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LED 2 & 4 POLARITY			LED 1 & 3 POLARITY		
PIN 13	PIN 14	COLOR	PIN 15	PIN 16	COLOR
-	+	YELLOW	-	+	YELLOW
+	-	GREEN	+	-	GREEN

PRELIMINARY

SCHEMATIC

RoHS



ELECTRICAL CHARACTERISTICS @ 25°C

URNS RATIO

TP1	1CT : 1CT ±2%
TP2	1CT : 1CT ±2%
TP3	1CT : 1CT ±2%
TP4	1CT : 1CT ±2%

□CL @ 100kHz/100mVRMS

FOR CHANNEL 1 AND CHANNEL 2  
11mA DC BIAS 350µH MIN.  
Compliant to IEEE 802.3at specification

FOR CHANNEL 3 AND CHANNEL 4

8mA DC BIAS 350µH MIN.  
INS. LOSS

0.1MHz TO 1MHz	-1.1 dB MAX
1MHz TO 65MHz	-0.5 dB MAX
65MHz TO 100MHz	-0.8 dB MAX
100MHz TO 125MHz	-1.2 dB MAX

RET. LOSS (MIN) @ 100ΩHMS ±15%

0.5MHz-40MHz	-18 dB
40MHz-100MHz	-12+20LOG(F/80MHz) dB

CM TO CM REJ

100kHz - 100MHz -30 dB MIN

CM TO DM REJ

100kHz - 100MHz -35 dB MIN

HIPOT (Isolation Voltage): 2250 VDC

100% OF PRODUCTION TESTED TO COMPLY WITH  
IEEE 802.3 ISOLATION REQUIREMENTS.

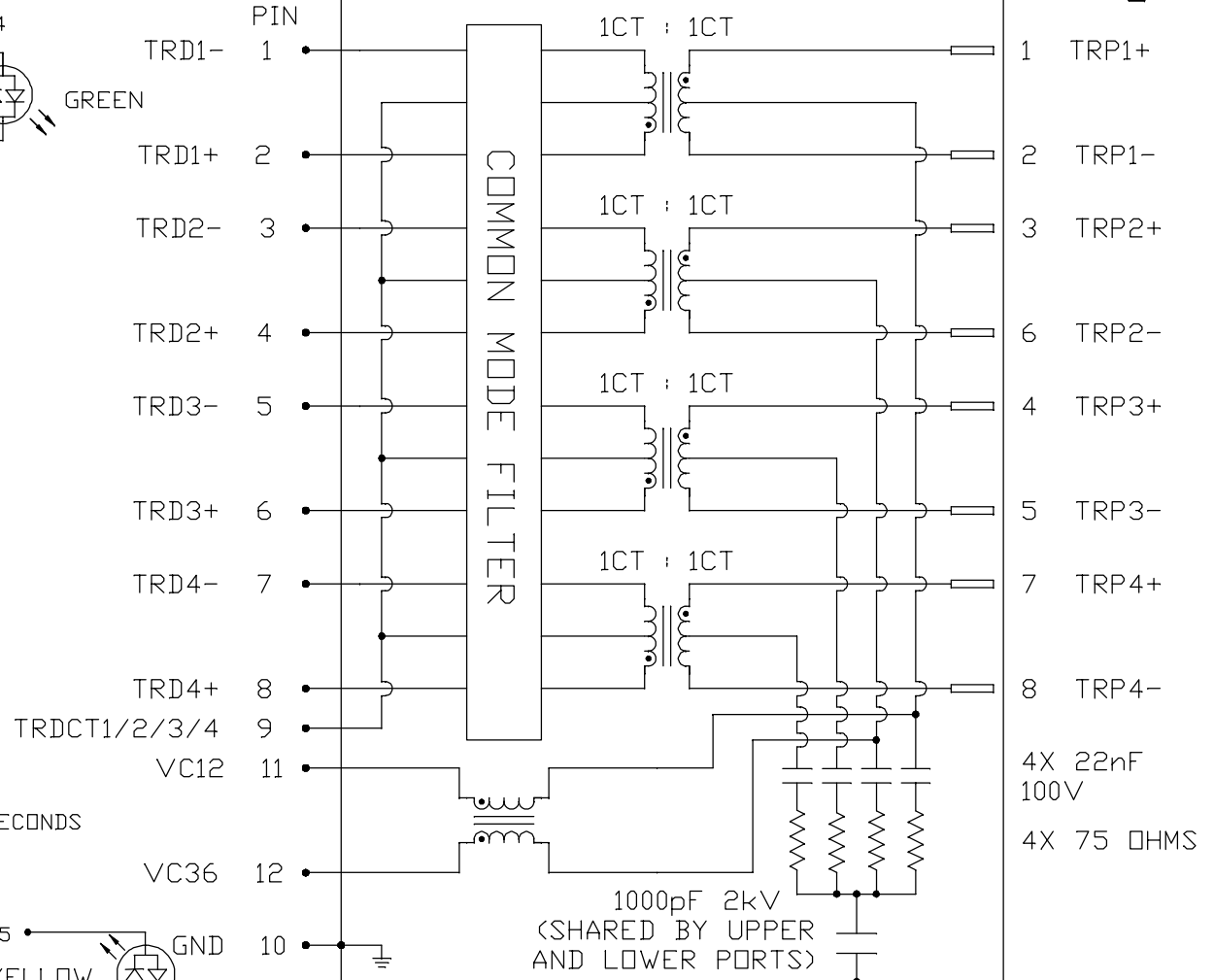
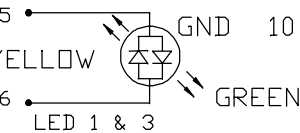
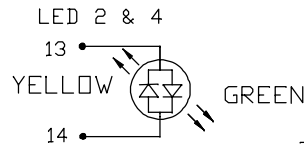
BALANCED DC LINE CURRENT 720 mA MAX. @ 57 VDC CONTINUOUS  
1.2A MAX. @ 57 VDC FOR 200 MILLISECONDS

OPERATING TEMPERATURE -40°C TO +85°C

LEDS 1, 2, 3 AND 4

V<sub>F</sub> (FORWARD VOLTAGE) IF=20mA GREEN 2.2V TYP,  
IF=20mA YELLOW 2.1V TYP,

λ<sub>D</sub> (DOMINANT WAVELENGTH) IF=20mA GREEN 570nm TYP. YELLOW  
IF=20mA YELLOW 590nm TYP.



RJ45

REV. : PA PAGE : 2

ORIGINATED BY  
CHOW WANCHUNG  
DATE 2017-06-15

TITLE  
2X4 Gigabit MagJack®  
PoEp  
(Extended temperature)  
PATENTED

DRAWN BY  
LI LINFENG  
DATE 2017-06-15

PART NO. / DRAWING NO.  
08AN-2C4R-GK

FILE NAME  
08AN-2C4R-GK\_PA.DWG

STANDARD DIM.  
TOL. IN INCH [ ] METRIC DIM.  
AS REF.

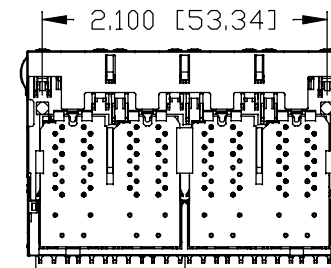
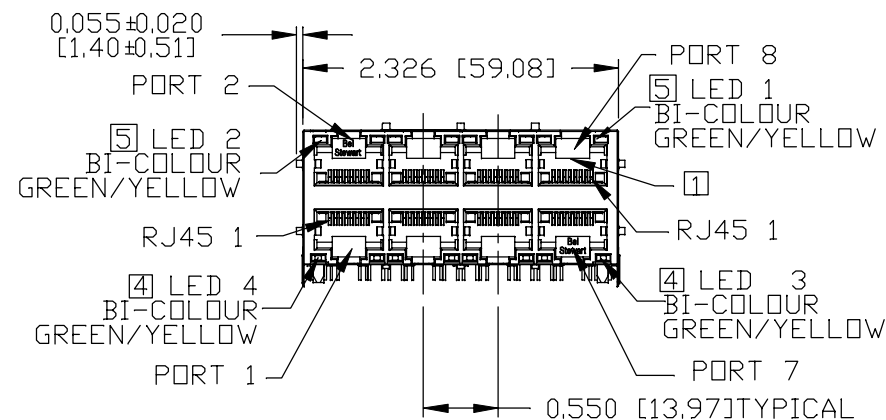
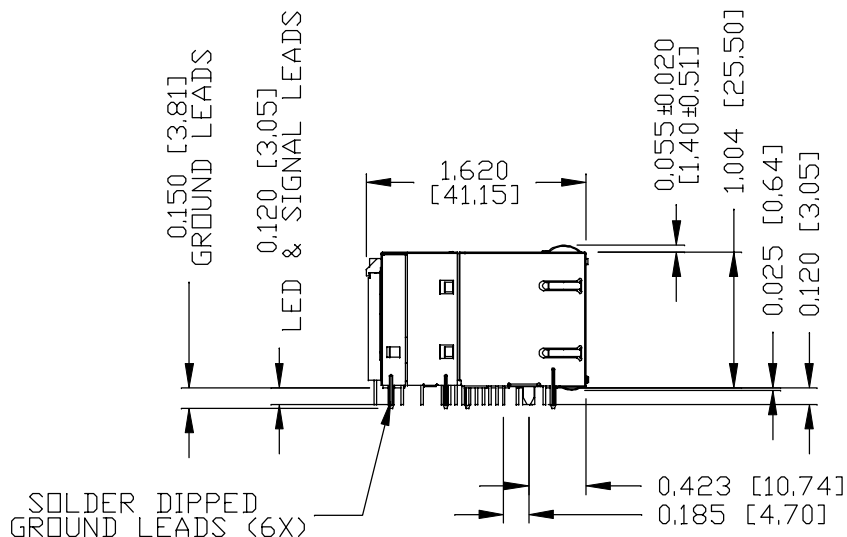
.X UNIT : INCH [mm]  
.XX SCALE : N/A  
.XXX SIZE : A4



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PRELIMINARY

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NOTE:

PLASTIC HOUSING: THERMOPLASTIC PBT, BLACK  
 FLAMMABILITY RATING UL 94V-0  
 CONTACT PLATING: 50 MICRO-INCH HARD GOLD PLATING OR EQUIVALENT.  
 OUTPUT PINS: TIN-COATED COPPER WIRE;  
 100 MICRO-INCH MIN MATTE TIN. PINS ARE SOLDER DIPPED.  
 METAL SHIELD: NICKEL PLATED ON COPPER ALLOY,  
 (ALL GROUND LEADS ARE SOLDER DIPPED)

- 1. JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS, PART 68 SUBPART F.
- 2. MARK PART WITH MFG LOGO, MFG NAME, PART NUMBER, DATE CODE AND PATENTED.
- 3. THE PRODUCT IS RoHS COMPLIANT.

UL RECOGNIZED - FILE #E196366 AND E169987.

- 4. SPECIAL LED 3 & 4 CONFIGURATION: TWO STEP LED HEAD, LOW INTENSITY LIGHT.
- 5. SPECIAL LED 1 & 2 CONFIGURATION: SUPER INTENSITY LIGHT.
- 6. THE AXIAL RETENTION FORCE OF RJ PORT IS 15LBS MIN.

- 7. THE PRODUCT IS PATENT PRODUCT. THE PATENT NUMBER ARE U.S. PAT. 7,123,117 AND U.S. PAT. 6,840,817.
- 8. THE PART IS RECOMMENDED FOR WAVE SOLDERING. THE SUGGESTED PEAK WAVE SOLDERING CONDITION IS 260°C MAX AND 10 SECONDS MAX.

ORIGINATED BY  
ANTON LIAO  
DATE 2017-06-15  
DRAWN BY  
SANDY LIN  
DATE 2017-06-15

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(Extended temperature)  
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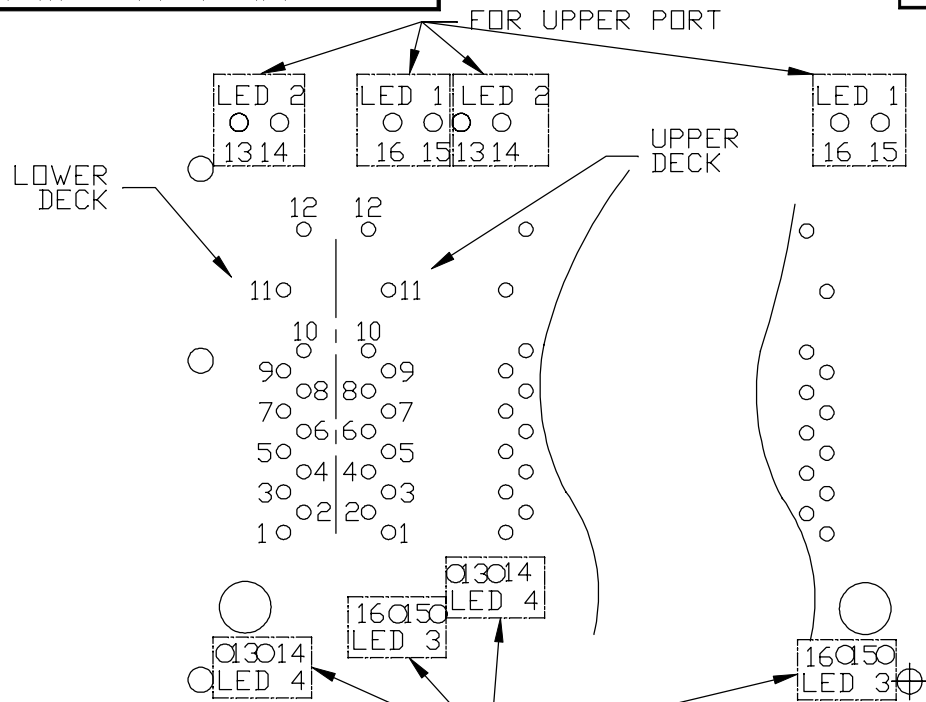
STANDARD DIM. TOL. IN INCH	[ ] METRIC DIM. AS REF.
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REV. : PA PAGE : 3

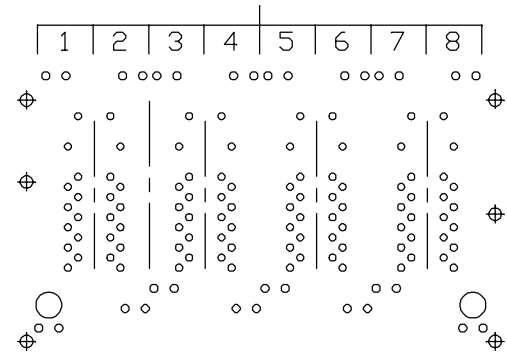


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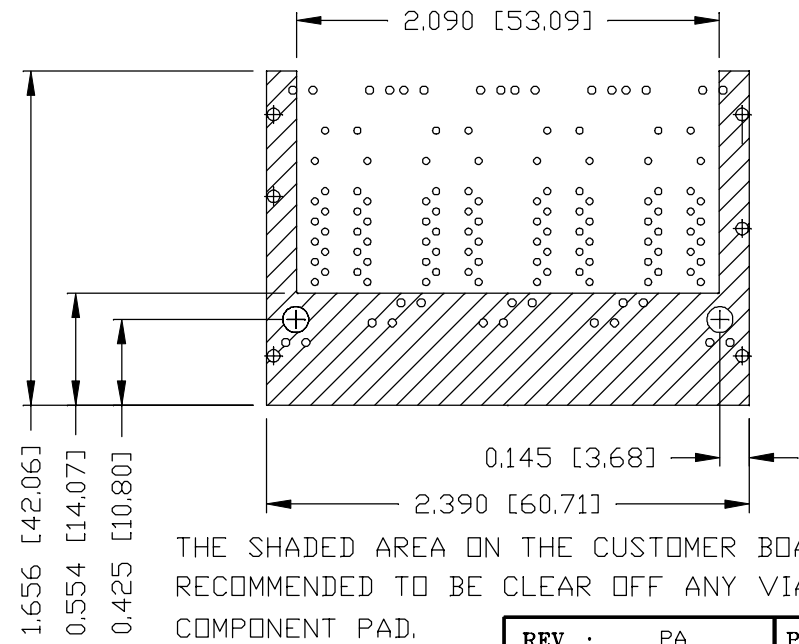


PORT ASSIGNMENT  
(COMPONENT SIDE VIEW)



PIN-OUT INFORMATION  
(COMPONENT SIDE VIEW)

12	VC36		
11	VC12		
10	GND		
9	TRDCT1/2/3/4		
8	TRD 4+		
7	TRD 4-		
6	TRD 3+		
5	TRD 3-		
4	TRD 2+	16	YELLOW (+)/GREEN (-)
3	TRD 2-	15	YELLOW (-)/GREEN (+)
2	TRD 1+	14	YELLOW (+)/GREEN (-)
1	TRD 1-	13	YELLOW (-)/GREEN (+)



THE SHADED AREA ON THE CUSTOMER BOARD ARE RECOMMENDED TO BE CLEAR OFF ANY VIA HOLE OR COMPONENT PAD.

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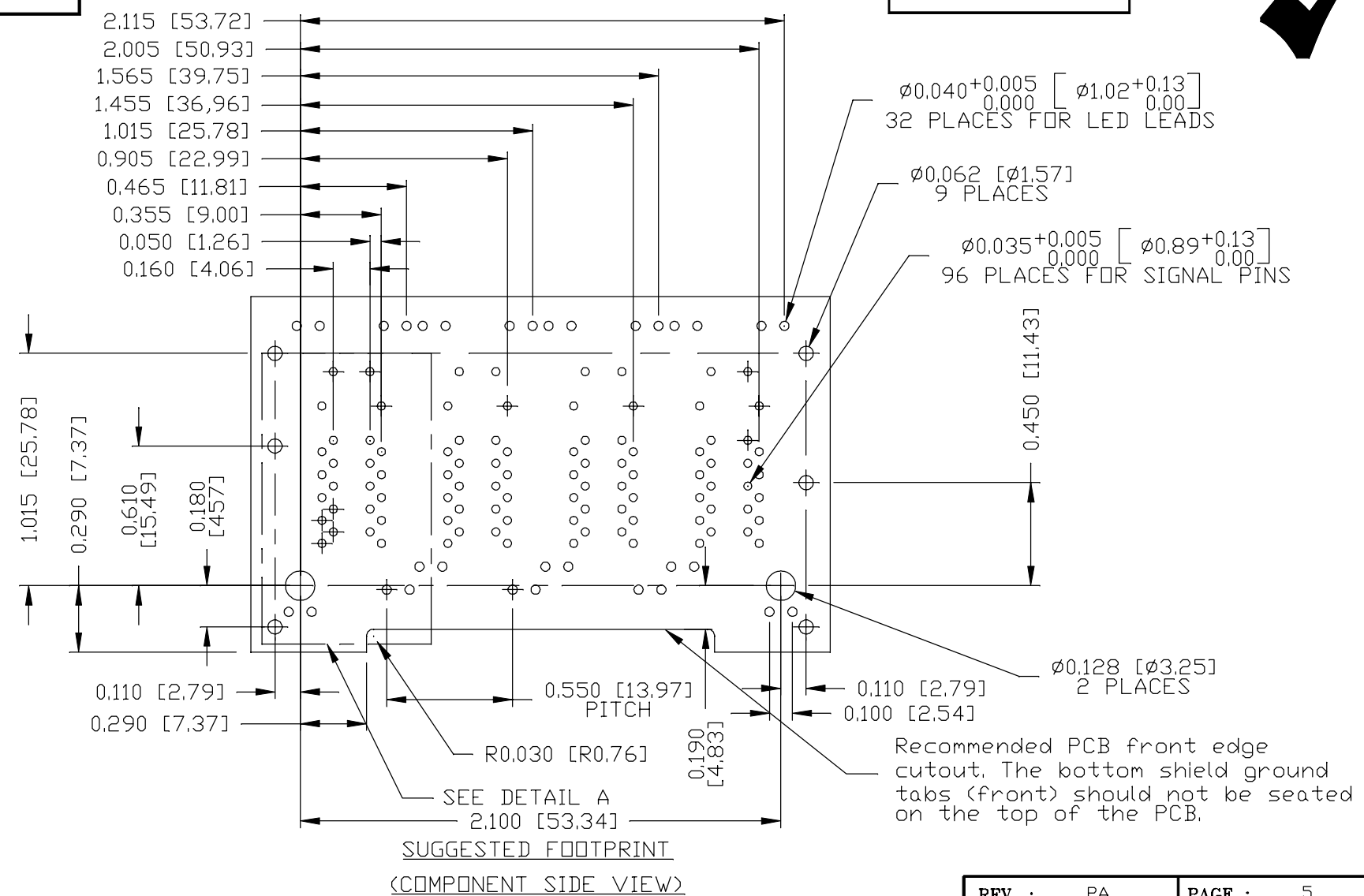
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STANDARD DIM. TOL. IN INCH	[ ] METRIC DIM. AS REF.
.X	UNIT : INCH [mm]
.XX	SCALE : N/A
.XXX ±0.004	SIZE : A4



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PRELIMINARY



Recommended PCB front edge cutout. The bottom shield ground tabs (front) should not be seated on the top of the PCB.

SUGGESTED FOOTPRINT  
(COMPONENT SIDE VIEW)

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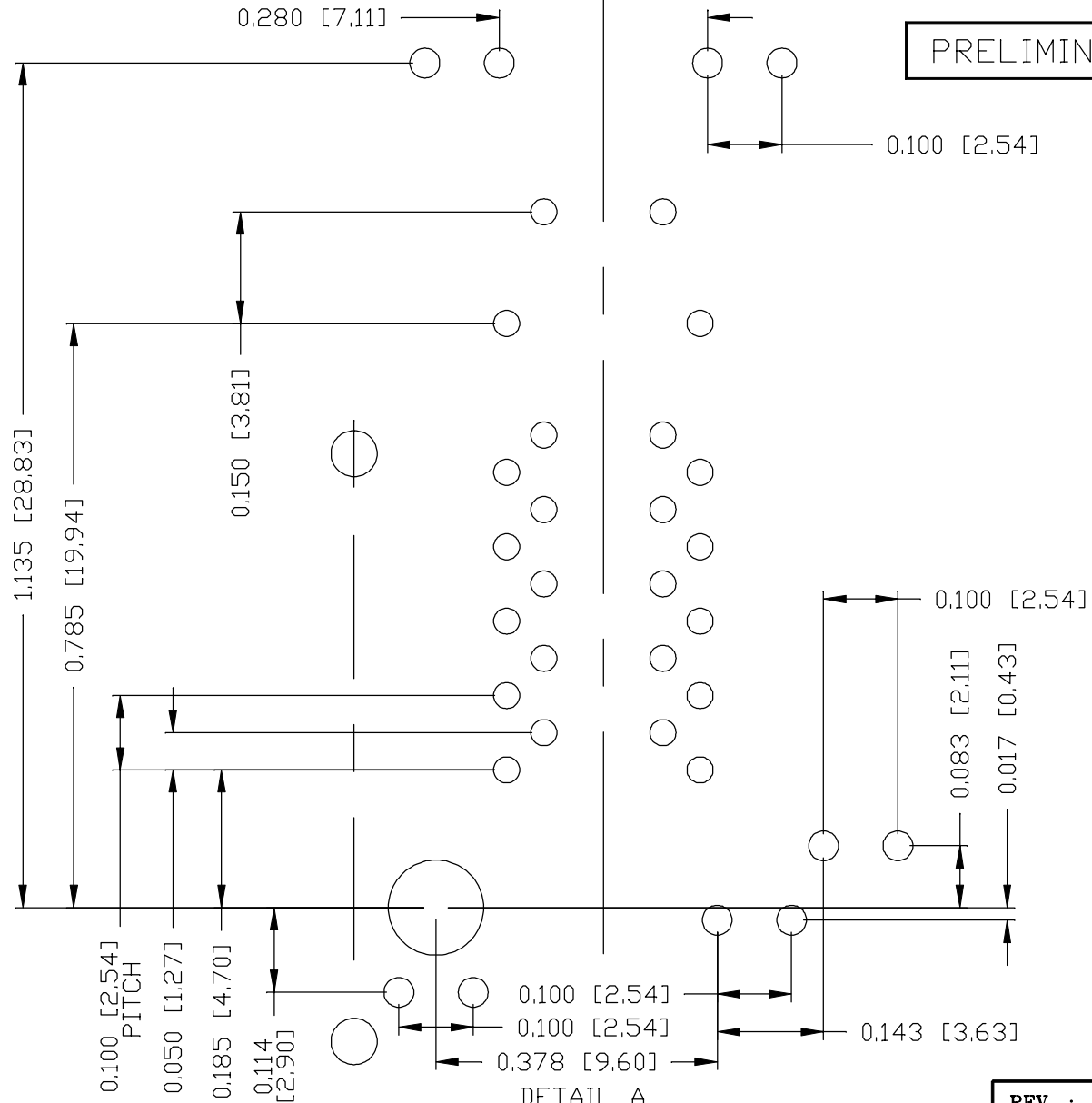
<b>ORIGINATED BY</b> ANTON LIAO <b>DATE</b> 2017-06-15	<b>TITLE</b> 2X4 Gigabit MagJack® PoEp (Extended temperature) PATENTED	<b>PART NO. / DRAWING NO.</b> 08AN-2C4R-GK	<b>STANDARD DIM.</b> TOL. IN INCH .X	<b>[ ] METRIC DIM.</b> AS REF.	
		<b>FILE NAME</b> 08AN-2C4R-GK_PA.DWG	.XX	<b>UNIT : INCH [mm]</b>	
<b>DATE</b> 2017-06-15	<b>DATE</b> 2017-06-15	.XXX ±0.004	<b>SCALE : N/A</b>		
			<b>SIZE : A4</b>		

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RoHS



PRELIMINARY



DETAIL A

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DATE 2017-06-15

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PART NO. / DRAWING NO.  
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FILE NAME  
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STANDARD DIM. [ ] METRIC DIM.  
TOL. IN INCH AS REF.

.X		UNIT : INCH [mm]
.XX		SCALE : N/A
.XXX	±0.004	SIZE : A4

REV. : PA

PAGE : 6



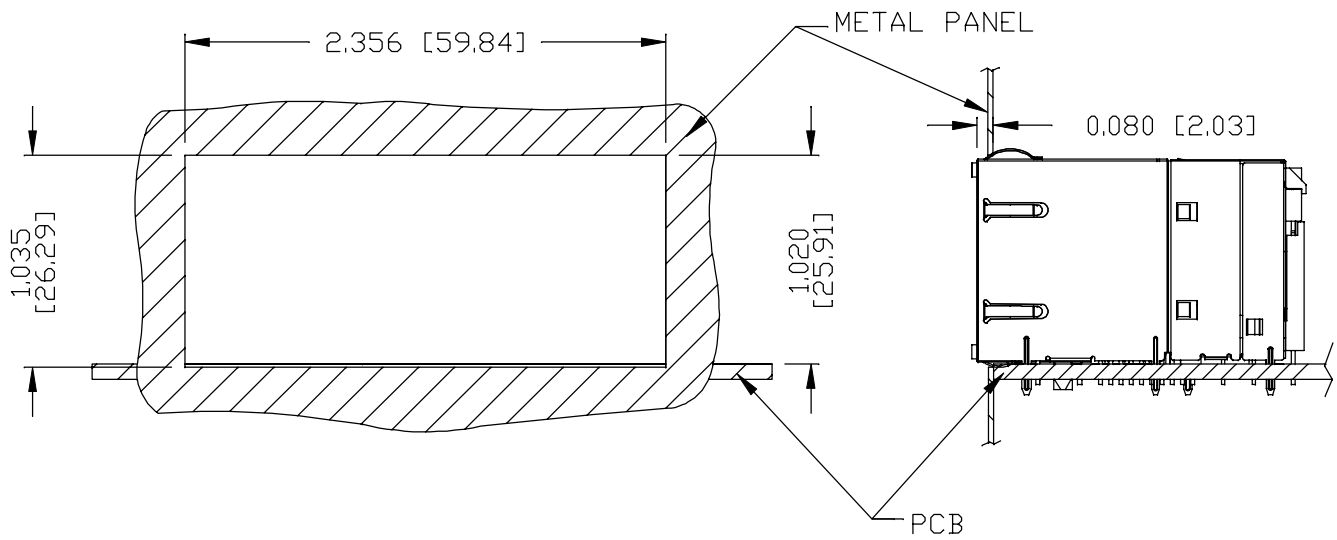
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PRELIMINARY



SUGGESTED PANEL OPENING



NOTE:

THE DISTANCE OF PANEL INSIDE SURFACE RELATIVE TO FRONT SURFACE OF PART IS ONLY A SUGGESTION. IN CASE THIS DISTANCE IS DIFFERENT, THE REQUIRED PANEL OPENING DIMENSIONS CHANGE ACCORDINGLY.

PACKING INFORMATION

PACKING TRAY : 0200-9999-G1 (BOTTOM)  
0200-9999-G2 (TOP)

PACKING QUANTITY : 20 PCS FINISHED GOODS PER TRAY,  
5 TRAYS (100 PCS FINISHED GOODS) PER CARTON BOX.

REMARK : CARDBOARDS ARE PLACED BETWEEN LAYERS OF PACKING TRAY INSIDE CARTON BOX.  
(INCLUDE THE UPPERMOST AND LOWERMOST TRAY)

REV. : PA PAGE : 7

ORIGINATED BY ANTON LIAO DATE 2017-06-15	TITLE 2X4 Gigabit MagJack® PoEp (Extended temperature) PATENTED	PART NO. / DRAWING NO. 08AN-2C4R-GK	STANDARD DIM. TOL. IN INCH	[ ] METRIC DIM. AS REF.	
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			.XX	SCALE : N/A	
DRAWN BY SANDY LIN DATE 2017-06-15			.XXX	±0.004	SIZE : A4

