

1. MATERIALS:  
 PLASTIC HOUSING: BLACK, THERMOPLASTIC FLAMMABILITY RATING UL 94V-0  
 SHIELD: BRASS, PREPLATED WITH 0.76um MIN SEMI-BRIGHT NICKEL, POST DIPPED WITH 2.54um MIN SAC SOLDER ON SOLDER TAILS.  
 CONTACTS: PHOSPHOR BRONZE, 1.27um MIN OVERALL NICKEL UNDERPLATE, WITH SELECT 0.05um MIN GOLD OVER 0.76um MIN PALLADIUM-NICKEL AT MATING INTERFACE AND 2.54um MIN MATTE TIN ON SOLDER TAILS.  
 LED: DIFFUSED EPOXY LENS, CARBON STEEL LEAD FRAME TAILS OF LED ARE PREPLATED WITH 2.03um MIN SILVER OVER 1.02um MIN NICKEL UNDERPLATE OVER 1.02um MIN COPPER UNDERPLATE, POST-PLATED WITH 2.54um MIN MATTE TIN AND/OR SAC SOLDER DIP OR PURE TIN SOLDER DIP  
 ALL PC BOARDS: HIGH TEMPERATURE PCB, TG>170°C

- ⚠ MAGNETICS  
 APPLICATION: 10/100/1000 BASE-T, PoE PLUS  
 IMPEDANCE: 100 OHMS  
 TURNS RATIO (CHIP:CABLE): 1:1 ALL FOUR PAIRS  
 OPEN CIRCUIT INDUCTANCE (OCL): ALL CHANNELS, 350uH MIN@100kHz, 0.1VRMS, WITH 8mADC BIAS FROM 0°C TO 70°C  
 120uH MIN@100kHz, 0.1VRMS, 19mADC BIAS FROM 0°C TO 70°C, ACROSS RJ1-RJ2 & RJ3-RJ6  
 ALL FOUR PAIRS BI-DIRECTIONAL  
 POE CURRENT: 600mADC MAX  
 PERFORMANCE @ 25°C:  
 INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz  
 RETURN LOSS (RL): 18dB MIN FROM 0.5MHz TO 40MHz  
 12-20LOG(f/80)dB MIN FROM 40.1MHz TO 100MHz  
 CROSSTALK ATTENUATION: 35dB MIN FROM 0.5MHz TO 40MHz  
 33-20LOG(f/50)dB MIN FROM 40.1MHz TO 100MHz  
 COMMON MODE REJECTION RATIO (CMRR): 30dB MIN FROM 0.5MHz TO 100MHz  
 ISOLATION VOLTAGE: 2250VDC(MAX) FOR 60 SECONDS WITH A RISE TIME OF 500V/SEC AND WITH ALL PORTS CONNECTED.

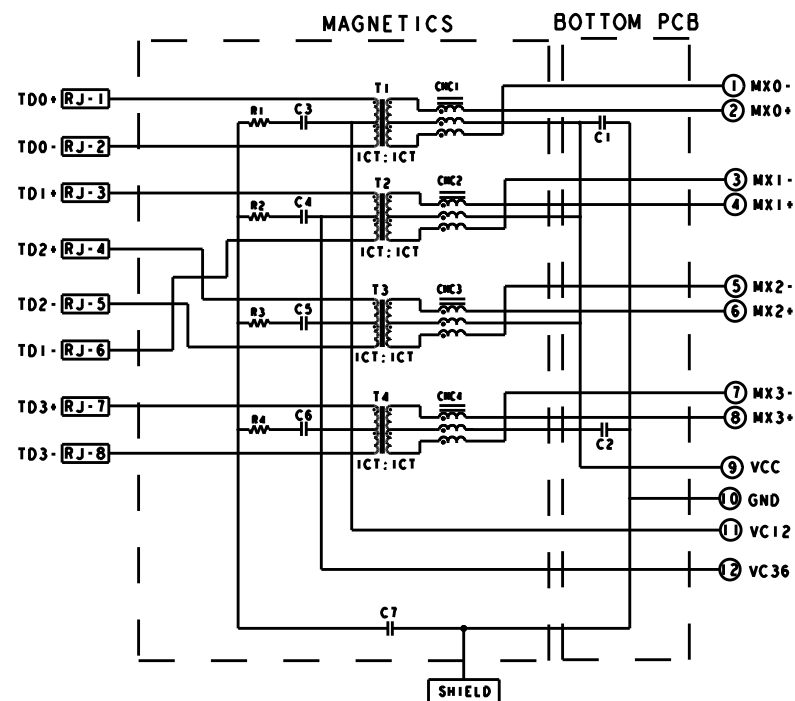
- ⚠ PART NUMBER, DATE CODE AND COUNTRY OF ORIGIN ARE LOCATED IN APPROXIMATE AREA SHOWN. "YY" IS YEAR, "WW" IS WORK WEEK, "D" IS THE DAY OF WEEK, WITH "SUNDAY"=1.  
 ⚠ TRP LOGO AND AGENCY APPROVAL LOGO ARE LOCATED IN APPROXIMATE AREA SHOWN.  
 5. OPERATING TEMP: FROM 0°C TO +70°C.

6. RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F.  
 ⚠ INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL AND SUPPORT AUTO-MDI/MDIX.  
 ⚠ DATUM AND BASIC DIMENSION ESTABLISHED BY CUSTOMER.  
 ⚠ BASIC DIMENSION ESTABLISHED BY CUSTOMER, BUT MAY NOT BE GREATER THAN 5.08mm.  
 ⚠ LEDS ARE DRIVEN BY CONSTANT CURRENT AT APPROX 20mA  
 LED COLOR: DOMINANT WAVELENGTH (λD): GREEN 568 nm TYP. @ IF=20mA  
 FORWARD VOLTAGE (VF): GREEN 2.2V TYP. @ IF=20mA  
 DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP. @ IF=20mA  
 FORWARD VOLTAGE (VF): YELLOW 2.1V TYP. @ IF=20mA

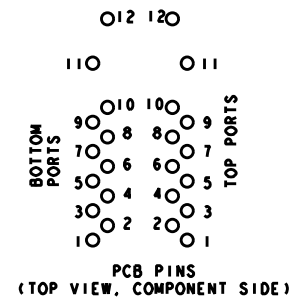
11. THE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS, PEAK TEMPERATURE 260°C MAX, 10 SECONDS MAX.

S9HG62 GIGABIT PoE PLUS CIRCUIT

TOP AND BOTTOM PORTS



PIN DESIGNATIONS  
 (REPEAT FOR EACH VERTICAL PAIR OF PORTS)



TOP PORTS



BOTTOM PORTS

RJ CABLE CONTACTS

- C1 - C2 = 10nF, 50V, X7R, CAPACITORS  
 C3 - C6 = 22nF, 100V, CAPACITORS  
 C7 = 1000pF, 2kV, CAPACITOR  
 R1 - R4 = 75 Ohms, 1/16W, RESISTORS

2.29	GRN/YEL	GRN/YEL	GRN/YEL	GRN/YEL	1840937-4
2.50	GREEN	GREEN	GREEN	GREEN	1840937-1
DIM A	BOTTOM LED 2	BOTTOM LED 1	TOP LED 2	TOP LED 1	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:	0 PLC ±0.25	1 PLC ±0.25	2 PLC ±0.25	3 PLC ±0.25	4 PLC ±0.25	ANGLES ±°
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PRODUCT SPEC: 108-104004

APPLICATION SPEC:

THIS DRAWING IS A CONTROLLED DOCUMENT.

DRN	21FEB2010	TONMY REN
CHK	21FEB2010	TONY YUAN
APVD	21FEB2010	KEITH ZHU

MODEL NAME: MAGJACK

DESC: 2X4 S9HG62 GIGABIT PoE PLUS W/ LEDS

SIZE: A1

CAGE CODE: 1840937

DRAWING NO: 1840937

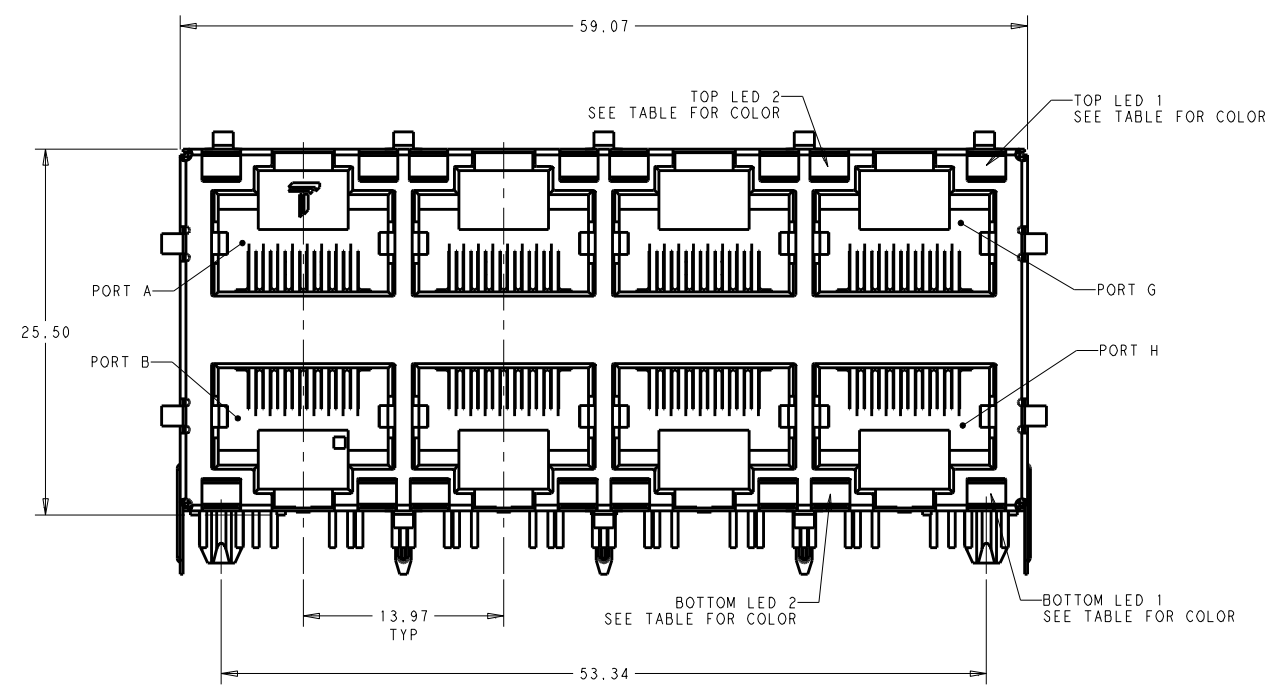
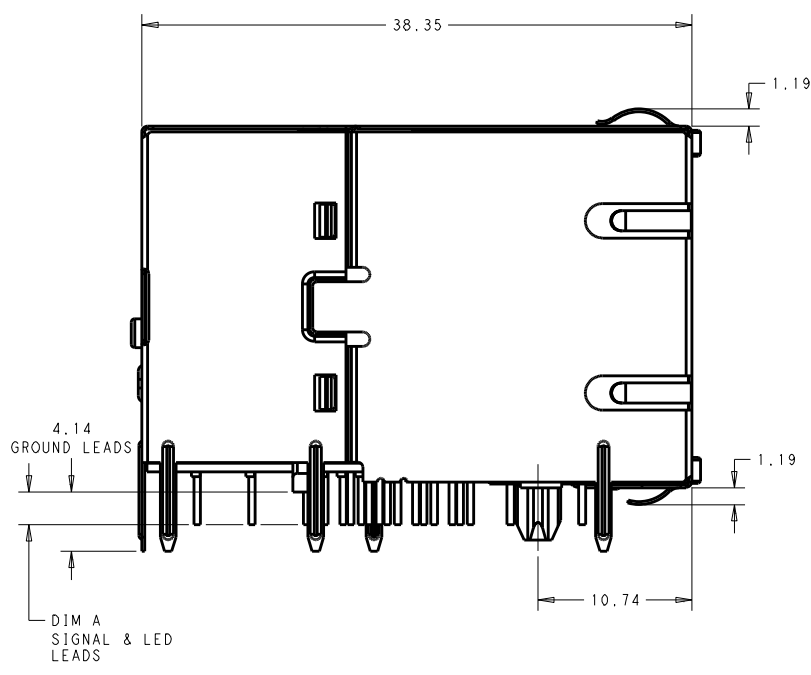
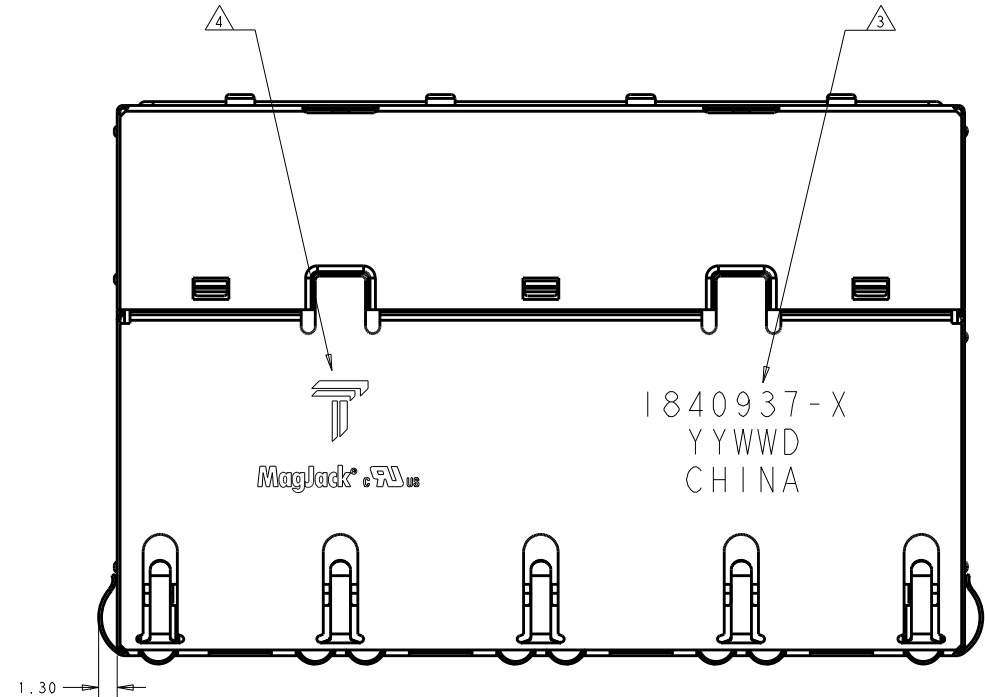
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CUSTOMER DRAWING

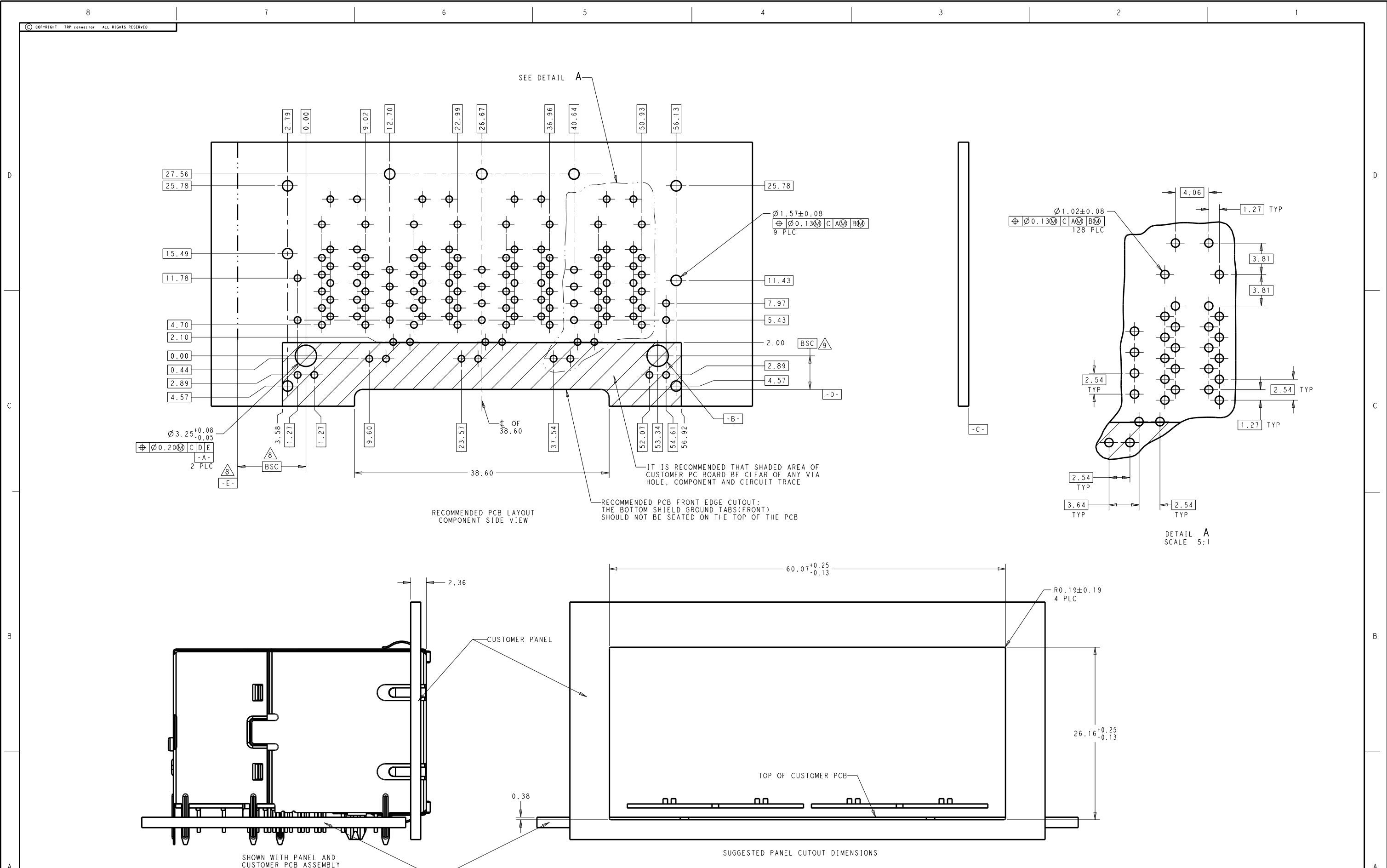
SCALE: NTS

SHEET 1 OF 4

REV C



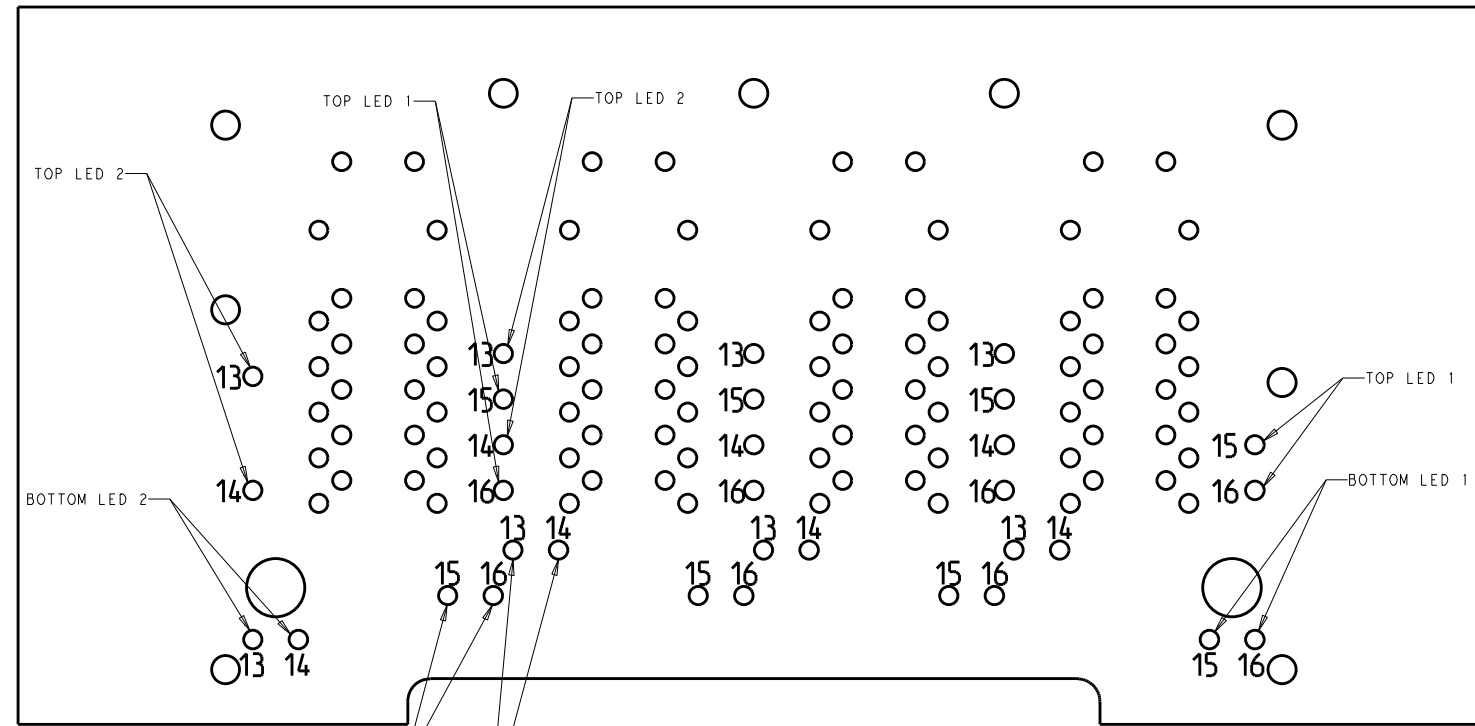
THIS DRAWING IS A CONTROLLED DOCUMENT.		DRN	TOMMY REN	21FEB2010	<b>trp</b> CONNECTOR DONGGUAN CHINA	
DIMENSIONS:		CHK	TONY YUAN	21FEB2010		
mm		APVD	KEITH ZHU	21FEB2010		
TOLERANCES UNLESS OTHERWISE SPECIFIED:		MODEL NAME	MAGJACK			
0 PLC ±0.25		DESC	2X4 S9HG62 GIGABIT PoE PLUS W/ LEDS			
1 PLC ±0.25		SIZE	A1			
2 PLC ±0.25		CAGE CODE				
3 PLC ±		DRAWING NO	1840937			
4 PLC ±		RESTRICTED TO				
ANGLES		CUSTOMER DRAWING				
PRODUCT SPEC	108-104004	APPLICATION SPEC				
SCALE		NTS	SHEET	2	OF	4
REV		C				



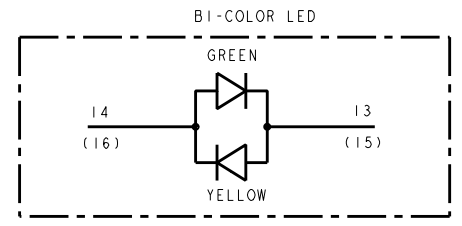
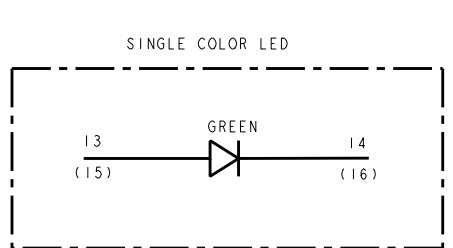
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THIS DRAWING IS A CONTROLLED DOCUMENT.		DWG: TOMMY REN 21FEB2010		DONGGUAN CHINA
DIMENSIONS: mm		CHK: TONY YUAN 21FEB2010		
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: KELTH ZHU 21FEB2010		MODEL NAME: MAGJACK DESCRIPTION: 2X4 S9HG2 GIGABIT PoE PLUS W/ LEDS SIZE: CAGE CODE DRAWING NO A1 1840937
$\text{Hole Symbol}$		PRODUCT SPEC: 108-104004 APPLICATION SPEC: -		
PRODUCT SPEC: 108-104004 APPLICATION SPEC: -		CUSTOMER DRAWING		
				RESTRICTED TO: - SCALE: NTS SHEET 3 OF 4 REV C



LED HOLE DESIGNATIONS  
VIEWED FROM COMPONENT SIDE



THIS DRAWING IS A CONTROLLED DOCUMENT.		DWG TOMMY REN 21FEB2010		DONGGUAN CHINA
		CHK TONY YUAN 21FEB2010		
DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED:		MODEL NAME: MAGJACK STACK POE PLUS
		0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ±°		
PRODUCT SPEC	108-104004	APPLICATION SPEC	-	DESC: 2X4 S9HG62 GIGABIT PoE PLUS W/ LEDS SIZE: A1 CAGE CODE: - DRAWING NO: 1840937 RESTRICTED TO: -
CUSTOMER DRAWING		SCALE: NTS		SHEET 4 OF 4 REV C