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Part Number: [0459851911](#)
Status: **Active**
Overview: [extreme_lphpower](#)
Description: 12.00mm (0.472") Pitch, EXTreme LPHPower™ Header, Right Angle, 10 Power Contacts, Select Gold (Au) Plating, for 3.18mm (.125") Thick PC Board

Documents:

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

Agency Certification

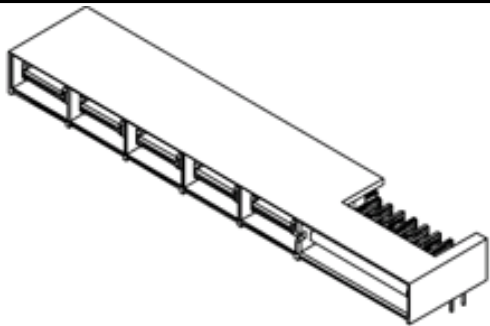
CSA	LR19980
TUV	30683046
UL	E29179

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)	0.177 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



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

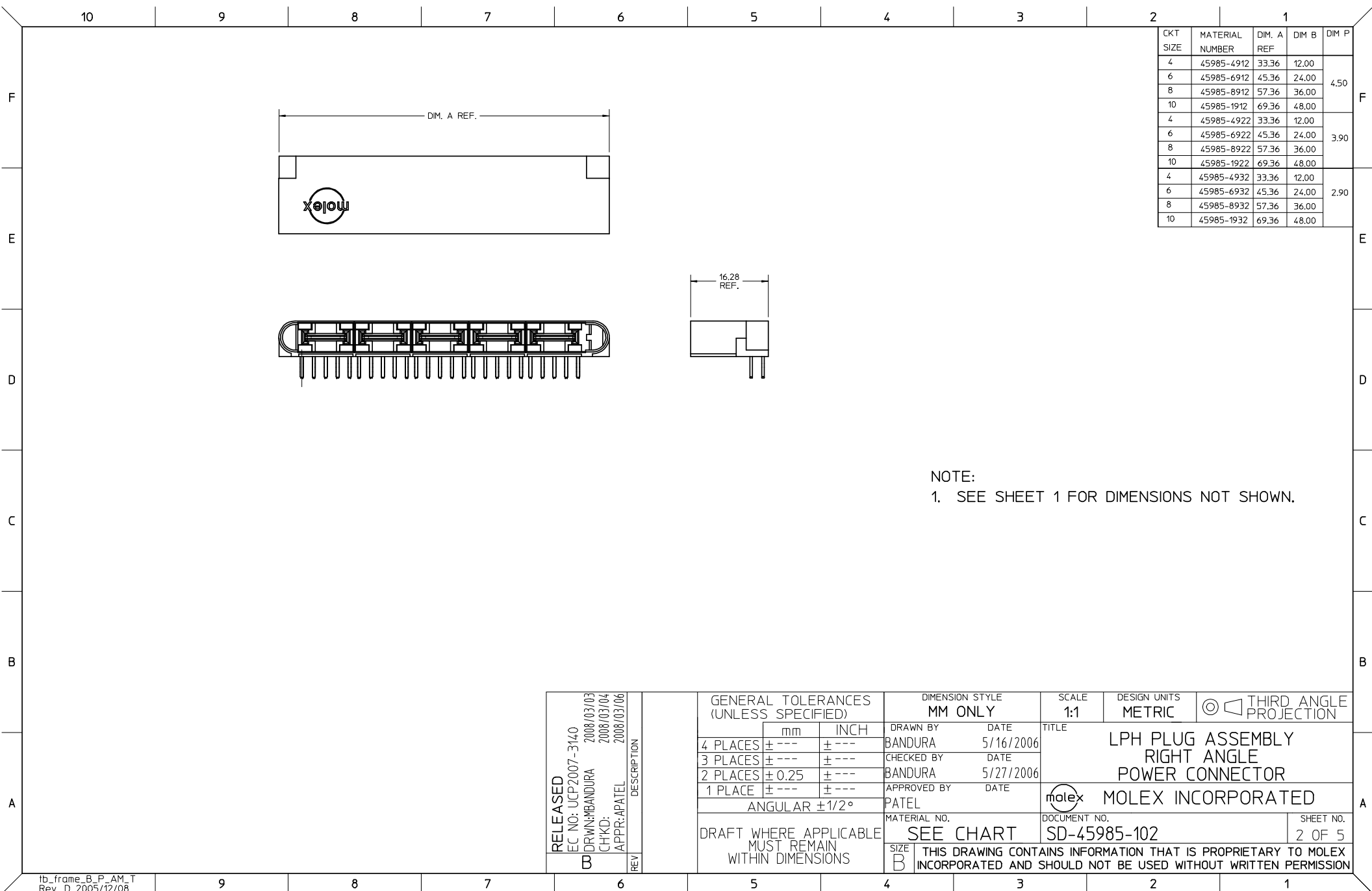
Duration at Max. Process Temperature (seconds)	15
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	230

Material Info

Reference - Drawing Numbers

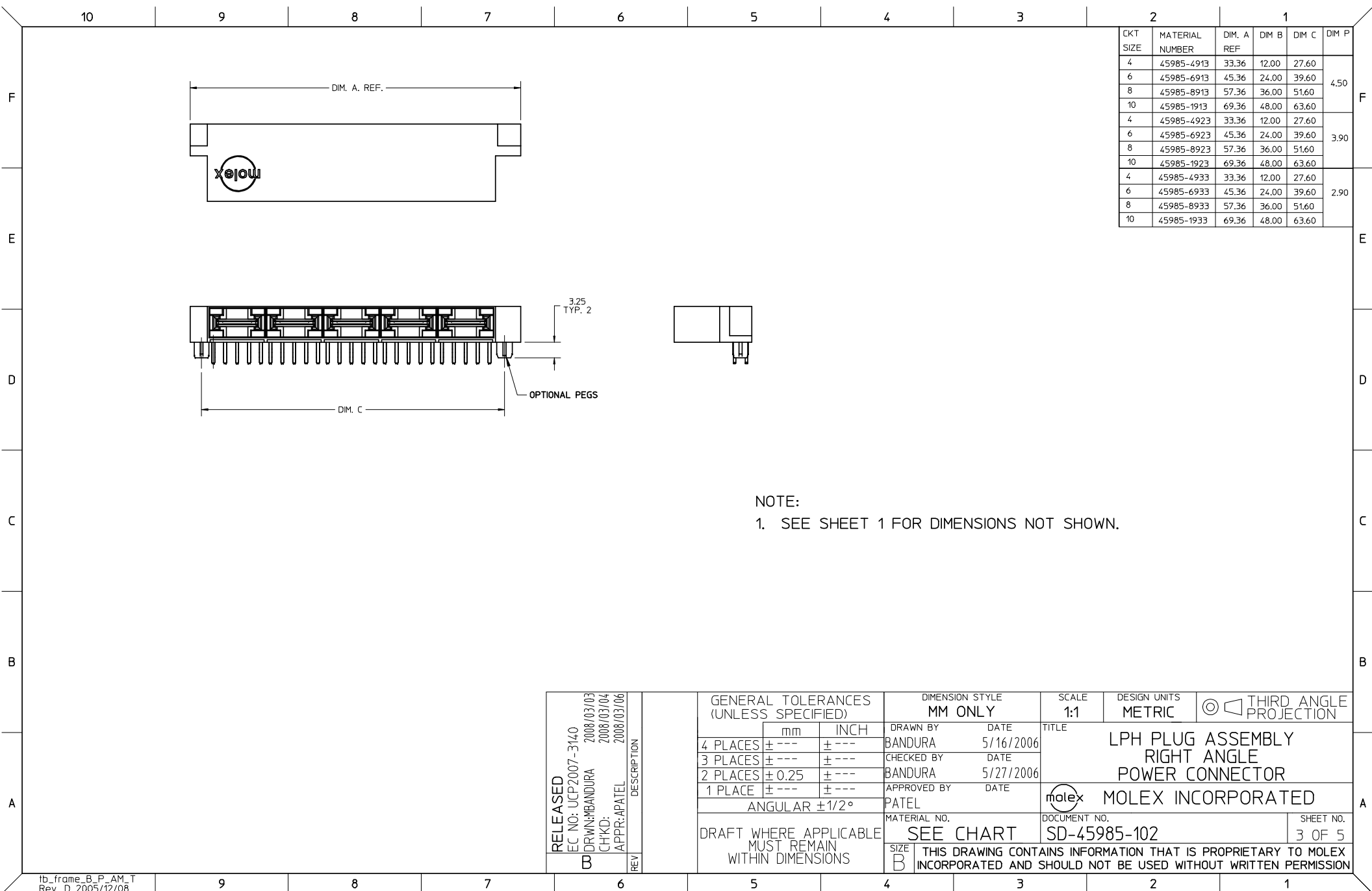
Packaging Specification	PK-45984-001
Product Specification	PS-45984-001
Sales Drawing	SD-45985-102

This document was generated on 05/25/2010
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NOTE:
1. SEE SHEET 1 FOR DIMENSIONS NOT SHOWN.

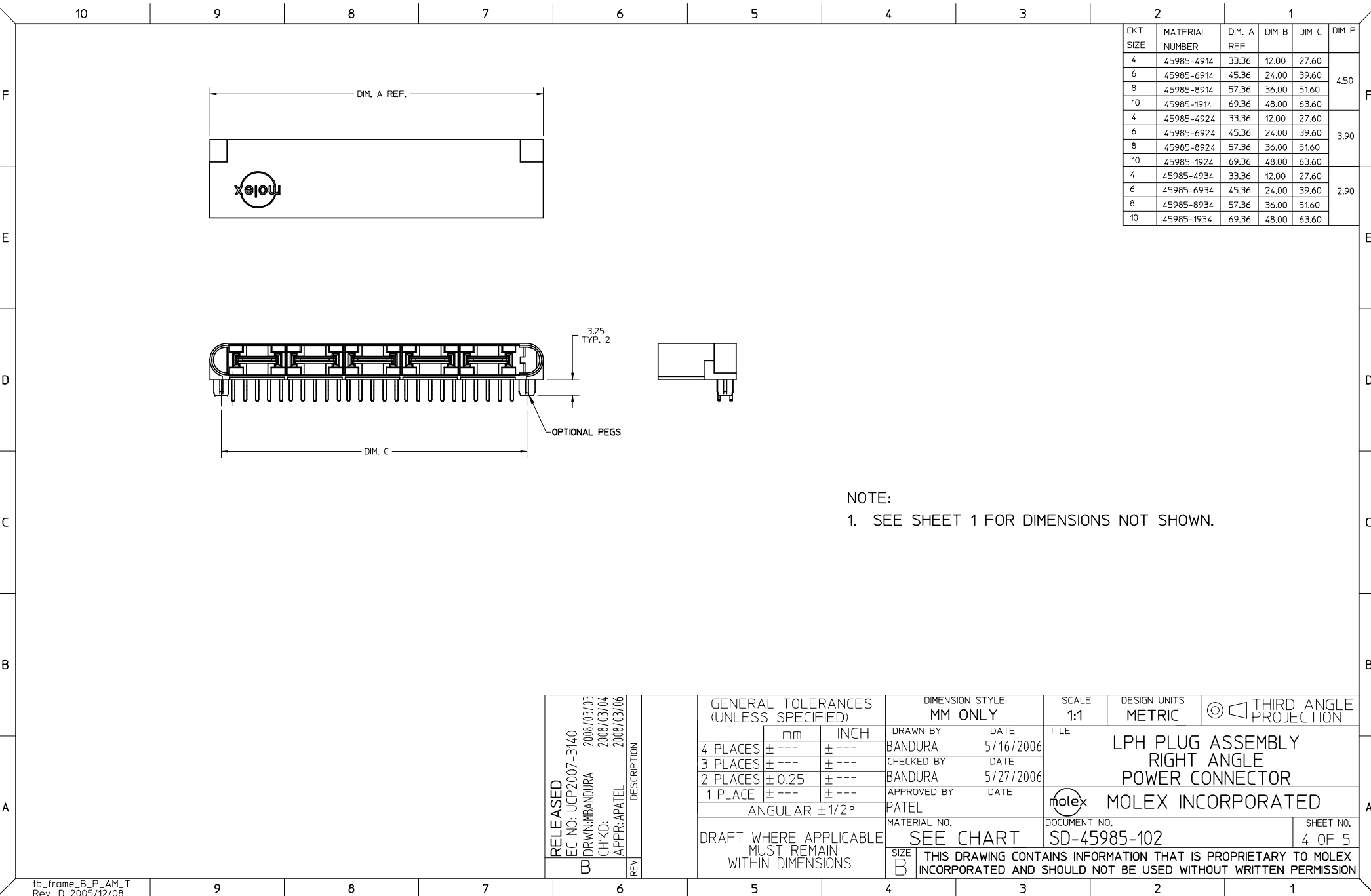
RELEASED EC NO: UCP2007-3140 DRAWN: BANDURA CHKD: BANDURA APPR: APATEL B	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		mm	INCH	DRAWN BY	DATE	TITLE LPH PLUG ASSEMBLY RIGHT ANGLE POWER CONNECTOR			
		4 PLACES ± ---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



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 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	MATERIAL NO. SEE CHART				
ANGULAR ± 1/2°		PATEL		DOCUMENT NO. SD-45985-102						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE B							SHEET NO. 4 OF 5	
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								

The diagram illustrates the 100-pin connector from two perspectives. The top view shows the connector with five power bays labeled POWER BAY 5, POWER BAY 4, POWER BAY 3, POWER BAY 2, and POWER BAY 1. The bottom view shows the pin layout with two rows: TOP ROW and BOTTOM ROW. The TOP ROW has 50 pins, and the BOTTOM ROW has 50 pins. The pins are numbered 1 to 50 from left to right in both rows. The diagram also shows the internal structure of the connector, including the power bays and the pin connections.

RELEASED EC NO: UCP2007-3140 2008/03/03 2008/03/04 2008/03/06 DRAWN: BANDURA CHKD: DRWIN 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 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		DOCUMENT NO.		SHEET NO.
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NO.		SD-45985-102		5 OF 5
					SEE CHART				
					THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				