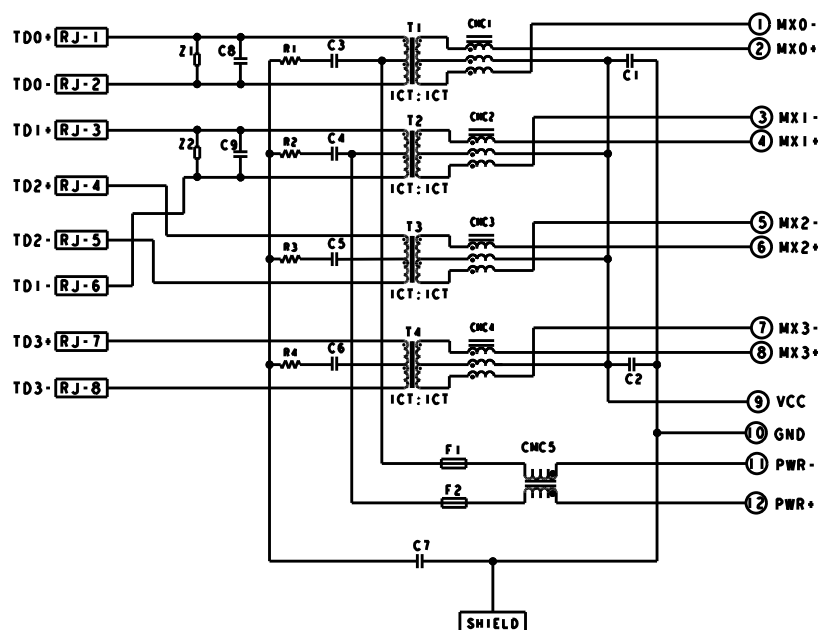


**S9HG122 GIGABIT PoE PLUS CIRCUIT** ⚠⚠  
TOP AND BOTTOM PORTS

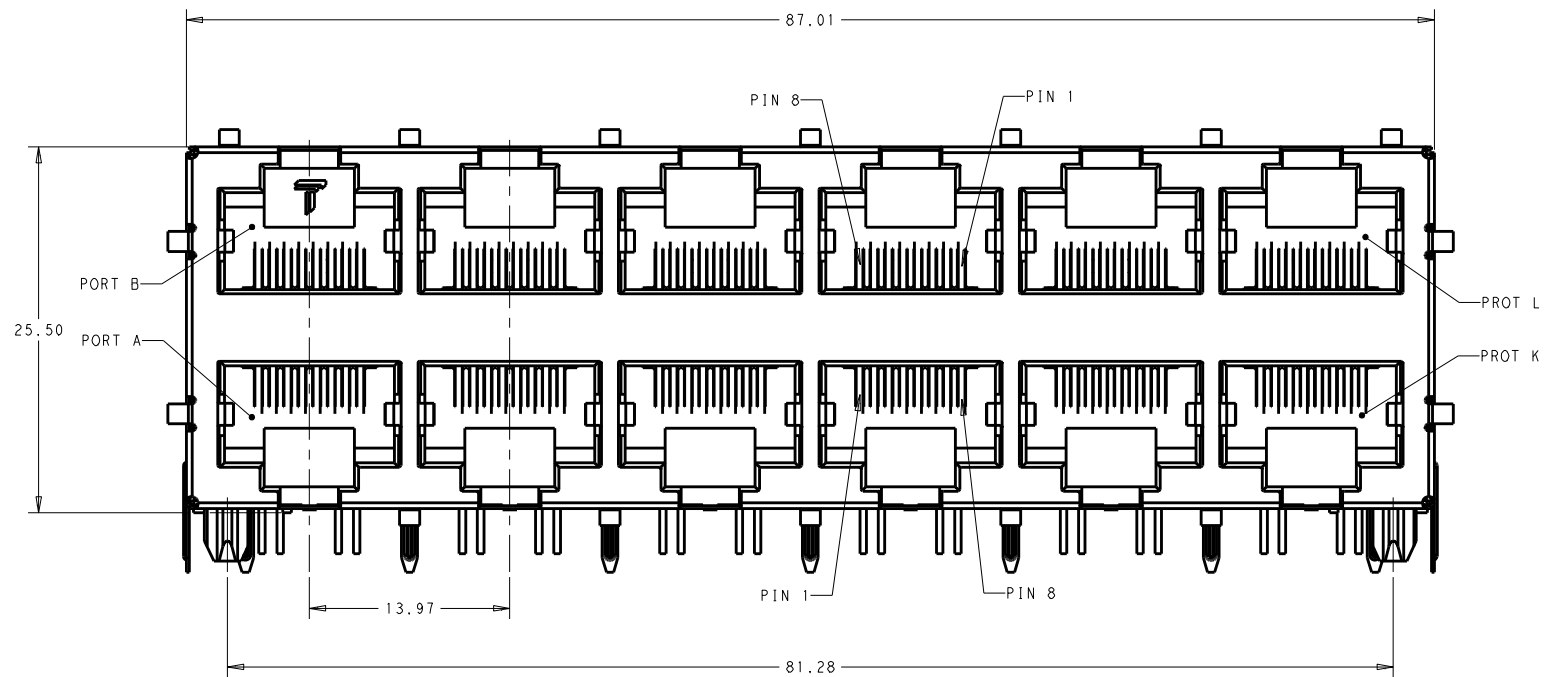
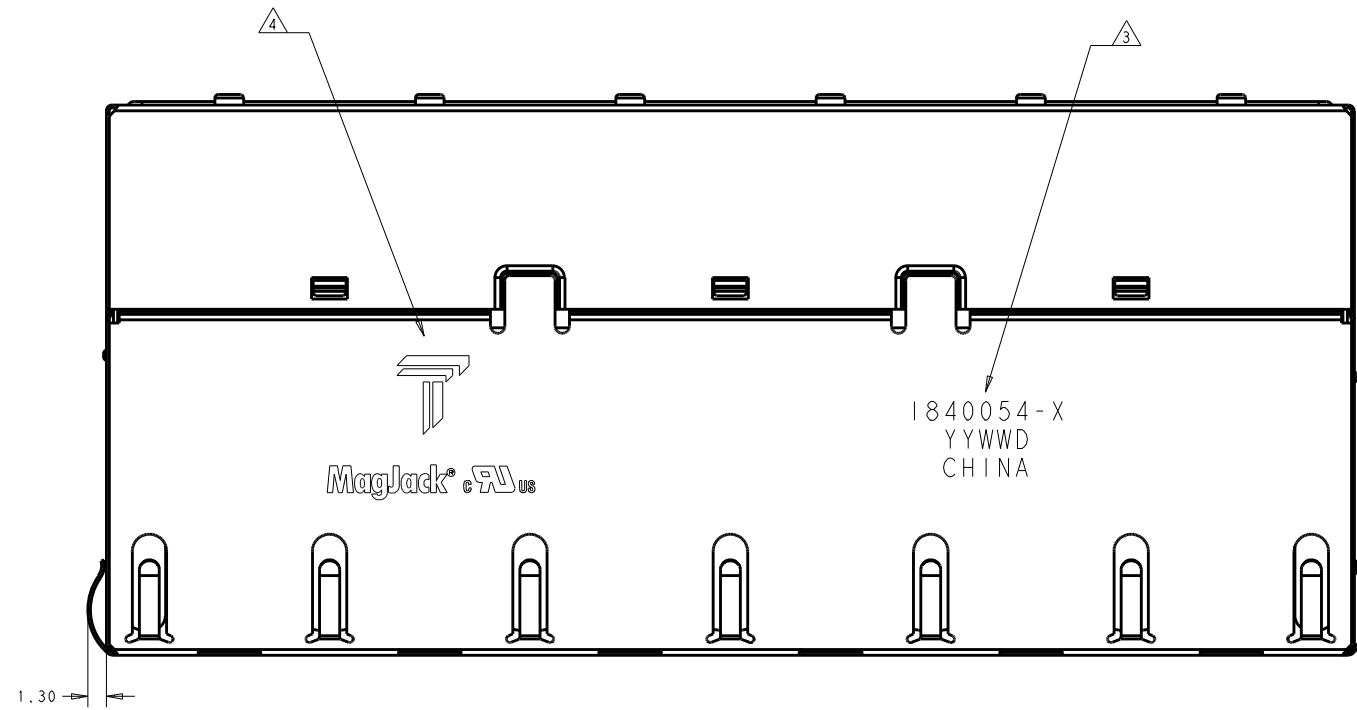


C1-C2=10nF, 50V, X7R, CAPACITORS  
 C3-C6=22nF, 100V, CAPACITORS  
 C8-C9=3.3pF, 50V, CAPACITORS  
 C7=1000pF, 2KV, CAPACITOR  
 R1-R4=750hms, 1/16W, RESISTORS  
 F1-F2=63V, 1.5A, FUSES  
 Z1-Z2=10V, B1-DIRECTIONAL ESD

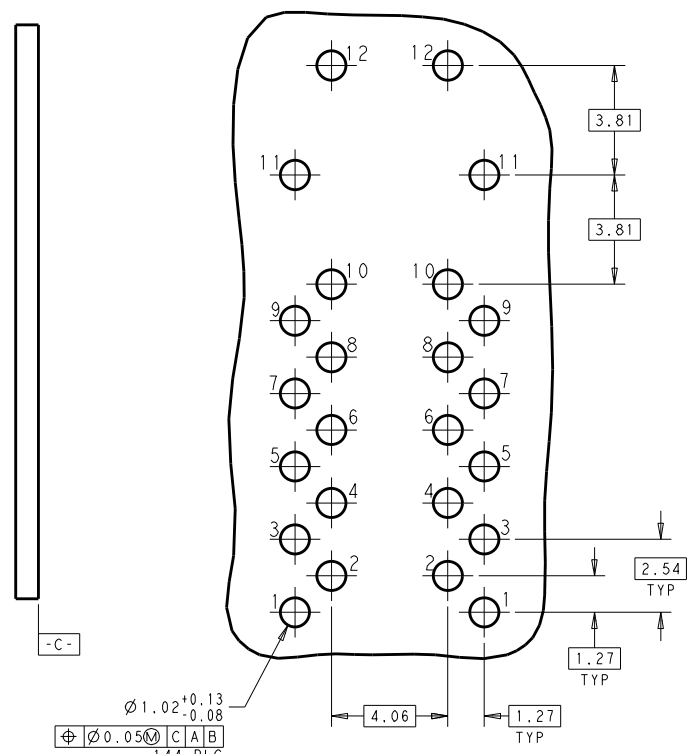
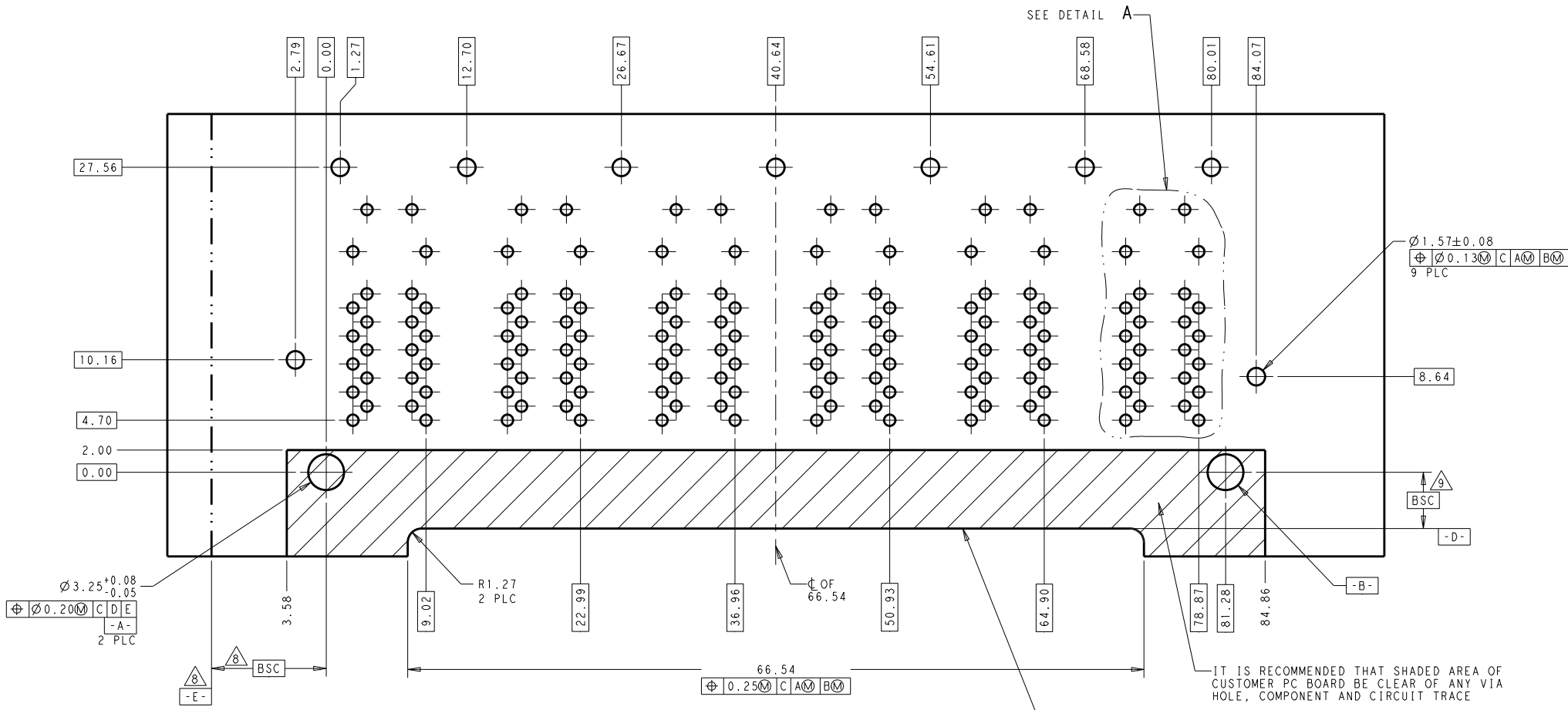
1. **MATERIALS:**  
 PLASTIC HOUSING: BLACK, THERMOPLASTIC FLAMMABILITY RATING UL 94V-0  
 SHIELD: BRASS, PREPLATED WITH 0.76um MIN SEMI-BRIGHT NICKEL,  
 POST DIPPED WITH 2.54um MIN SAC SOLDER OR PURE TIN ON SOLDER TAILS  
 CONTACTS: PHOSPHOR BRONZE, 1.27um MIN OVERALL NICKEL UNDERPLATE  
 WITH SELECT 1.27um MIN GOLD AT MATING INTERFACE  
 AND 2.54um MIN MATTE TIN ON SOLDER TAILS.
- ⚠ **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, 200uH MIN @100kHz,  
 0.1VRMS WITH 19mADC BIAS FROM 0°C TO 70°C, ACROSS RJ1-RJ2 & RJ3-RJ6  
 ALL FOUR PAIRS B1-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. DATE CODE "YY"  
 IS YEAR, "WW" IS WORK WEEK, "D" IS 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.
10. THE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS,  
 PEAK TEMPERATURE 260°C MAX, 10 SECONDS MAX.

2.84 1840054-1  
DIM A PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: TOMMY REN/TERRY LIN 23AUG2012 CK: TONY YUAN 23AUG2012 APVD: KELTH ZHU 23AUG2012	 DONGGUAN CHINA
DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ±	MODEL NAME MAGJACK	DESC 2X6 S9HG122 GIGABIT PoE+ W/O LED
PRODUCT SPEC 108-104004	APPLICATION SPEC -	SIZE A1	CAGE CODE -
CUSTOEMR DRAWING		DRAWING NO 1840054	RESTRICTED TO -
SCALE 4:1		SHEET 1 OF 4	REV 3



THIS DRAWING IS A CONTROLLED DOCUMENT.		DWG: 23AUG2012 TOMMY REN/TERRY LIN CHK: 23AUG2012 TONY YUAN APVD: 23AUG2012 KEITH ZHU	<b>trp</b> CONNECTOR DONGGUAN CHINA
DIMENSIONS: mm 	TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES °	MODEL NAME MAGJACK STACK POE PLUS	
PRODUCT SPEC 108-104004	APPLICATION SPEC -	CUSTOMER DRAWING	RESTRICTED TO - SCALE 4:1 SHEET 2 OF 4 REV 3

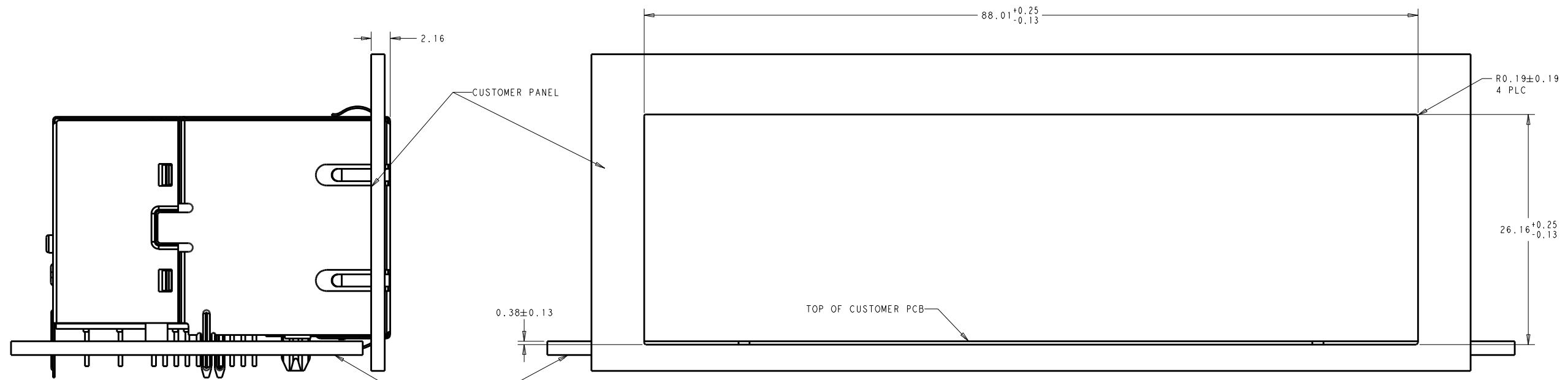


DETAIL A  
SCALE 8:1

IT IS RECOMMENDED THAT SHADED AREA OF CUSTOMER PC BOARD BE CLEAR OF ANY VIA HOLE, COMPONENT AND CIRCUIT TRACE

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

RECOMMENDED PCB LAYOUT  
COMPONENT SIDE VIEW



SUGGESTED PANEL CUTOUT DIMENSIONS

SHOWN WITH PANEL AND  
CUSTOMER PCB ASSEMBLY

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: TOMMY REN/TERRY LIN 23AUG2012 CHK: TONY YUAN 23AUG2012 APVD: KELTH ZHU 23AUG2012	DONGGUAN CHINA
DIMENSIONS: mm 	TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ±	MODEL NAME: MAGJACK SIZE: 2X6 S9HG122 GIGABIT PoE+ W/O LED PRODUCT SPEC: 108-104004 APPLICATION SPEC:	

D

D

C

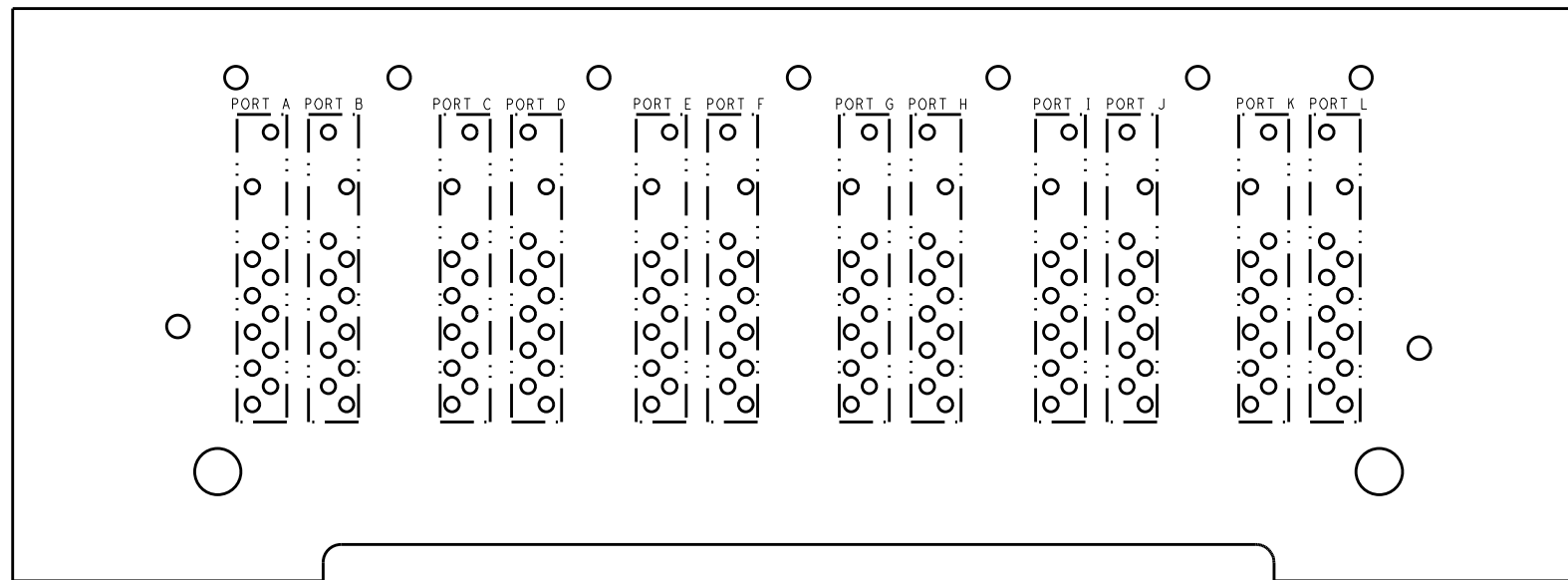
C

B

B

A

A



PORT ASSIGNMENT  
COMPONENT SIDE VIEW

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN 23AUG2012 TOMMY REN/TERRY LIN CHK 23AUG2012 TONY YUAN APVD 23AUG2012 KEITH ZHU	DONGGUAN CHINA
DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES °	MODEL NAME MAGJACK	DESC 2X6 S9HG122 GIGABIT PoE+ W/O LED
PRODUCT SPEC 108-104004	APPLICATION SPEC -	SIZE A1	CAGE CODE -
CUSTOEMR DRAWING		DRAWING NO 1840054	RESTRICTED TO -
		SCALE 4:1	SHEET 4 OF 4 REV 3