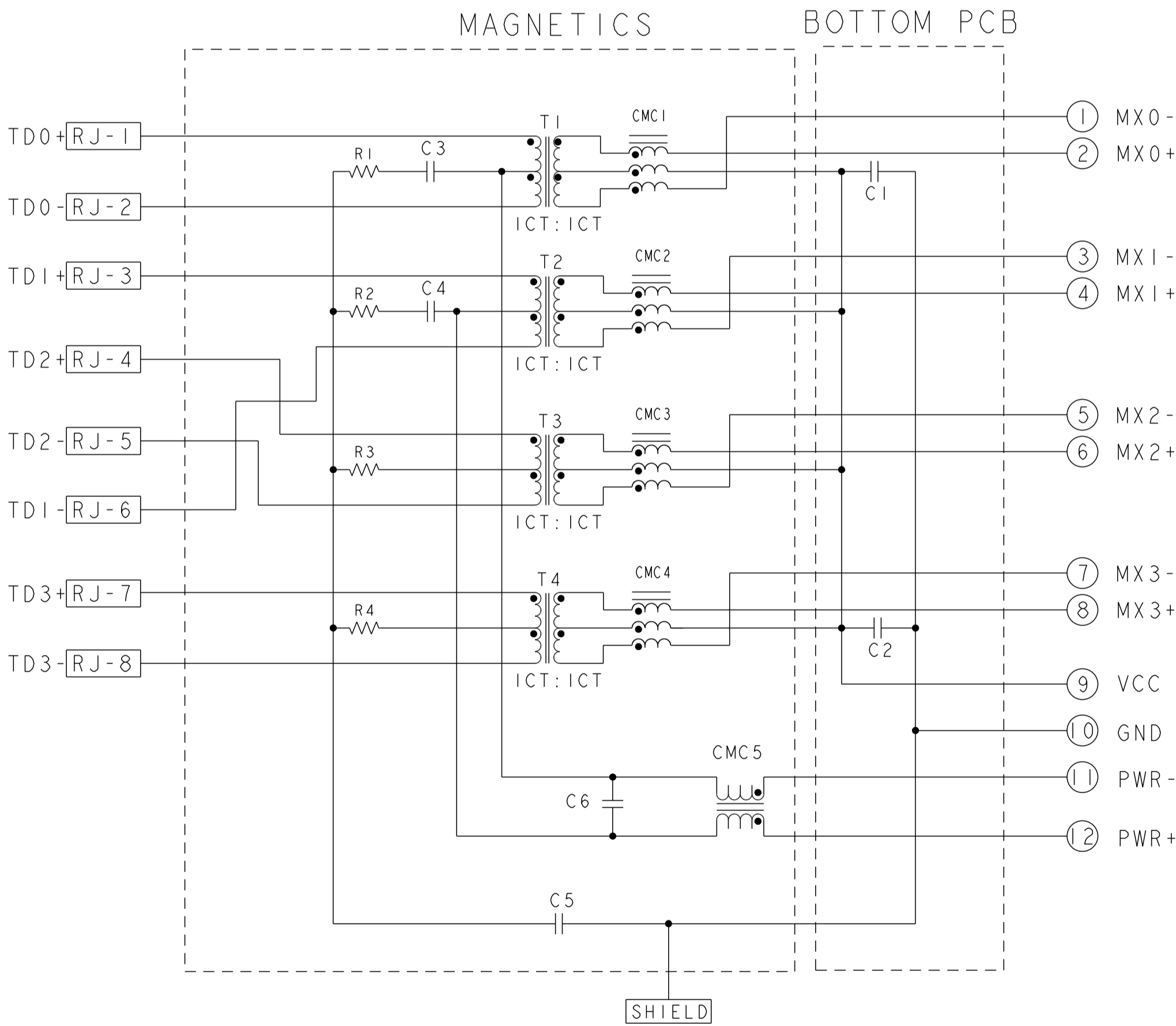


S9HG104C GIGABIT PoE PLUS CIRCUIT⚠⚠
TOP AND BOTTOM PORTS



C1-C2=10nF, 50V, CAPACITORS
C3-C4=22nF, 100V,CAPACITORS
C5=1000pF,2kV,CAPACITOR
C6=100nF,100V,CAPACITOR
R1-R4=75 OHMS,1/16W,RESISTORS

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 OR PURE TIN SOLDER TIP ON SOLDER TAILS,
CONTACTS: PHOSPHOR BRONZE, 1.27um MIN OVERALL NICKEL UNDERPLATE
WITH 1.27um MIN GOLD OR 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

- ⚠ 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 350 uH MIN @ 100KHz, 0.1 VRMS WITH 8mA DC BIAS FROM 0°C TO 70°C,
120 uH min @ 100KHz, 0.1 VRMS WITH 19 mA DC BIAS FROM 0°C TO 70°C, ACROSS
RJ1-RJ2 & RJ3-RJ6.
ALL FOUR PAIRS BI-DIRECTIONAL
POE CURRENT: 600mA DC MAX
PERFORMANCE @25°C:
INSERTION LOSS (IL): 1.1dB MAX FROM 1.0MHz TO 100MHz
RETURN LOSS (RL): 18dB MIN FROM 1.0MHz TO 40MHz
12-20LOG(f/80)dB MIN FROM 40.1MHz TO 100MHz
CROSSTALK ATTENUATION: 35dB MIN FROM 1.0MHz TO 40MHz
33-20LOG(f/50)dB MIN FROM 40.1MHz TO 100MHz
COMMON MODE REJECTION RATIO (CMRR):
30dB MIN FROM 1.0MHz 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 LOCATED IN APPROXIMATE AREA SHOWN
DATE CODE: YYWW WHERE "YY" IS YEAR, "WW" IS WORK WEEK, "D" IS DAY OF WEEK,
WITH SUNDAY =1
⚠ TRP CONNECTOR 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.
⚠ DIMENSION ESTABLISHED BY CUSTOMER, BUT MAY NOT BE
GREATER THAN 5.08mm.
⚠ LEDs ARE DRIVEN WITH 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. THESE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS, PEAK TEMPERATURE 260°C
FOR 10 SECONDS MAX.

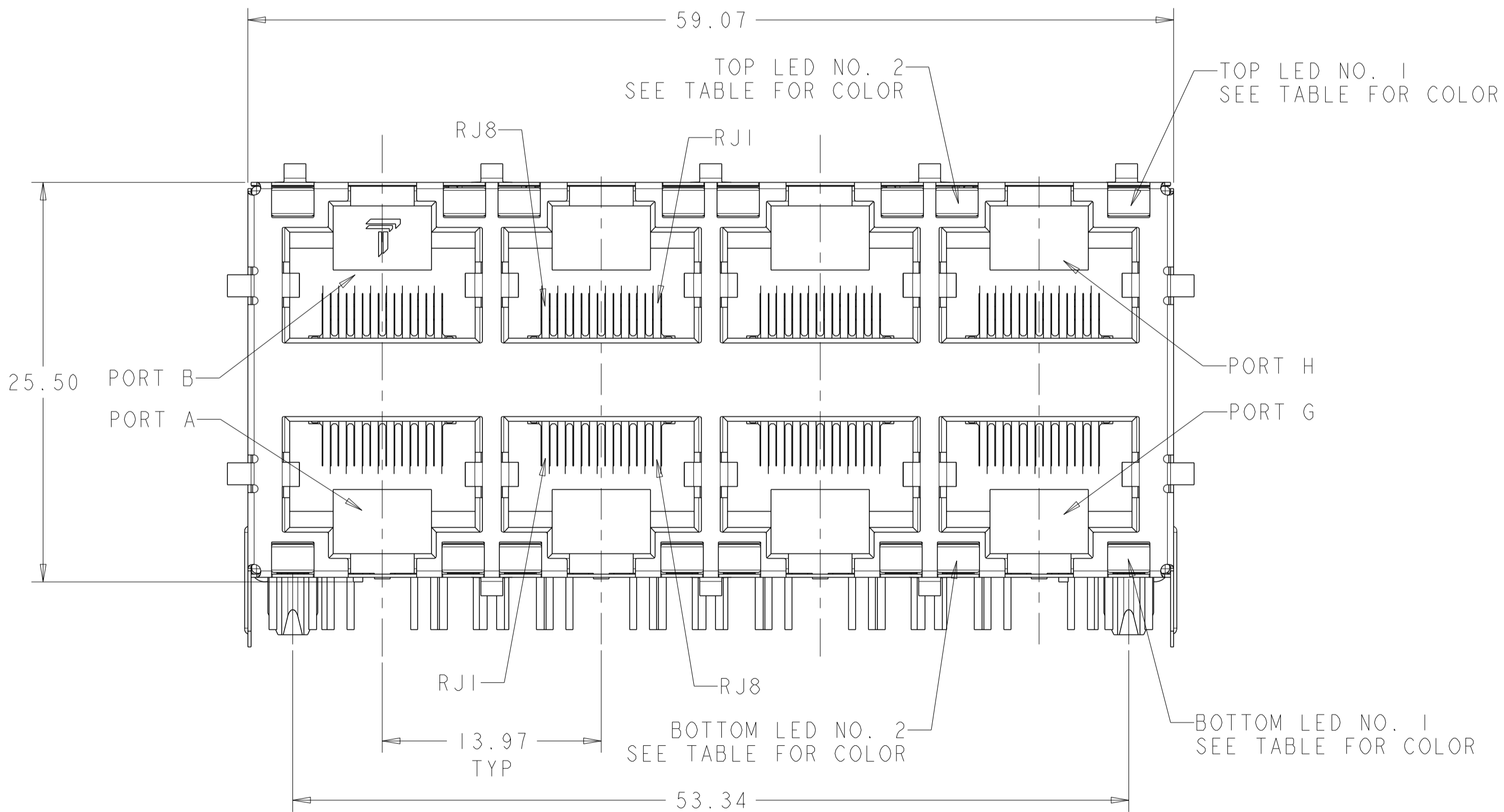
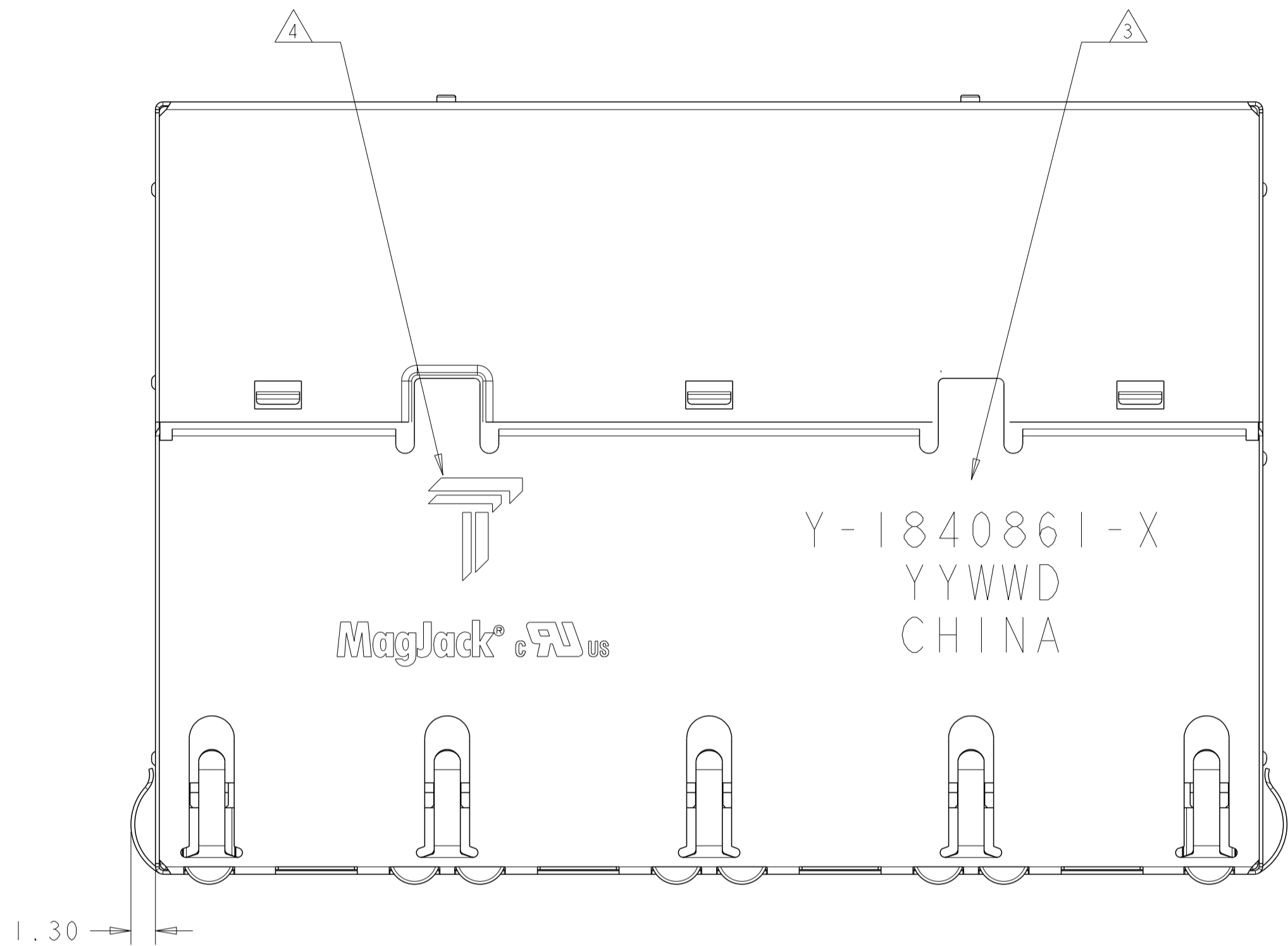
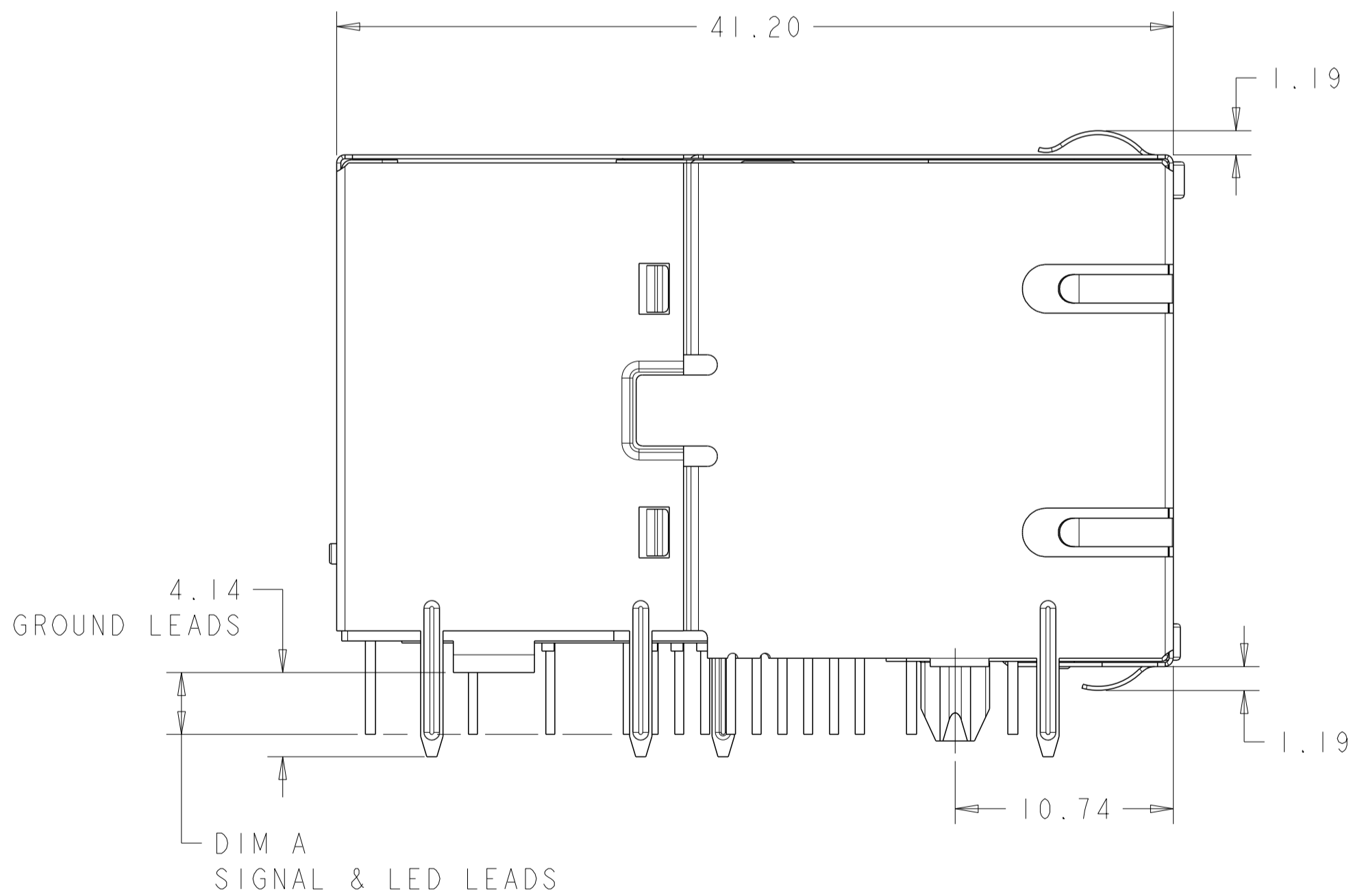
2.60	GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	2-1840861-4
3.81	GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	1-1840861-4
DIM A	BOTTOM LED NO. 2	BOTTOM LED NO. 1	TOP LED NO. 2	TOP LED NO. 1	PART NO.
THIS DRAWING IS A CONTROLLED DOCUMENT.			OWN RICK LI/ALLEN ZHOU CHK TONY YUAN APVD KEITH ZHU	09DEC2010 09DEC2010 09DEC2010	
DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED:		MODEL NAME	
0 PLC 1 PLC 2 PLC 3 PLC 4 PLC ANGLES		±0.25 ±0.25 ±0.25 ± ±		MAGJACK STACK PoE+	
PRODUCT SPEC 108-104004		APPLICATION SPEC -		DESC 2X4 S9HG104C GIGABIT PoE+ W/ LED	
CUSTOMER DRAWING			SIZE A1	CAGE CODE C=1840861	RESTRICTED TO -
SCALE 4:1			SHEET 1	OF 5	REV 4

D

C

B

A





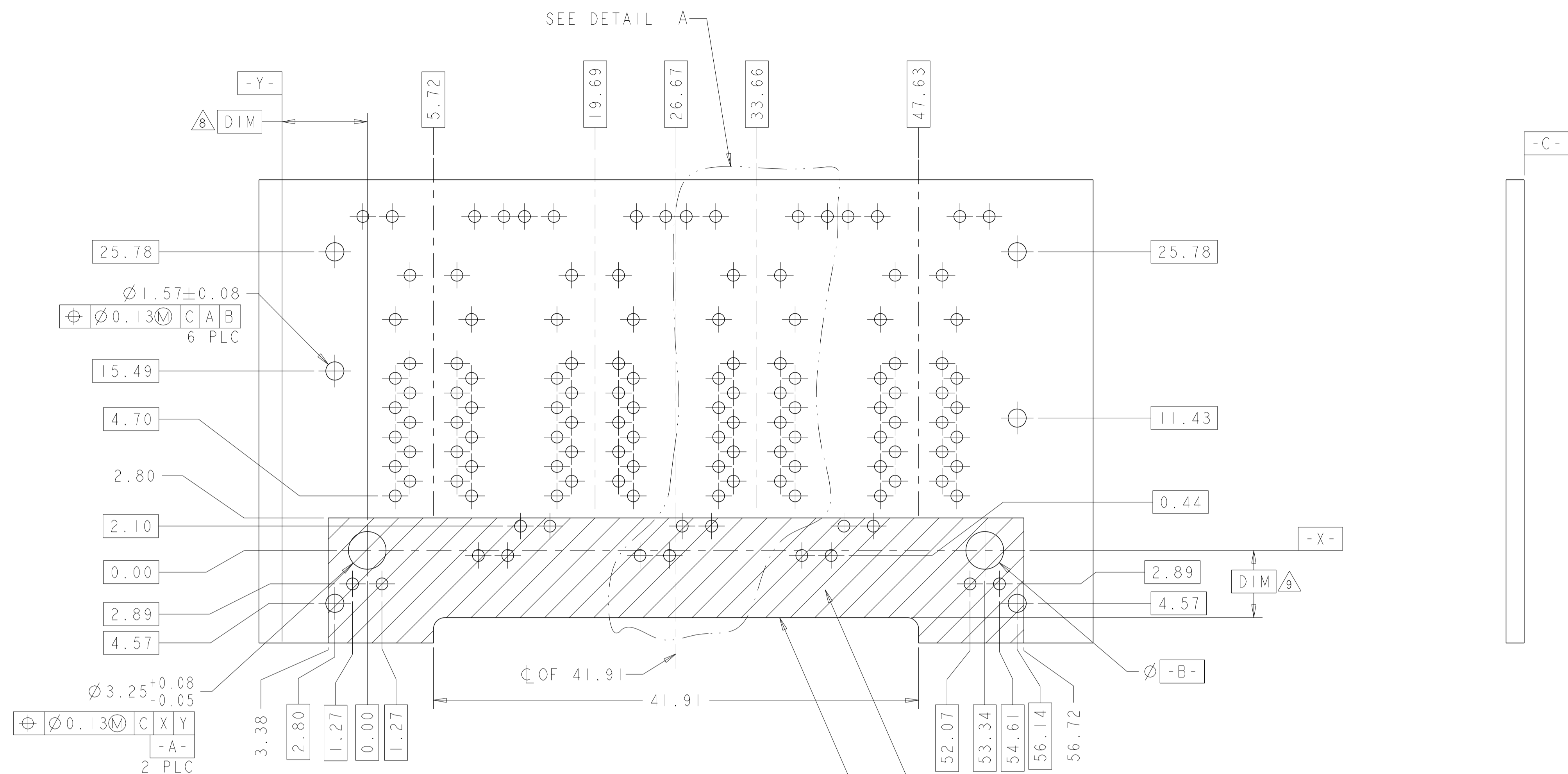
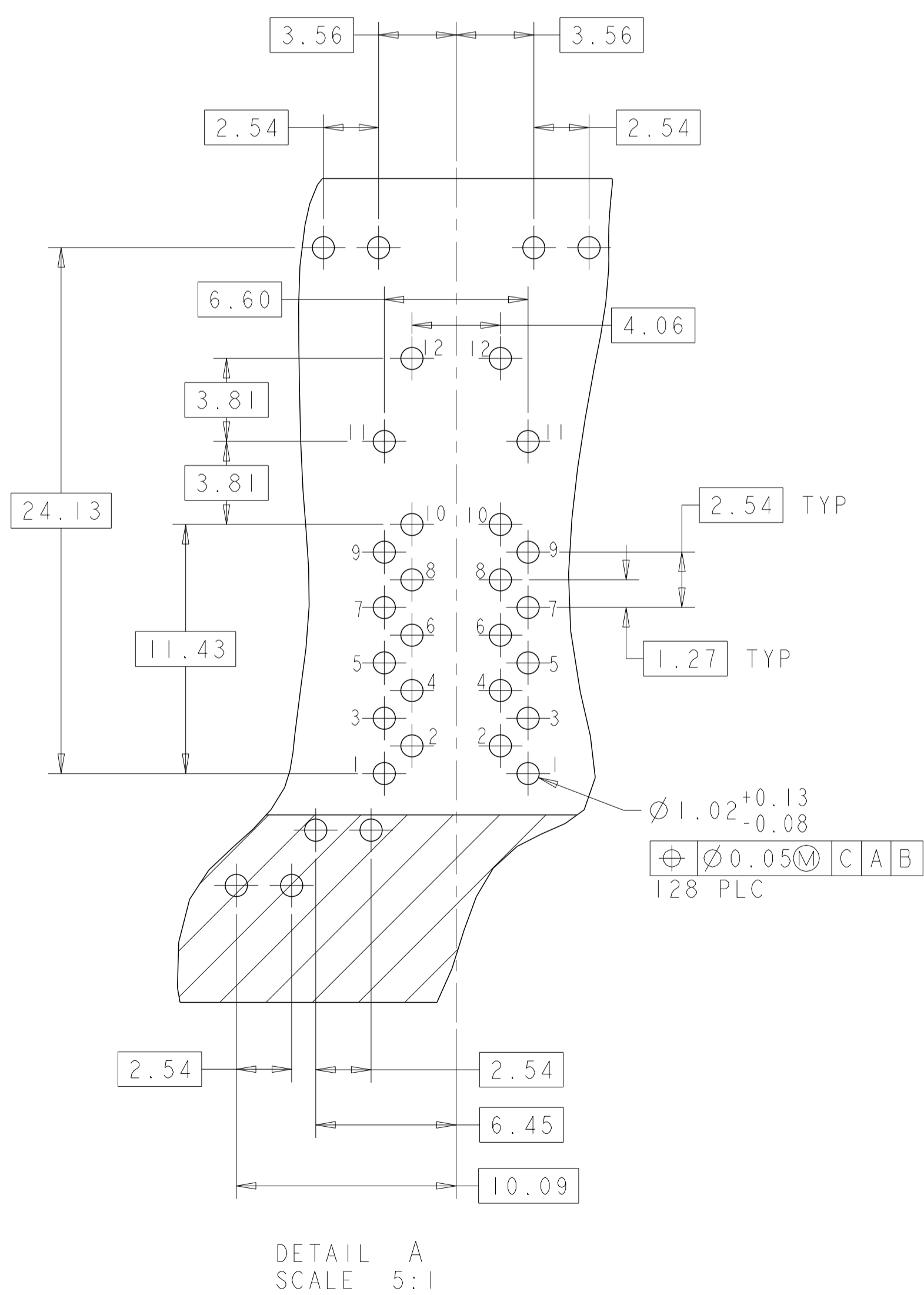
D

C

B

A

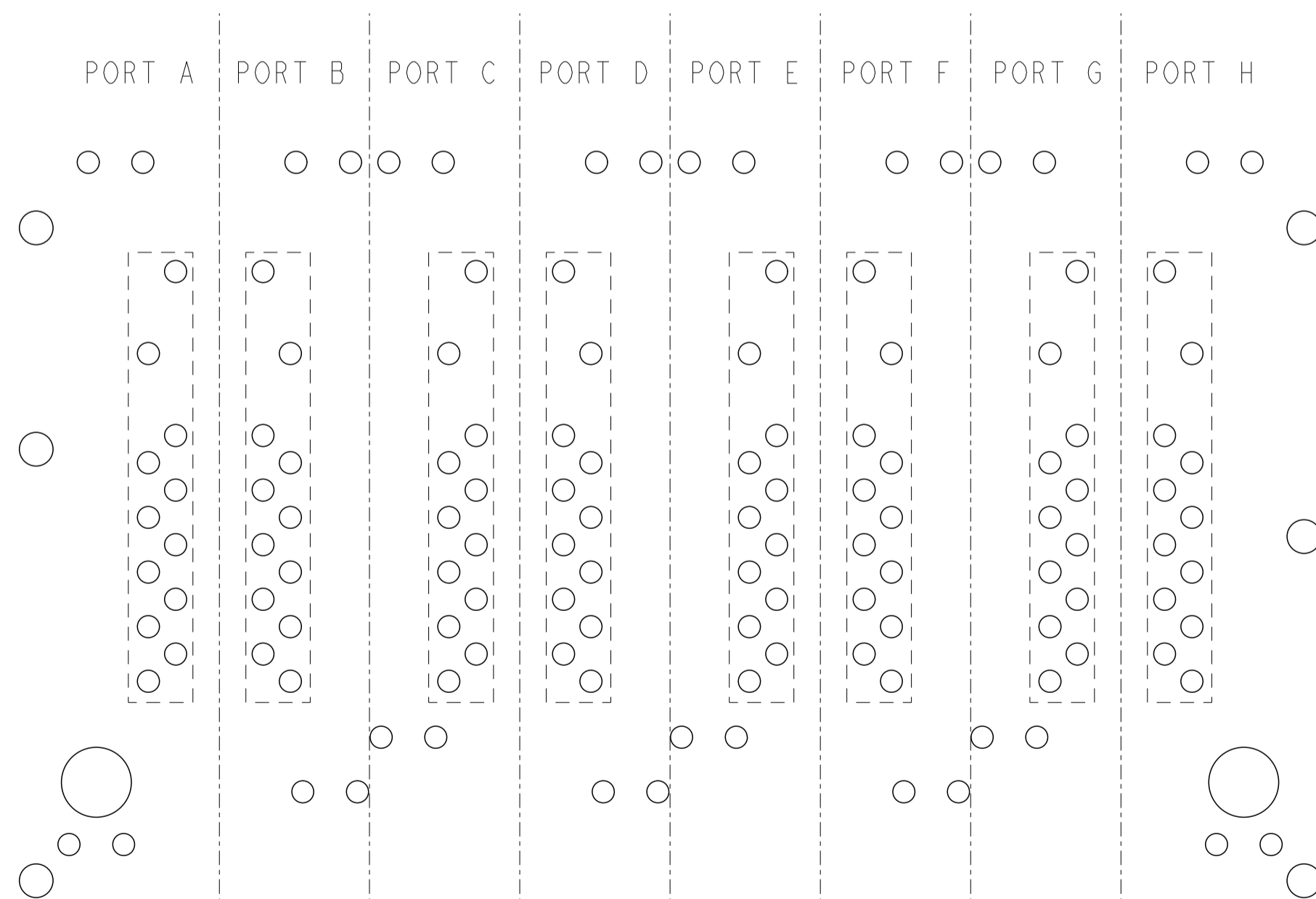
THIS DRAWING IS A CONTROLLED DOCUMENT.			DWG RICK LI/ALLEN ZHOU 09DEC2010		 trp CONNECTOR a bel group	DONGGUAN CHINA
			CHK TONY YUAN 09DEC2010			
			APPD KEITH ZHU 09DEC2010			
			MODEL NAME			
DIMENSIONS:		TOLERANCES UNLESS OTHERWISE SPECIFIED:		MAGJACK	DESC 2X4 S9HG104C GIGABIT PoE+ W/ LED	
mm				STACK PoE+	SIZE A1	
		0 PLC ±0.25		DRAWING NO C-1840861		RESTRICTED TO -
PRODUCT SPEC		1 PLC ±0.25		SCALE 4:1		
108-104004		2 PLC ±0.25		SHEET 2		OF 5
		3 PLC ±		REV 4		
		4 PLC ±				
		ANGLES				
		APPLICATION SPEC				
		-				



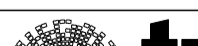

RECOMMENDED CUSTOMER PCB LAYOUT
VIEWED FROM COMPONENT SIDE

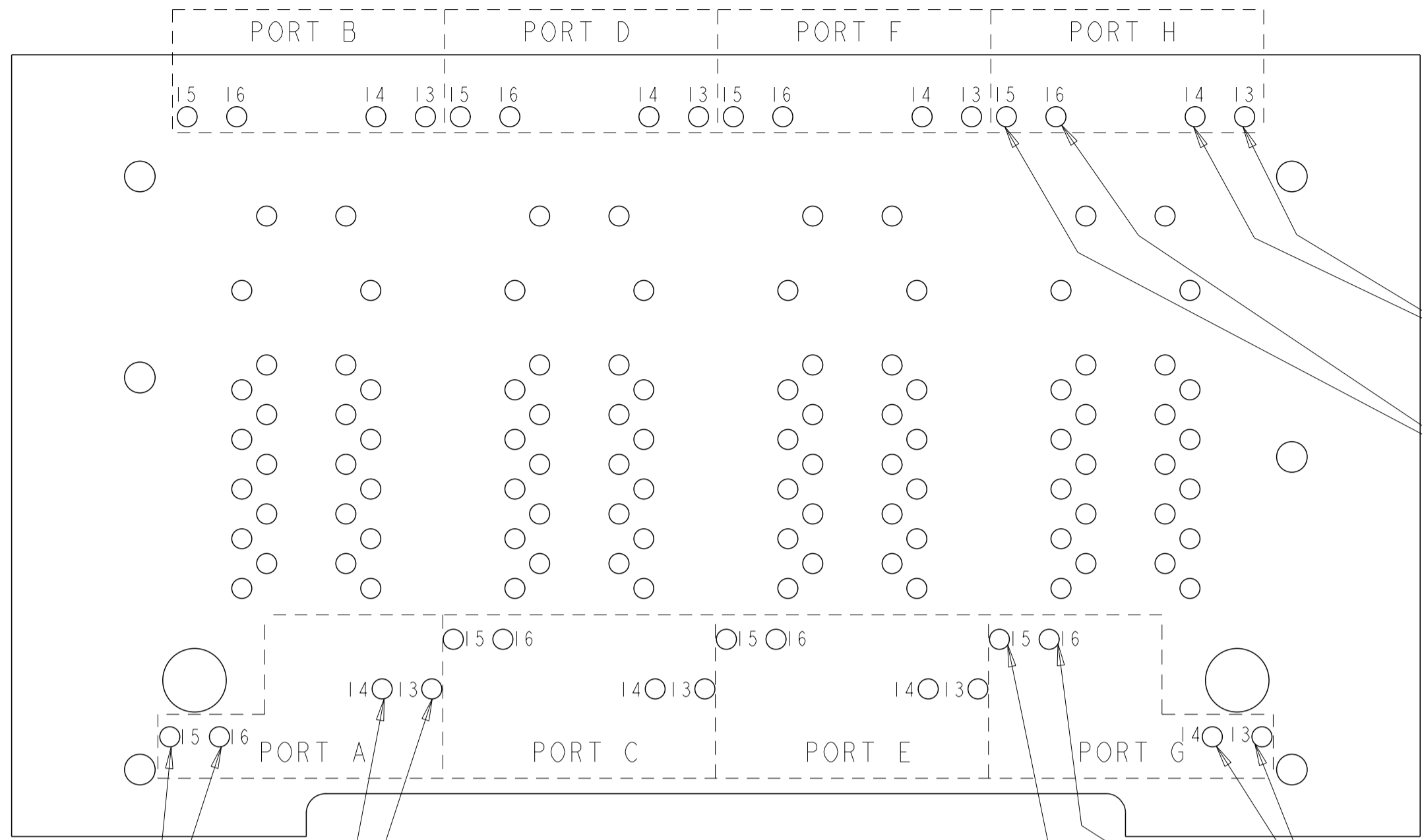
IT IS RECOMMENDED THAT SHADED AREAS ON CUSTOMER PC BOARD BE CLEAR OF ANY VIA HOLE, COMPONENT, CIRCUIT TRACE WHICH HAS EQUAL POTENTIAL WITH CABLE SIDE SIGNAL AND POE SIGNAL

RECOMMENDED PCB FRONT EDGE CUTOUT:
THE BOTTOM SHIELD GROUND TABS(FRONT)
SHOULD NOT BE SEATED ON THE TOP OF THE PCB



PORT ASSIGNMENT
VIEWED FROM COMPONENT SIDE
SCALE 4:1

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN 09DEC2010 RICK LI/ALLEN ZHOU CHK 09DEC2010 TONY YUAN APP'D 09DEC2010 KEITH ZHU		 trp a bel group DONGGUAN CHINA	
DIMENSIONS:		TOLERANCES UNLESS OTHERWISE SPECIFIED:		DESC	
mm		0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ±0.4 4 PLC ±0.4 ANGLES ±°		MODEL NAME 2X4 S9HG104C GIGABIT PoE+ W/ LED	
		MAGJACK		SIZE CASE CODE DRAWING NO	
PRODUCT SPEC		APPLICATION SPEC		RESTRICTED TO	
108-104004		-		A1 C=1840861	
		CUSTOMER DRAWING		SCALE 4:1 SHEET 3 OF 4 REV 4	



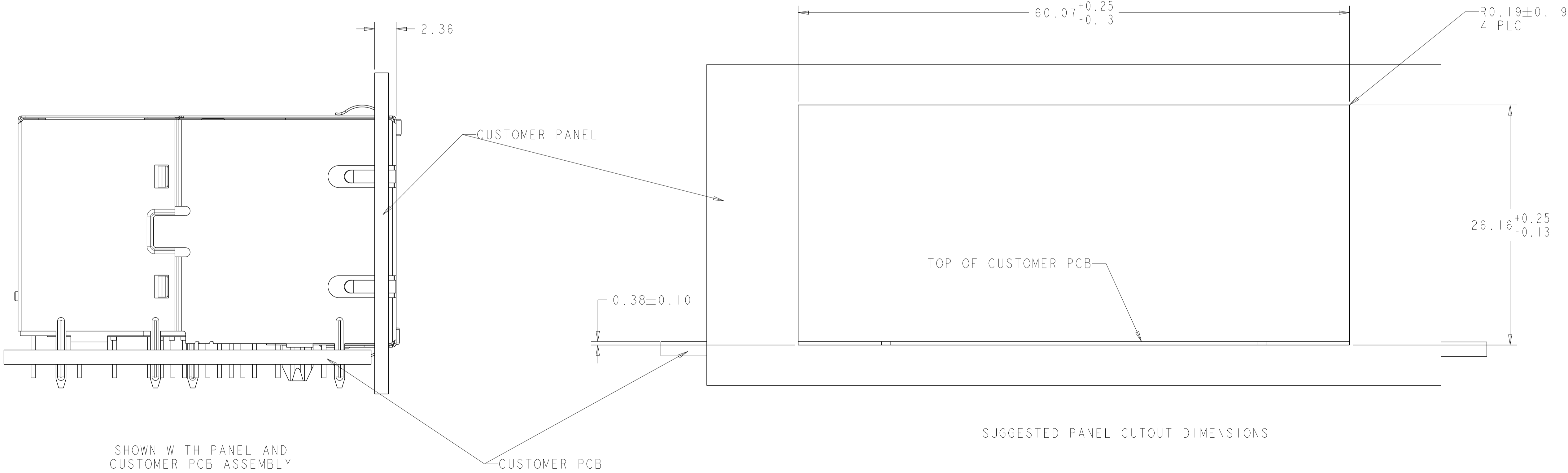
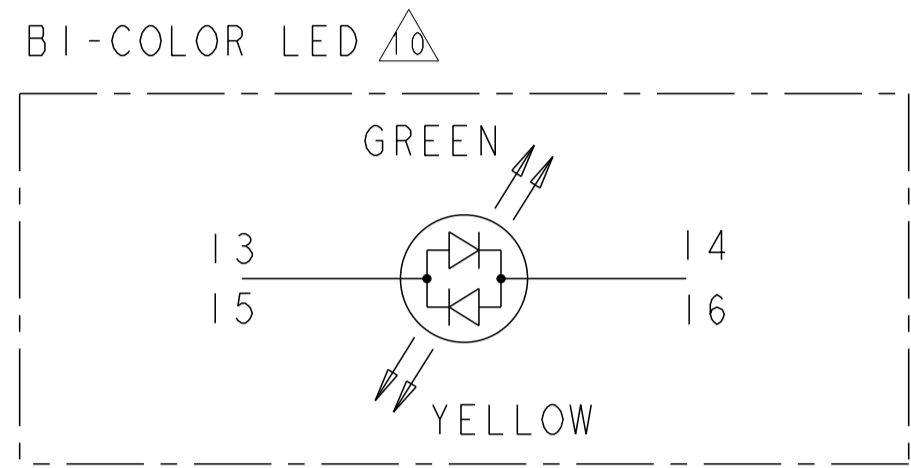
TOP LED NO. 1

TOP LED NO. 2

BOTTOM LED NO. 1


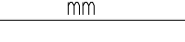
BOTTOM LED NO. 2

LED HOLE DESIGNATIONS
VIEWED FROM COMPONENT SIDE
SCALE 4:1



SHOWN WITH PANEL AND
CUSTOMER PCB ASSEMBLY

SUGGESTED PANEL CUTOUT DIMENSIONS

THIS DRAWING IS A CONTROLLED DOCUMENT.		DRN RICK LI/ALLEN ZHOU 09DEC2010		trp CONNECTOR a bel group	DONGGUAN CHINA
DIMENSIONS: mm		CHK TONY YUAN 09DEC2010			
	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD KEITH ZHU 09DEC2010	MODEL NAME		
		MAGJACK STACK PoE+			
PRODUCT SPEC 108-104004	APPLICATION SPEC -		DESC 2X4 S9HG104C GIGABIT PoE+ W/ LED	RESTRICTED TO -	
CUSTOMER DRAWING		SIZE A1	CAGE CODE -	DRAWING NO C=1840861	
		SCALE 4:1	SHEET 4	OF 5	
			REV 4		

