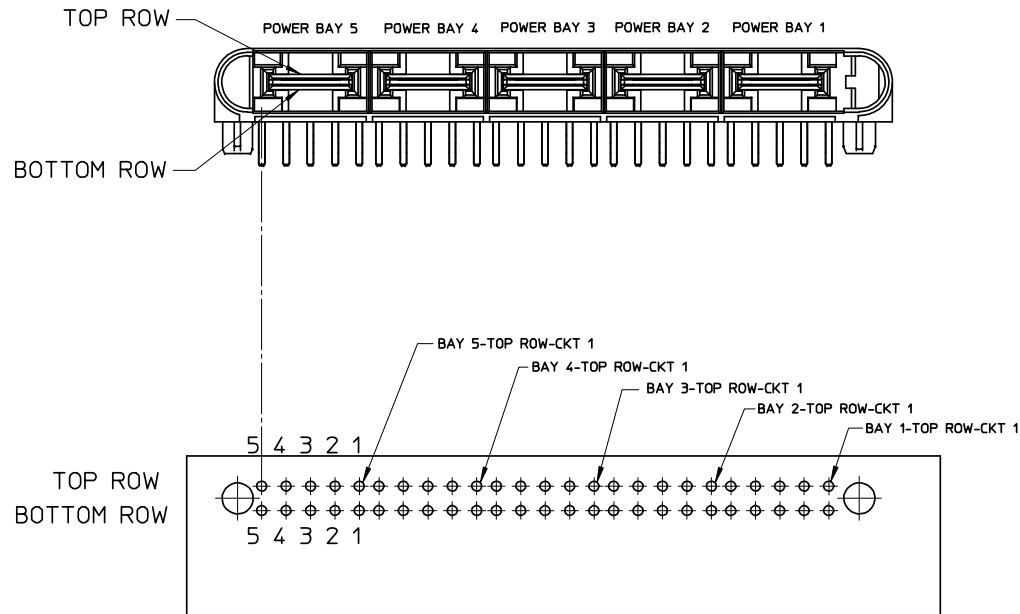
CKT SIZE	MATERIAL NUMBER	DIM. A REF	DIM B	DIM C	DIM P
4	45985-4914	33.36	12.00	27.60	4.50
6	45985-6914	45.36	24.00	39.60	
8	45985-8914	57.36	36.00	51.60	
10	45985-1914	69.36	48.00	63.60	
4	45985-4924	33.36	12.00	27.60	3.90
6	45985-6924	45.36	24.00	39.60	
8	45985-8924	57.36	36.00	51.60	
10	45985-1924	69.36	48.00	63.60	
4	45985-4934	33.36	12.00	27.60	2.90
6	45985-6934	45.36	24.00	39.60	
8	45985-8934	57.36	36.00	51.60	
10	45985-1934	69.36	48.00	63.60	

NOTE:
1. SEE SHEET 1 FOR DIMENSIONS NOT SHOWN.

RELEASED EC NO: UCP2007-3140 DRAWN: BANDURA CHKD: BANDURA APPR: APATEL	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		mm	INCH	DRAWN BY	DATE	TITLE LPH PLUG ASSEMBLY RIGHT ANGLE POWER CONNECTOR			
		4 PLACES ± ---	± ---	BANDURA	5/16/2006				
		3 PLACES ± ---	± ---	CHECKED BY	DATE				
		2 PLACES ± 0.25	± ---	BANDURA	5/27/2006	MOLEX INCORPORATED			
		1 PLACE ± ---	± ---	APPROVED BY	DATE				
ANGULAR ±1/2°		PATEL		MOLEX INCORPORATED					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		DOCUMENT NO.				SHEET NO.	
		SEE CHART		SD-45985-102				4 OF 5	
B	REV	SIZE B	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

10 9 8 7 6 5 4 3 2 1

CIRCUIT IDENTIFICATION



PCB LAYOUT: COMPONENT SIDE

RELEASED EC NO: UCP2007-3140 DRAWN: BANDURA CHKD: BANDURA APPR: APATEL REV: B	DESCRIPTION 2008/03/03 2008/03/04 2008/03/06	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
				DRAWN BY BANDURA	DATE 5/16/2006	TITLE LPH PLUG ASSEMBLY RIGHT ANGLE POWER CONNECTOR			
				CHECKED BY BANDURA	DATE 5/27/2006				
				APPROVED BY PATEL	DATE	MOLEX INCORPORATED			
				MATERIAL NO.					
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		DOCUMENT NO. SD-45985-102			SHEET NO. 5 OF 5
		SIZE B		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

9 8 7 6 5 4 3 2 1