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Part Number: [0459841311](#)
Status: **Active**
Overview: [extreme_lphpower](#)
Description: 1.27mm (.050"), 12.00mm (.472") Pitch, EXTreme LPHPower™ Receptacle Header, Right Angle, 10 Power Contacts, 12 Signal Contacts, Select Gold (Au) Plating, for 3.18mm (.125") Thick PC Board, with Press-fit Plastic Pegs

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

Agency Certification

CSA LR 19980
UL E29179

General

Product Family PCB Receptacles
Series [45984](#)
Application Board-to-Board
Overview [extreme_lphpower](#)
Product Name EXTreme LPHPower™

Physical

Circuits (Loaded) 22
Circuits (maximum) 22
Circuits Detail 10 Power, 12 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), Phosphor Bronze
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 Yes
PCB Retention Yes
PCB Thickness Recommended (in) 0.125 In
PCB Thickness Recommended (mm) 3.18 mm
Packaging Type Tray
Pitch - Mating Interface (in) 0.050 In, 0.472 In
Pitch - Mating Interface (mm) 1.27 mm, 12.00 mm
Plating min: Mating (µin) 30
Plating min: Mating (µm) 0.75
Plating min: Termination (µin) 150, 75
Plating min: Termination (µm) 1.875, 3.75
Polarized to Mating Part Yes
Polarized to PCB Yes
Stackable No
Surface Mount Compatible (SMC) Yes

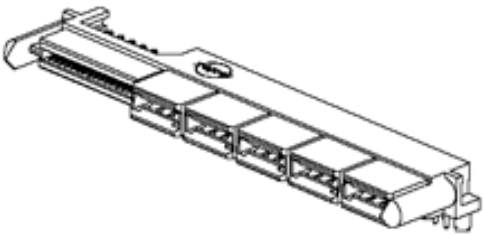


image - Reference only

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
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, 1.57mm (.062") Card Edge

Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole
Electrical	
Current - Maximum per Contact	20A
Grounding to PCB	No
Voltage - Maximum	250V AC (RMS)/DC

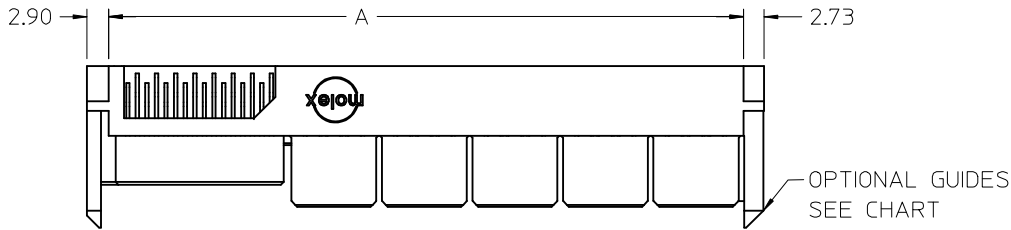
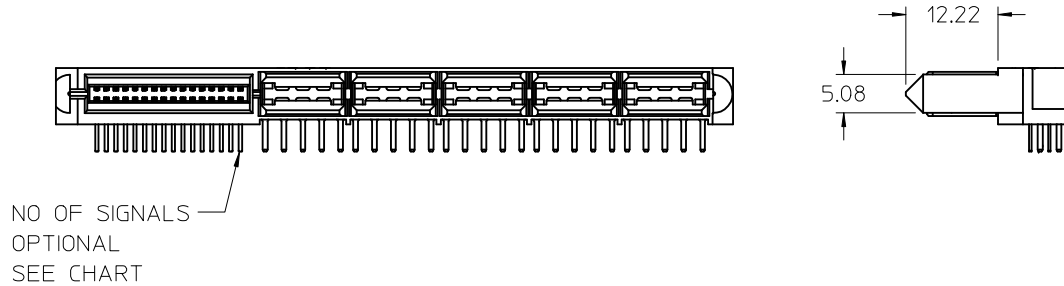
Solder Process Data	
Duration at Max. Process Temperature (seconds)	20
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	260

Material Info

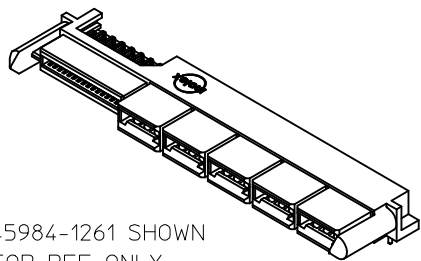
Reference - Drawing Numbers	
Packaging Specification	PK-45984-001
Product Specification	PS-45984-001
Sales Drawing	SD-45984-100

This document was generated on 05/21/2010

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GUIDE POST OPTIONS



45984-1261 SHOWN
FOR REF ONLY
SEE CHART

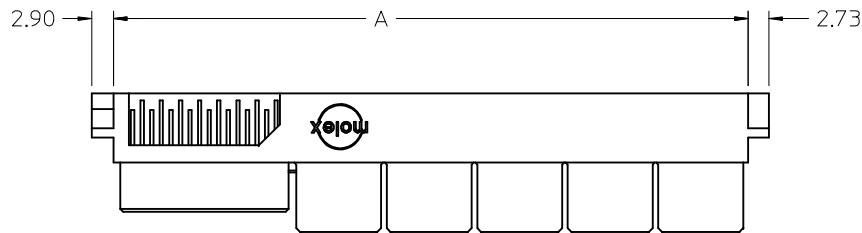
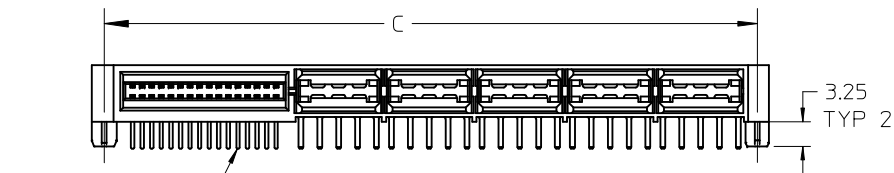
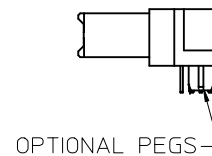
REVISED	EC NO: UCP2009-0971	DRWN:MBANDURA	CHKD:	APPR:APATEL	DESCRIPTION
	2008/11/13	2008/11/14	2008/11/17		
REV					

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		

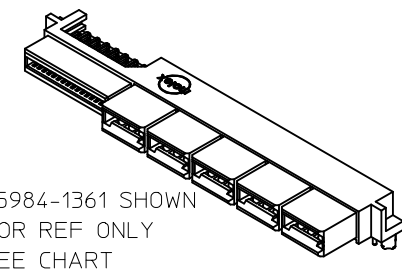
DIMENSION STYLE MM ONLY	
DRAWN BY	DATE
SAMIEC	2005/05/13
CHECKED BY	DATE
SAMIEC	2005/05/13
APPROVED BY	DATE
MARGULIS	2005/05/13
MATERIAL NO.	SEE CHART
SIZE	A

SCALE 1:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION
TITLE LPH RECEPTACLE ASSEMBLY RT ANGLE 10 CIRCUIT POWER CONNECTOR		
 MOLEX INCORPORATED		
DOCUMENT NO. SD-45984-100		SHEET NO. 2 OF 5
AINS INFORMATION THAT IS PROPRIETARY TO MOLEX SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

NO OF SIGNAL	MATERIAL NUMBER	DIM A	DIM P	PCB THK
12	45984-1211	71.5	4.50	3.18
16	45984-1221	74.0		
20	45984-1231	76.6		
24	45984-1241	79.1		
28	45984-1251	81.6		
32	45984-1261	84.2		
36	45984-1271	86.7	3.60	2.36
40	45984-1281	89.3		
12	45984-1212	71.5		
16	45984-1222	74.0		
20	45984-1232	76.6		
24	45984-1242	79.1		
28	45984-1252	81.6		
32	45984-1262	84.2	2.90	1.57
36	45984-1272	86.7		
40	45984-1282	89.3		
12	45984-1213	71.5		
16	45984-1223	74.0		
20	45984-1233	76.6		
24	45984-1243	79.1		
28	45984-1253	81.6		
32	45984-1263	84.2		
36	45984-1273	86.7		
40	45984-1283	89.3		



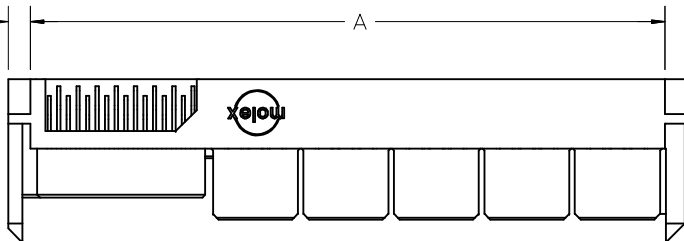
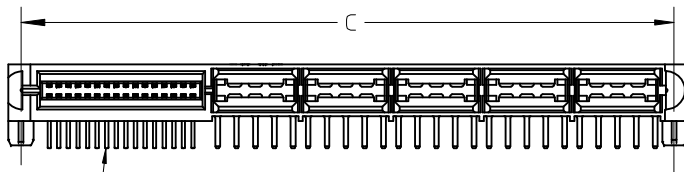
MOUNTING PEG OPTIONS



NO OF SIGNAL	MATERIAL NUMBER	DIM A	DIM C	DIM P	PCB THK
12	45984-1311	71.5	73.90	4.50	3.18
16	45984-1321	74.0	76.44		
20	45984-1331	76.6	78.98		
24	45984-1341	79.1	81.52		
28	45984-1351	81.6	84.06		
32	45984-1361	84.2	86.60		
36	45984-1371	86.7	89.14		
40	45984-1381	89.3	91.68		
12	45984-1312	71.5	73.90	3.60	2.36
16	45984-1322	74.0	76.44		
20	45984-1332	76.6	78.98		
24	45984-1342	79.1	81.52		
28	45984-1352	81.6	84.06		
32	45984-1362	84.2	86.60		
36	45984-1372	86.7	89.14		
40	45984-1382	89.3	91.68		
12	45984-1313	71.5	73.90	2.90	1.57
16	45984-1323	74.0	76.44		
20	45984-1333	76.6	78.98		
24	45984-1343	79.1	81.52		
28	45984-1353	81.6	84.06		
32	45984-1363	84.2	86.60		
36	45984-1373	86.7	89.14		
40	45984-1383	89.3	91.68		

REVISED EC NO: UCP2009-0971 DRWN:MBANDURA CHKD: APPR:APATEL REV	DESCRIPTION 2008/11/13 2008/11/14 2008/11/17	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY DATE		TITLE				
		4 PLACES	± ---	± ---	SAMIEC 2005/05/13		LPH RECEPTACLE ASSEMBLY RT ANGLE 10 CIRCUIT POWER CONNECTOR				
		3 PLACES	± ---	± ---	CHECKED BY DATE						
		2 PLACES	± 0.25	± ---	SAMIEC 2005/05/13		MOLEX INCORPORATED				
		1 PLACE	± ---	± ---	APPROVED BY DATE						
		ANGULAR ±1/2°			MARGULIS 2005/05/13		molex				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NO. SEE CHART		DOCUMENT NO. SD-45984-100				
SIZE A	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										

2.90 A 2.73



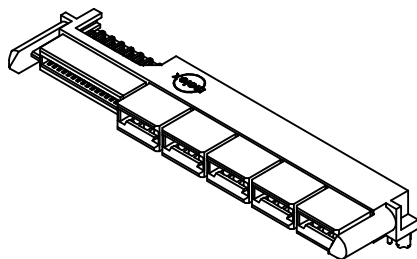
NO OF SIGNALS
OPTIONAL
SEE CHART

OPTIONAL GUIDES

OPTIONAL PEGS

GUIDE POST & MOUNTING PEG OPTIONS

NO OF SIGNAL	MATERIAL NUMBER	DIM A	DIM C	DIM P	PCB THK
12	45984-1411	71.5	73.90	4.50	3.18
16	45984-1421	74.0	76.44		
20	45984-1431	76.6	78.98		
24	45984-1441	79.1	81.52		
28	45984-1451	81.6	84.06		
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12	45984-1412	71.5	73.90		
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16	45984-1423	74.0	76.44		
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28	45984-1453	81.6	84.06		
32	45984-1463	84.2	86.60		
36	45984-1473	86.7	89.14		
40	45984-1483	89.3	91.68		



45984-1461 SHOWN
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REVISED	EC NO:	UCP2009-0971	2008/11/13	DRWN:MBANDURA	2008/11/14	CHKD:	2008/11/17	APPR:APATEL	2008/11/17	DESCRIPTION
1										

GENERAL TOLERANCES
(UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.25	± ---
1 PLACE	± ---	± ---

ANGULAR $\pm 1/2^\circ$

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

DIMENSION STYLE
MM ONLY

DRAWN BY	DATE
SAMIEC	2005/05/13
CHECKED BY	DATE
SAMIEC	2005/05/13
APPROVED BY	DATE
MARGULIS	2005/05/13

MATERIAL NO.
SEE CHART

SIZE
A

SCALE
1:1

DESIGN UNITS
METRIC

THIRD ANGLE
PROJECTION

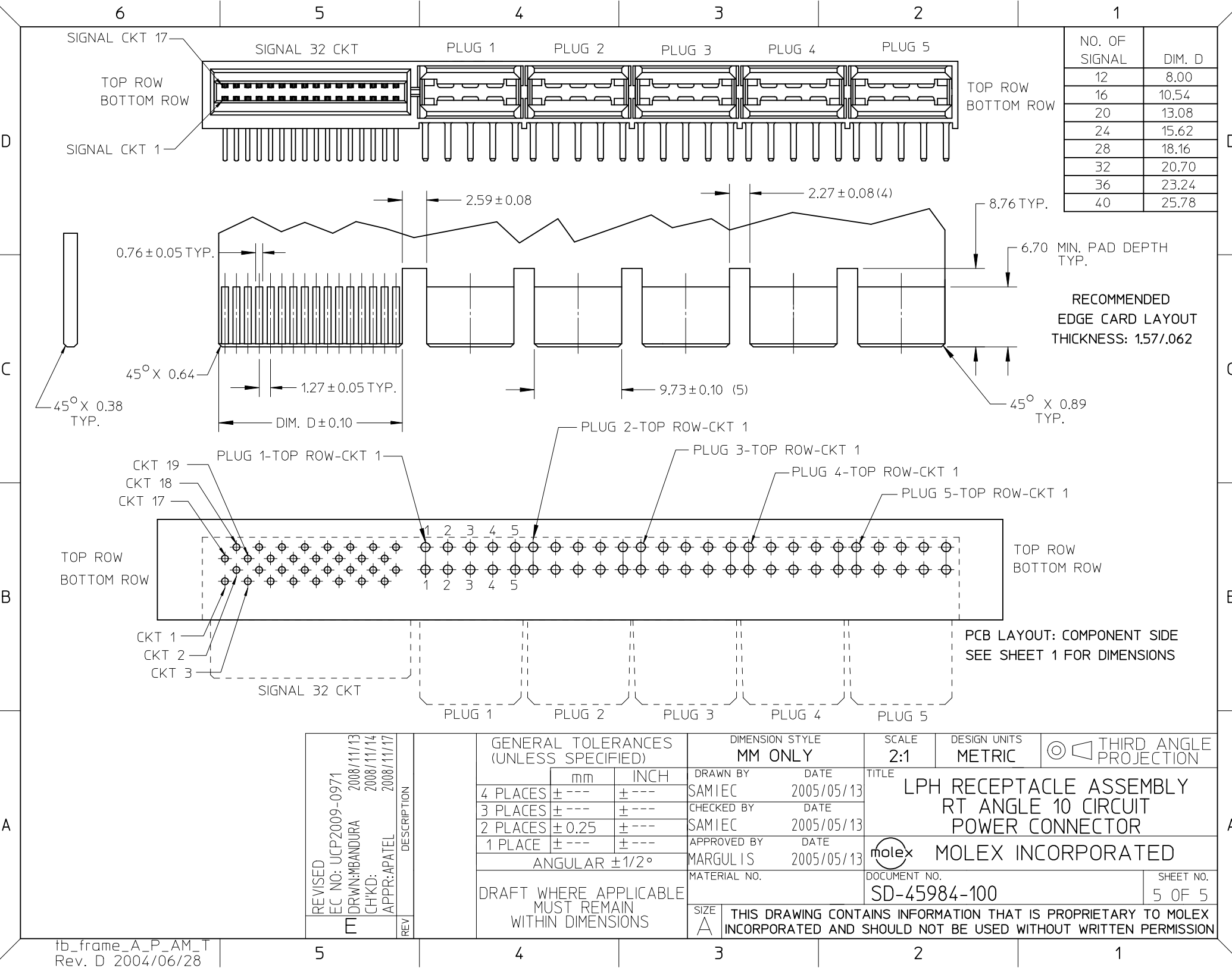
TITLE
LPH RECEPTACLE ASSEMBLY
RT ANGLE 10 CIRCUIT
POWER CONNECTOR

MOLEX INCORPORATED

DOCUMENT NO.
SD-45984-100

SHEET NO.
4 OF 5

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NO. OF SIGNAL	DIM. D
12	8.00
16	10.54
20	13.08
24	15.62
28	18.16
32	20.70
36	23.24
40	25.78

REVISED	EC NO: UCP2009-0971	2008/11/13	2008/11/14	2008/11/17	DESCRIPTION
	DRWN:MBANDURA		CHKD:	APPR:APATEL	
					REV

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
SAMIEC	2005/05/13
CHECKED BY	DATE
SAMIEC	2005/05/13
APPROVED BY	DATE
MARGULIS	2005/05/13
MATERIAL NO.	
SIZE	
A	

SCALE 2:1	DESIGN UNITS METRIC		THIRD ANGLE PROJECTION
TITLE LPH RECEPTACLE ASSEMBLY RT ANGLE 10 CIRCUIT POWER CONNECTOR			
 MOLEX INCORPORATED			
DOCUMENT NO. SD-45984-100			SHEET NO. 5 OF 5
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