

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0459844311

Status:

Active

Overview:

extreme_lphpower

Description:

1.27mm (.050"), 12.00mm (.472") Pitch, EXTreme LPHPower™ Receptacle Header, Right Angle, 4 Power Contacts, 12 Signal Contacts, Select Gold (Au) Plating, for 3.18mm (.125") Thick PC Board, with Press-fit Plastic Pegs

Documents:

3D Model

Drawing (PDF)

Product Specification PS-45984-001 (PDF)

RoHS Certificate of Compliance (PDF)

Agency Certification

CSA

LR19980

UL

E29179

General

Product Family

Series

Application

Overview

Product Name

PCB Receptacles

45984

Board-to-Board

extreme_lphpower

EXTreme LPHPower™

Physical

Circuits (Loaded)

Circuits (maximum)

Circuits Detail

Color - Resin

Durability (mating cycles max)

Flammability

Glow-Wire Compliant

Guide to Mating Part

Keying to Mating Part

Lock to Mating Part

Material - Metal

Material - Plating Mating

Material - Plating Termination

Material - Resin

Number of Rows

Orientation

PC Tail Length (in)

PC Tail Length (mm)

PCB Locator

PCB Retention

PCB Thickness Recommended (in)

PCB Thickness Recommended (mm)

Packaging Type

Pitch - Mating Interface (in)

Pitch - Mating Interface (mm)

Plating min: Mating (µin)

Plating min: Mating (µm)

Plating min: Termination (µin)

Plating min: Termination (µm)

Polarized to Mating Part

Polarized to PCB

Stackable

Surface Mount Compatible (SMC)

16

16

4 Power, 12 Signal

Black

250

94V-0

No

No

Yes

No

High Performance Alloy (HPA), Phosphor Bronze

Gold

Tin

High Temperature Thermoplastic

2

Right Angle

0.177 In

4.50 mm

Yes

Yes

0.125 In

3.18 mm

Tray

0.050 In, 0.472 In

1.27 mm, 12.00 mm

30

0.75

150, 75

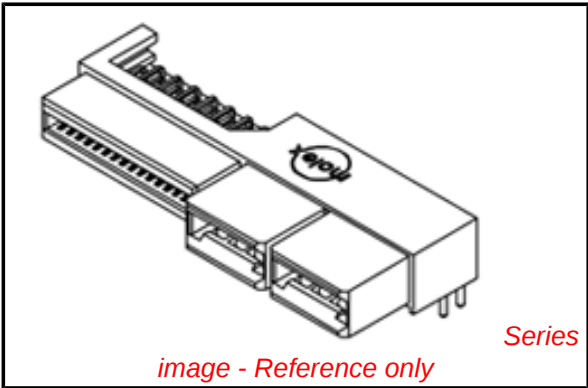
1.875, 3.75

Yes

Yes

No

Yes



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	30A
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-45984-400

This document was generated on 05/27/2010

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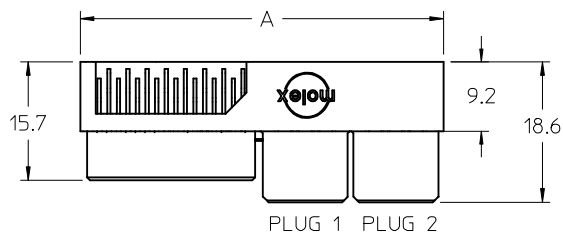
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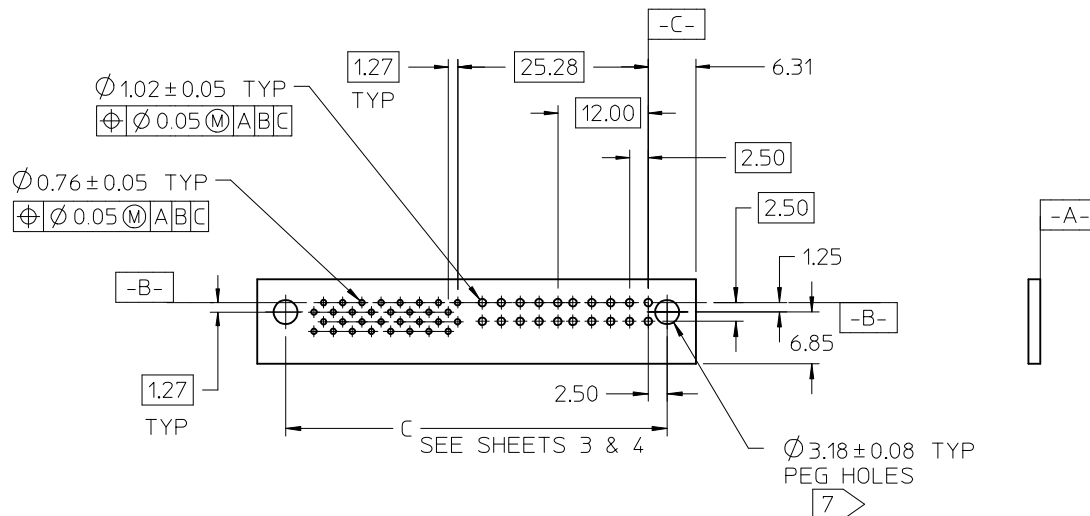
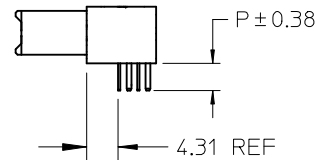
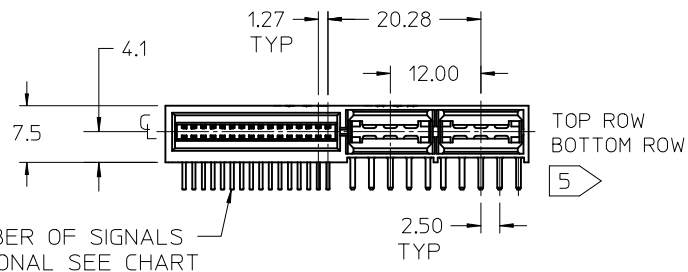
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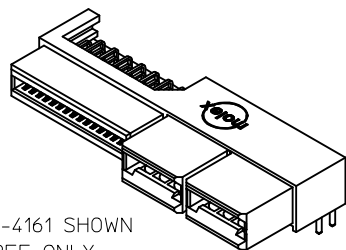


NOTES:

1. MATERIAL HOUSING: LCP, 94V-0, COLOR-BLACK.
CONTACT: COPPER ALLOY.
2. FINISH: SELECT GOLD - .76 μ M/30 MI MIN. CONTACT AREA.
SELECT TIN - 3.81 μ M/150 MI MIN. TAIL AREA.
BOTH OVER NICKEL - 1.27 μ M/50 MI MIN.
3. POWER TERMINALS ARE LUBRICATED IN CONTACT AREA.
3. PRODUCT SPECIFICATION: PS-45984-001.
4. PACKAGING: 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 AND 4.
8. MATES TO 1577.062 CARD EDGE OR MOLEX P/N 45985-4***.



RECOMMENDED PCB LAYOUT: COMPONENT SIDE
PEG HOLES OPTIONAL



45984-4161 SHOWN
FOR REF ONLY
SEE CHART

REVISED	EC NO:	UCP2009-0971	2008/11/13	DRWN:MBANDURA	2008/11/14	CHKD:	2008/11/14	APPR:APATEL	2008/11/17	DESCRIPTION	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 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
TITLE LPH RECEPTACLE ASSEMBLY RT ANGLE 4 CIRCUIT POWER CONNECTOR		
MOLEX INCORPORATED		
DOCUMENT NO. SD-45984-400		SHEET NO. 1 OF 5
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

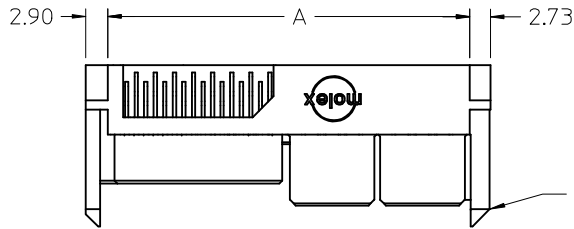
NO OF SIGNAL	MATERIAL NUMBER	DIM A REF	DIM P	PCB THK
12	45984-4111	35.5	4.50	3.18
16	45984-4121	38.0		
20	45984-4131	40.6		
24	45984-4141	43.1		
28	45984-4151	45.6		
32	45984-4161	48.2		
36	45984-4171	50.7	3.60	2.36
40	45984-4181	53.3		
12	45984-4112	35.5		
16	45984-4122	38.0		
20	45984-4132	40.6		
24	45984-4142	43.1		
28	45984-4152	45.6		
32	45984-4162	48.2	2.90	1.57
36	45984-4172	50.7		
40	45984-4182	53.3		
12	45984-4113	35.5		
16	45984-4123	38.0		
20	45984-4133	40.6		
24	45984-4143	43.1		
28	45984-4153	45.6		
32	45984-4163	48.2		
36	45984-4173	50.7		
40	45984-4183	53.3		

D

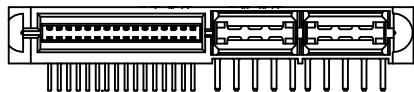
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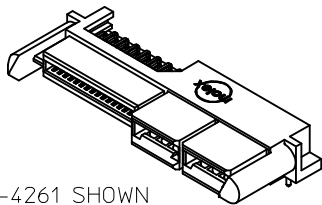
OPTIONAL GUIDES
SEE CHART



NO OF SIGNALS
OPTIONAL
SEE CHART

GUIDE POST OPTIONS

NO OF SIGNAL	MATERIAL NUMBER	DIM A	DIM P	PCB THK
12	45984-4211	35.5	4.50	3.18
16	45984-4221	38.0		
20	45984-4231	40.6		
24	45984-4241	43.1		
28	45984-4251	45.6		
32	45984-4261	48.2		
36	45984-4271	50.7	3.60	2.36
40	45984-4281	53.3		
12	45984-4212	35.5		
16	45984-4222	38.0		
20	45984-4232	40.6		
24	45984-4242	43.1		
28	45984-4252	45.6		
32	45984-4262	48.2		
36	45984-4272	50.7	2.90	1.57
40	45984-4282	53.3		
12	45984-4213	35.5		
16	45984-4223	38.0		
20	45984-4233	40.6		
24	45984-4243	43.1		
28	45984-4253	45.6		
32	45984-4263	48.2		
36	45984-4273	50.7		
40	45984-4283	53.3		



45984-4261 SHOWN
FOR REF ONLY
SEE CHART

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

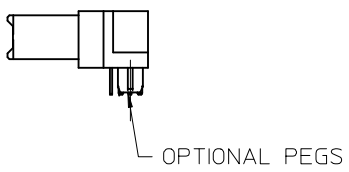
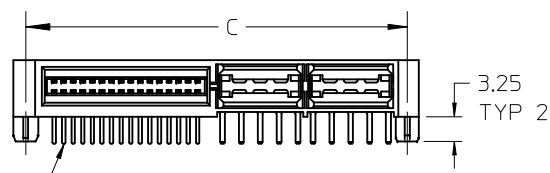
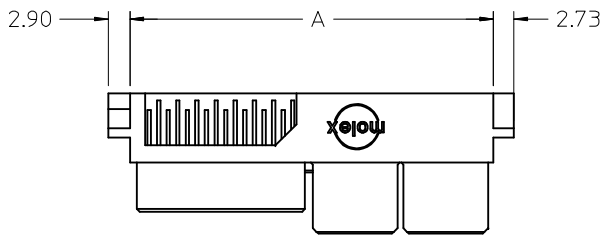
SCALE 1:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION
TITLE LPH RECEPTACLE ASSEMBLY RT ANGLE 4 CIRCUIT POWER CONNECTOR		
 MOLEX INCORPORATED		
DOCUMENT NO. SD-45984-400		SHEET NO. 2 OF 5
THIS INFORMATION THAT IS PROPRIETARY TO MOLEX SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

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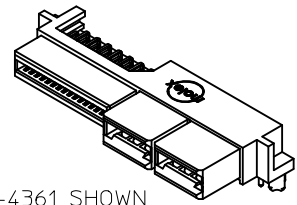
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MOUNTING PEG OPTIONS



45984-4361 SHOWN
FOR REF ONLY
SEE CHART

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

SCALE 1:1	DESIGN UNITS METRIC		THIRD ANGLE PROJECTION
TITLE LPH RECEPTACLE ASSEMBLY RT ANGLE 4 CIRCUIT POWER CONNECTOR			
 MOLEX INCORPORATED			
DOCUMENT NO. SD-45984-400			SHEET NO. 3 OF 5
THIS INFORMATION THAT IS PROPRIETARY TO MOLEX SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

NO OF SIGNAL	MATERIAL NUMBER	DIM A	DIM C	DIM P	PCB THK
12	45984-4311	35.5	37.90	4.50	3.18
16	45984-4321	38.0	40.44		
20	45984-4331	40.6	42.98		
24	45984-4341	43.1	45.52		
28	45984-4351	45.6	48.06		
32	45984-4361	48.2	50.60		
36	45984-4371	50.7	53.14		
40	45984-4381	53.3	55.68	3.60	2.36
12	45984-4312	35.5	37.90		
16	45984-4322	38.0	40.44		
20	45984-4332	40.6	42.98		
24	45984-4342	43.1	45.52		
28	45984-4352	45.6	48.06		
32	45984-4362	48.2	50.60		
36	45984-4372	50.7	53.14		
40	45984-4382	53.3	55.68	2.90	1.57
12	45984-4313	35.5	37.90		
16	45984-4323	38.0	40.44		
20	45984-4333	40.6	42.98		
24	45984-4343	43.1	45.52		
28	45984-4353	45.6	48.06		
32	45984-4363	48.2	50.60		
36	45984-4373	50.7	53.14		
40	45984-4383	53.3	55.68		

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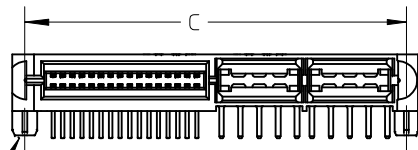
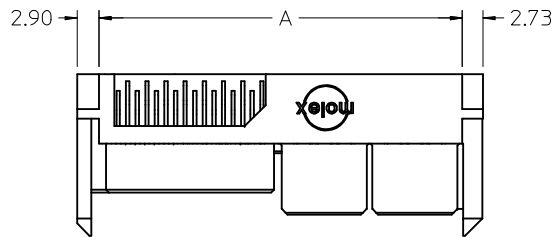
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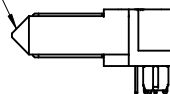
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NO OF SIGNALS
OPTIONAL
SEE CHART

OPTIONAL GUIDES



OPTIONAL PEGS

GUIDE POST & MOUNTING PEG OPTIONS

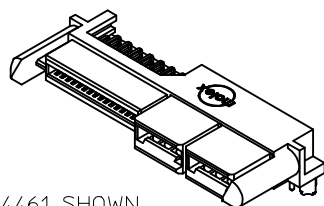
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12	45984-4411	35.5	37.90	4.50	3.18
16	45984-4421	38.0	40.44		
20	45984-4431	40.6	42.98		
24	45984-4441	43.1	45.52		
28	45984-4451	45.6	48.06		
32	45984-4461	48.2	50.60		
36	45984-4471	50.7	53.14		
40	45984-4481	53.3	55.68		
12	45984-4412	35.5	37.90	3.60	2.36
16	45984-4422	38.0	40.44		
20	45984-4432	40.6	42.98		
24	45984-4442	43.1	45.52		
28	45984-4452	45.6	48.06		
32	45984-4462	48.2	50.60		
36	45984-4472	50.7	53.14		
40	45984-4482	53.3	55.68		
12	45984-4413	35.5	37.90	2.90	1.57
16	45984-4423	38.0	40.44		
20	45984-4433	40.6	42.98		
24	45984-4443	43.1	45.52		
28	45984-4453	45.6	48.06		
32	45984-4463	48.2	50.60		
36	45984-4473	50.7	53.14		
40	45984-4483	53.3	55.68		

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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

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.	

SCALE
1:1

DESIGN UNITS
METRIC

THIRD ANGLE
PROJECTION

TITLE
LPH RECEPTACLE ASSEMBLY
RT ANGLE 4 CIRCUIT
POWER CONNECTOR

MOLEX INCORPORATED

DOCUMENT NO.
SD-45984-400

SHEET NO.
4 OF 5

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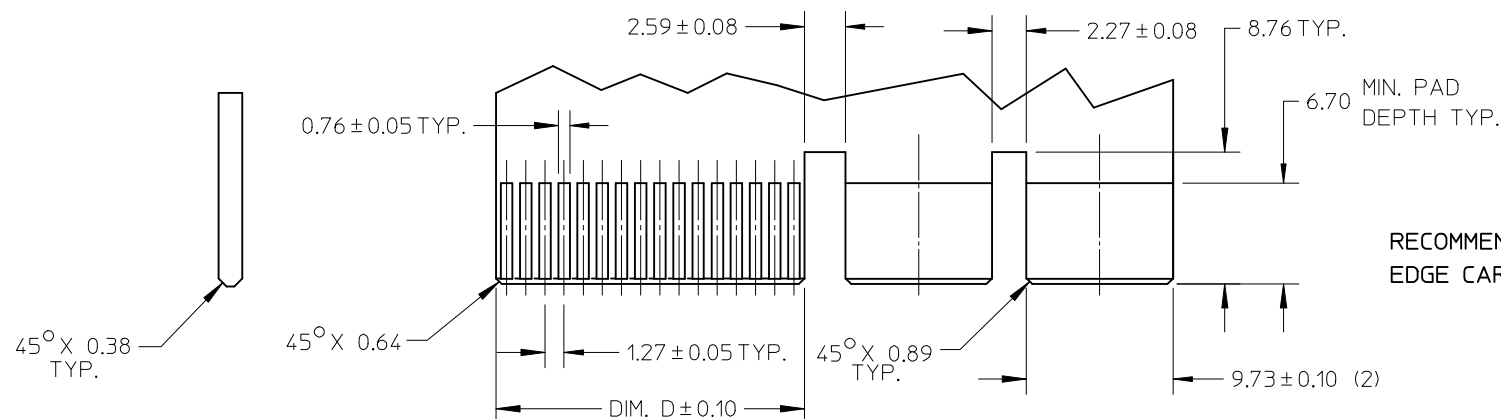
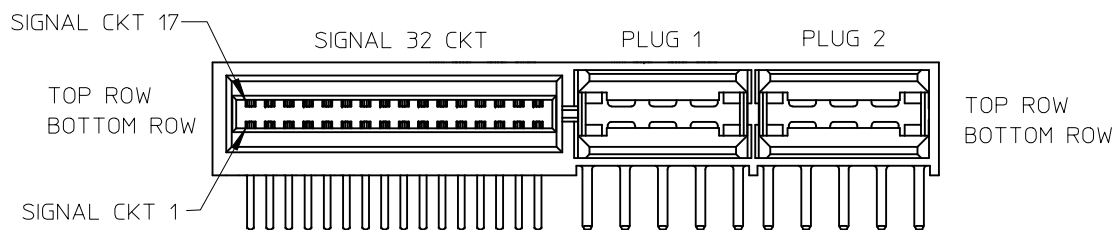
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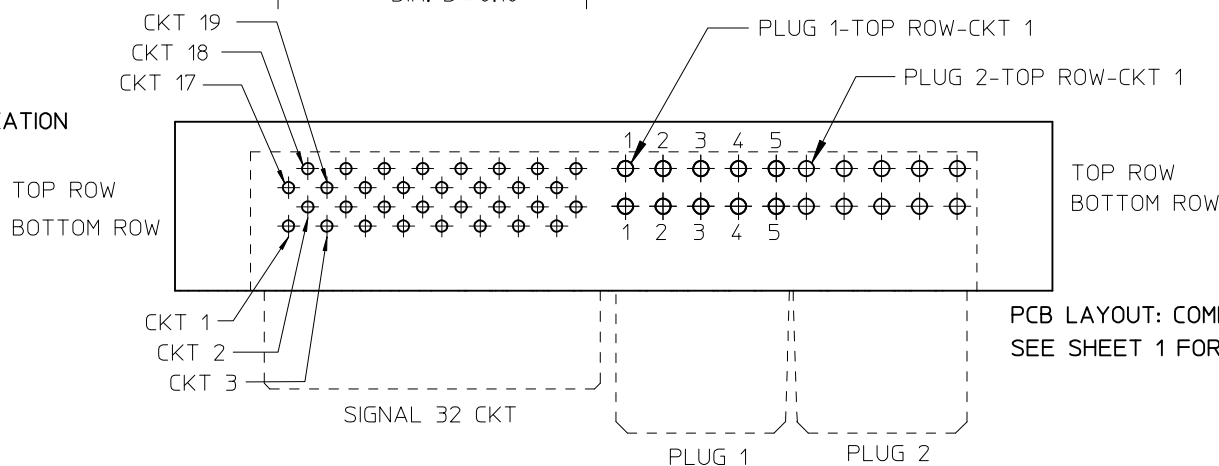
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NO. OF SIGNAL	DIM. D
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16	10.54
20	13.08
24	15.62
28	18.16
32	20.70
36	23.24
40	25.78



RECOMMENDED EDGE CARD LAYOUT
EDGE CARD THICKNESS: 1.57/0.62

CIRCUIT IDENTIFICATION



PCB LAYOUT: COMPONENT SIDE
SEE SHEET 1 FOR DIMENSIONS

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

GENERAL TOLERANCES
(UNLESS SPECIFIED)

	mm	INCH
4 PLACES	$\pm$ ---	$\pm$ ---
3 PLACES	$\pm$ ---	$\pm$ ---
2 PLACES	± 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
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 4 CIRCUIT
POWER CONNECTOR



MOLEX INCORPORATED

DOCUMENT NO.
SD-45984-400

SHEET NO.
5 OF 5

5

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1