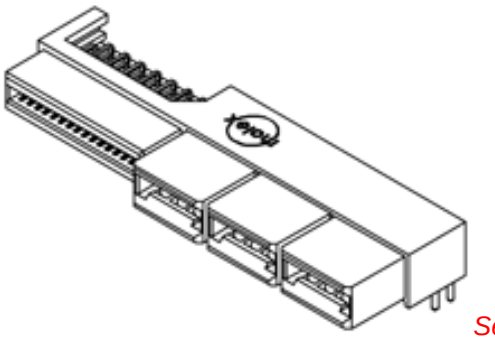
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Part Number: 0459846171
Status: Active
Overview: extreme_lphpower
Description: 1.27mm (.050"), 12.00mm (.472") Pitch, EXTreme LPHPower™ Receptacle Header, Right Angle, 6 Power Contacts, 36 Signal Contacts, Select Gold (Au) Plating, for 3.18mm (.125") Thick PC Board



Series image - Reference only

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	PCB Receptacles
Series	45984
Application	Board-to-Board
Overview	extreme_lphpower
Product Name	EXTreme LPHPower™

Physical

Circuits (Loaded)	42
Circuits (maximum)	42
Circuits Detail	6 Power, 36 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	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)	0.050 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

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	27A
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

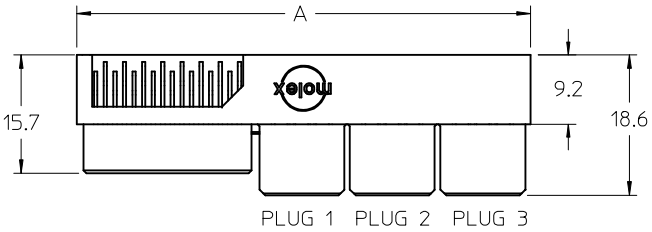
Material Info

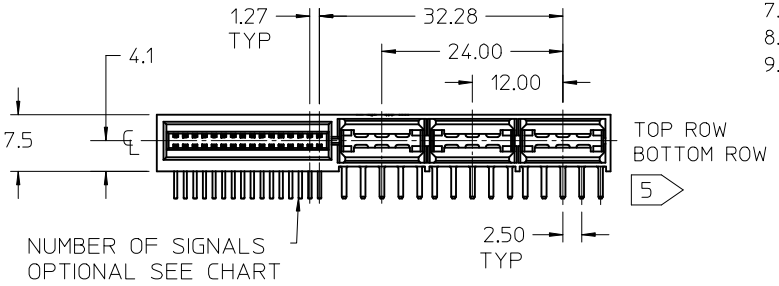
Reference - Drawing Numbers

Packaging Specification	PK-45984-001
Product Specification	PS-45984-001
Sales Drawing	SD-45984-600

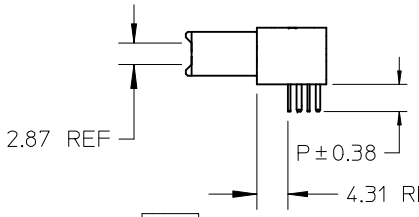
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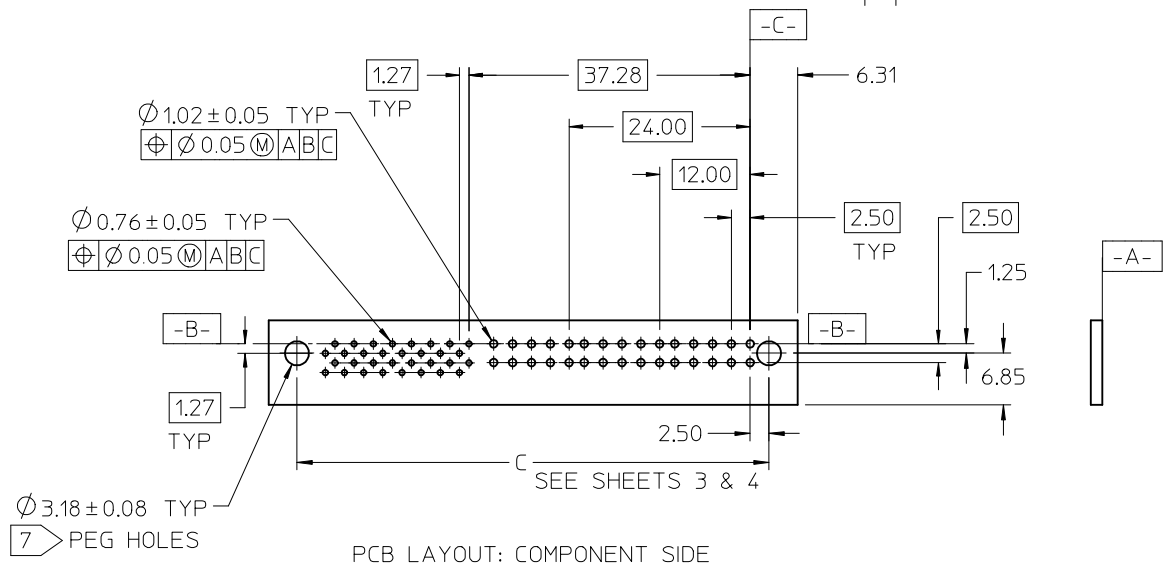
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION





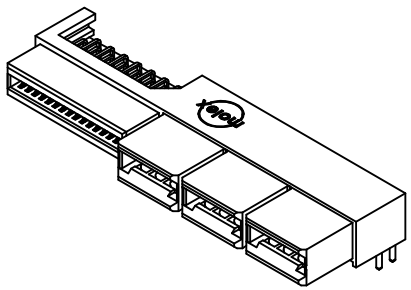
NOTES:
1. MATERIAL HOUSING: LCP, 94V-0, COLOR-BLACK.
   CONTACT: COPPER ALLOY.
2. FINISH: SELECT GOLD - .76µM/30 MI MIN. CONTACT AREA.
   SELECT TIN - 3.81µM/150 MI MIN. TAIL AREA.
   BOTH OVER NICKEL - 1.27µM/50 MI MIN.
3. POWER TERMINALS LUBRICATED IN CONTACT AREA.
4. PRODUCT SPECIFICATION: PS-45984-001.
5. PACKAGING: TRAY PER PK-45984-001.
6. SEE SHEET 5 FOR CKT IDENTIFICATION.
7. PARTS ARE RoHS COMPLIANT.
8. PEG HOLES ARE OPTIONAL - SEE SHEETS 3 & 4.
9. MATES TO 1.57/.062 CARD EDGE OR MOLEX P/N 45985-6***.





PCB LAYOUT: COMPONENT SIDE
PEG HOLES OPTIONAL

NO OF SIGNAL	MATERIAL NUMBER	DIM A	DIM P	PCB THK
12	45984-6111	47.5	4.50	3.18
16	45984-6121	50.0		
20	45984-6131	52.6		
24	45984-6141	55.1		
28	45984-6151	57.6		
32	45984-6161	60.2		
36	45984-6171	62.7		
40	45984-6181	65.3		
12	45984-6112	47.5	3.60	2.36
16	45984-6122	50.0		
20	45984-6132	52.6		
24	45984-6142	55.1		
28	45984-6152	57.6		
32	45984-6162	60.2		
36	45984-6172	62.7		
40	45984-6182	65.3		
12	45984-6113	47.5	2.90	1.57
16	45984-6123	50.0		
20	45984-6133	52.6		
24	45984-6143	55.1		
28	45984-6153	57.6		
32	45984-6163	60.2		
36	45984-6173	62.7		
40	45984-6183	65.3		



REV	DESCRIPTION	
E	REVISED	2008/11/13
	EC NO: UCP2009-0971	
	DRWN:MBANDURA	2008/11/14
	CH'KD:	
	APPR:APATEL	2008/11/17

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
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

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

TITLE: LPH RECEPTACLE ASSEMBLY RT ANGLE 6 CIRCUIT POWER CONNECTOR

MOLEX INCORPORATED

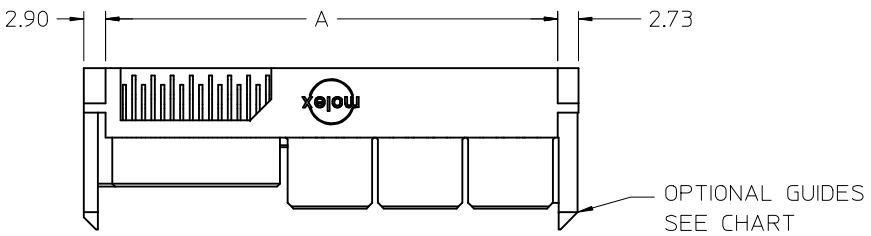
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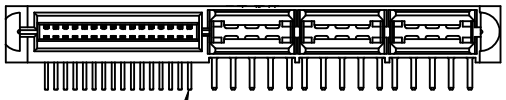
DOCUMENT NO. SD-45984-600

SHEET NO. 1 OF 5

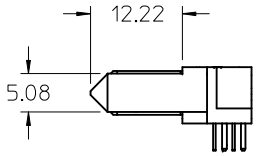
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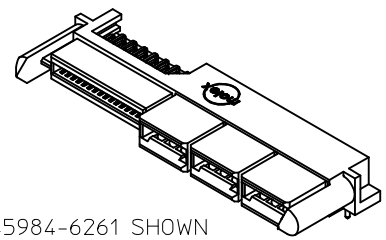


NO OF SIGNALS
OPTIONAL
SEE CHART



GUIDE POST OPTIONS

NO OF SIGNAL	MATERIAL NUMBER	DIM A	DIM P	PCB THK
12	45984-6211	47.5	4.50	3.18
16	45984-6221	50.0		
20	45984-6231	52.6		
24	45984-6241	55.1		
28	45984-6251	57.6		
32	45984-6261	60.2		
36	45984-6271	62.7		
40	45984-6281	65.3		
12	45984-6212	47.5	3.60	2.36
16	45984-6222	50.0		
20	45984-6232	52.6		
24	45984-6242	55.1		
28	45984-6252	57.6		
32	45984-6262	60.2		
36	45984-6272	62.7		
40	45984-6282	65.3		
12	45984-6213	47.5	2.90	1.57
16	45984-6223	50.0		
20	45984-6233	52.6		
24	45984-6243	55.1		
28	45984-6253	57.6		
32	45984-6263	60.2		
36	45984-6273	62.7		
40	45984-6283	65.3		



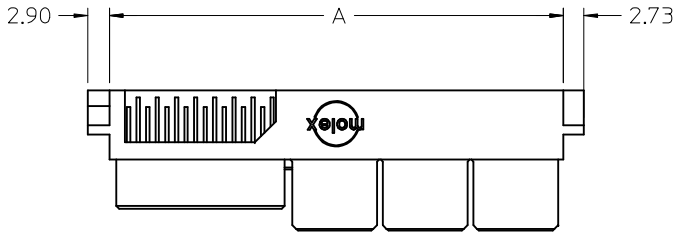
45984-6261 SHOWN
FOR REF ONLY
SEE CHART

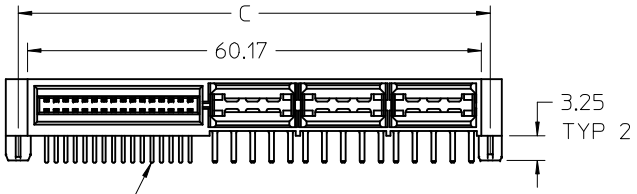
REVISED			
EC NO: UCP2009-0971	2008/11/13		DESCRIPTION
DRWN:MBANDURA	2008/11/14		
CH'KD:			
APPR:APATEL	2008/11/17		
E			REV

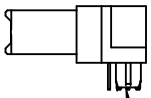
GENERAL TOLERANCES (UNLESS SPECIFIED)	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.25	± ---
1 PLACE	± ---	± ---
ANGULAR ±1/2°		

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY	SCALE: 1:1	DESIGN UNITS: METRIC	THIRD ANGLE PROJECTION
DRAWN BY: SAMIEC	DATE: 2005/05/13	TITLE: LPH RECEPTACLE ASSEMBLY RT ANGLE 6 CIRCUIT POWER CONNECTOR	
CHECKED BY: SAMIEC	DATE: 2005/05/13		
APPROVED BY: MARGULIS	DATE: 2005/05/13	MOLEX INCORPORATED	
MATERIAL NO.		DOCUMENT NO.: SD-45984-600	SHEET NO.: 2 OF 5
SIZE: A	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

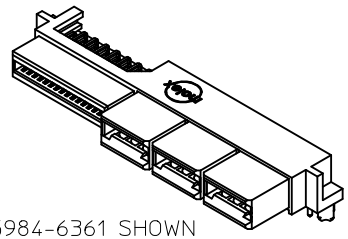






MOUNTING PEG OPTIONS

NO OF SIGNAL	MATERIAL NUMBER	DIM A	DIM C	DIM P	PCB THK
12	45984-6311	47.5	49.90	4.50	3.18
16	45984-6321	50.0	52.44		
20	45984-6331	52.6	54.98		
24	45984-6341	55.1	57.52		
28	45984-6351	57.6	60.06		
32	45984-6361	60.2	62.60		
36	45984-6371	62.7	65.14		
40	45984-6381	65.3	67.68		
12	45984-6312	47.5	49.90	3.60	2.36
16	45984-6322	50.0	52.44		
20	45984-6332	52.6	54.98		
24	45984-6342	55.1	57.52		
28	45984-6352	57.6	60.06		
32	45984-6362	60.2	62.60		
36	45984-6372	62.7	65.14		
40	45984-6382	65.3	67.68		
12	45984-6313	47.5	49.90	2.90	1.57
16	45984-6323	50.0	52.44		
20	45984-6333	52.6	54.98		
24	45984-6343	55.1	57.52		
28	45984-6353	57.6	60.06		
32	45984-6363	60.2	62.60		
36	45984-6373	62.7	65.14		
40	45984-6383	65.3	67.68		



45984-6361 SHOWN
FOR REF ONLY
SEE CHART

REV	DESCRIPTION
E	REVISED EC NO: UCP2009-0971 2008/11/13 DRWN:MBANDURA 2008/11/14 CH'KD: APPR:APATEL 2008/11/17

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
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

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

TITLE: LPH RECEPTACLE ASSEMBLY RT ANGLE 6 CIRCUIT POWER CONNECTOR

MOLEX INCORPORATED

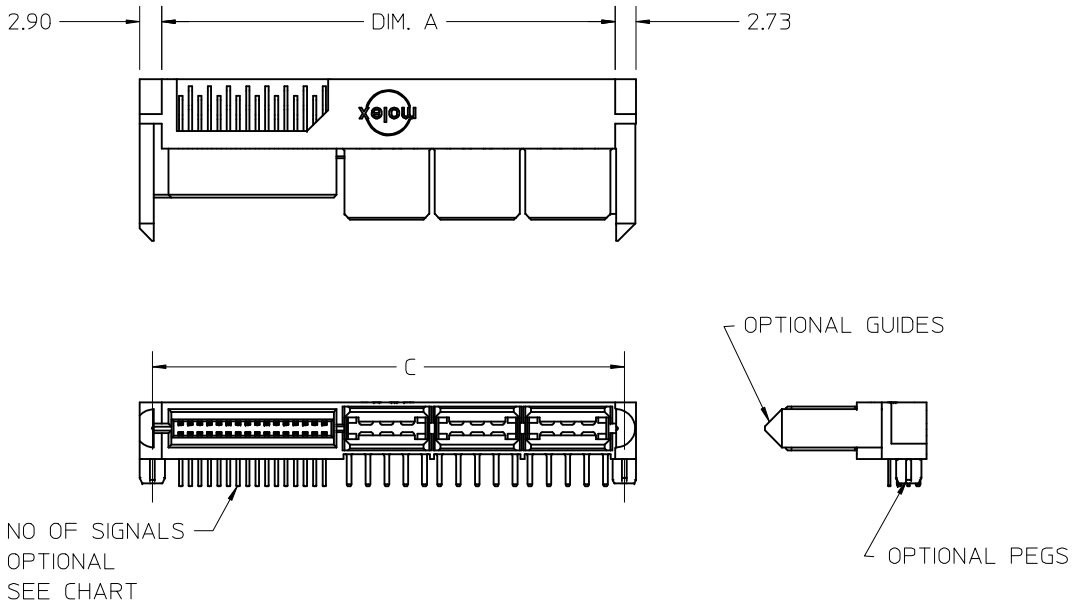
MATERIAL NO.

DOCUMENT NO. SD-45984-600

SHEET NO. 3 OF 5

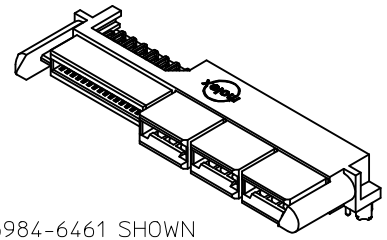
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NO OF SIGNAL	MATERIAL NUMBER	DIM A	DIM C	DIM P	PCB THK
12	45984-6411	47.5	49.90	4.50	3.18
16	45984-6421	50.0	52.44		
20	45984-6431	52.6	54.98		
24	45984-6441	55.1	57.52		
28	45984-6451	57.6	60.06		
32	45984-6461	60.2	62.60		
36	45984-6471	62.7	65.14		
40	45984-6481	65.3	67.68		
12	45984-6412	47.5	49.90	3.60	2.36
16	45984-6422	50.0	52.44		
20	45984-6432	52.6	54.98		
24	45984-6442	55.1	57.52		
28	45984-6452	57.6	60.06		
32	45984-6462	60.2	62.60		
36	45984-6472	62.7	65.14		
40	45984-6482	65.3	67.68		
12	45984-6413	47.5	49.90	2.90	1.57
16	45984-6423	50.0	52.44		
20	45984-6433	52.6	54.98		
24	45984-6443	55.1	57.52		
28	45984-6453	57.6	60.06		
32	45984-6463	60.2	62.60		
36	45984-6473	62.7	65.14		
40	45984-6483	65.3	67.68		

GUIDE POST & MOUNTING PEG OPTIONS



45984-6461 SHOWN
FOR REF ONLY
SEE CHART

REV	DESCRIPTION
E	REVISED EC NO: UCP2009-0971 2008/11/13 DRWN:MBANDURA 2008/11/14 CH'KD: APPR:APATEL 2008/11/17

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
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: SAMIEC DATE: 2005/05/13
CHECKED BY: SAMIEC DATE: 2005/05/13
APPROVED BY: MARGULIS DATE: 2005/05/13
MATERIAL NO.

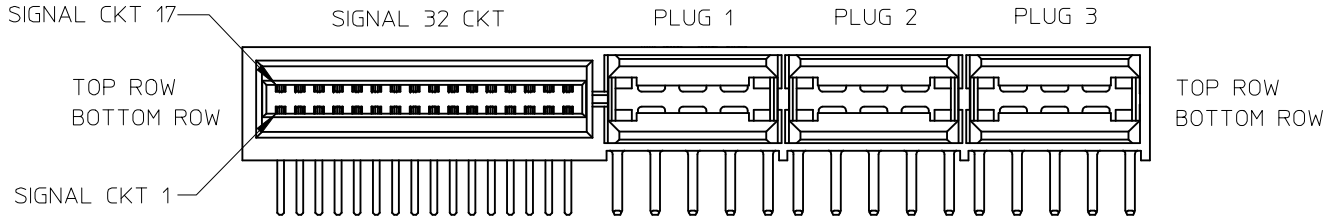
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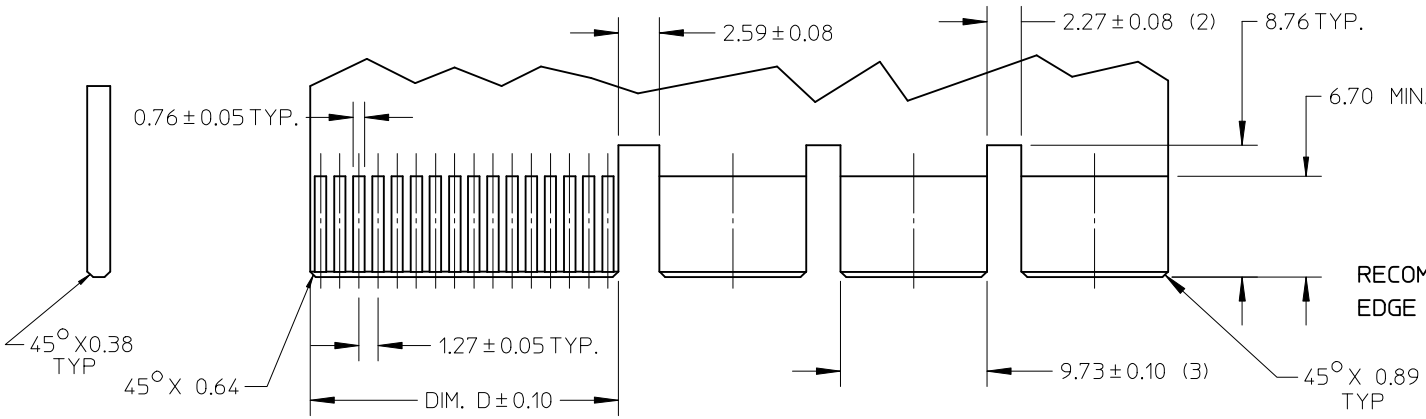
DOCUMENT NO. SD-45984-600
SHEET NO. 4 OF 5

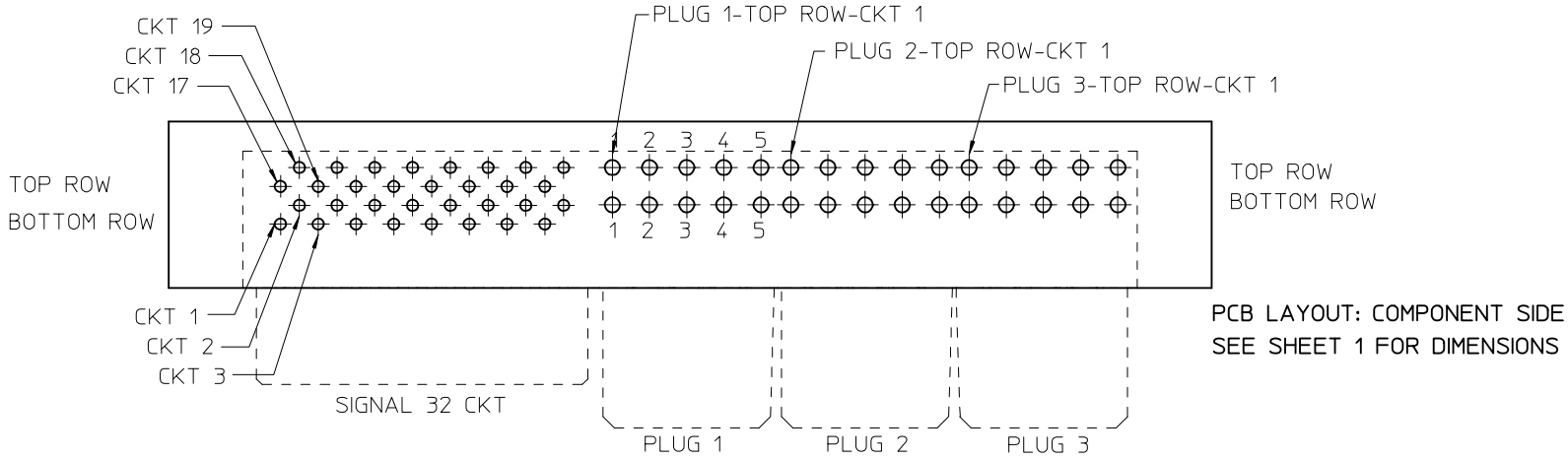
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NO. OF SIGNAL	DIM. D
12	8.00
16	10.54
20	13.08
24	15.62
28	18.16
32	20.70
36	23.24
40	25.78





PCB LAYOUT: COMPONENT SIDE
SEE SHEET 1 FOR DIMENSIONS

REVISED	DRWN:MBANDURA	CH'KD:	APPR:APATEL	DESCRIPTION
EC NO: UCP2009-0971	2008/11/13	2008/11/14	2008/11/17	
E				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
SCALE: 2:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

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

TITLE: LPH RECEPTACLE ASSEMBLY RT ANGLE 6 CIRCUIT POWER CONNECTOR

MOLEX INCORPORATED

DOCUMENT NO.: SD-45984-600
SHEET NO.: 5 OF 5

SIZE: A

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