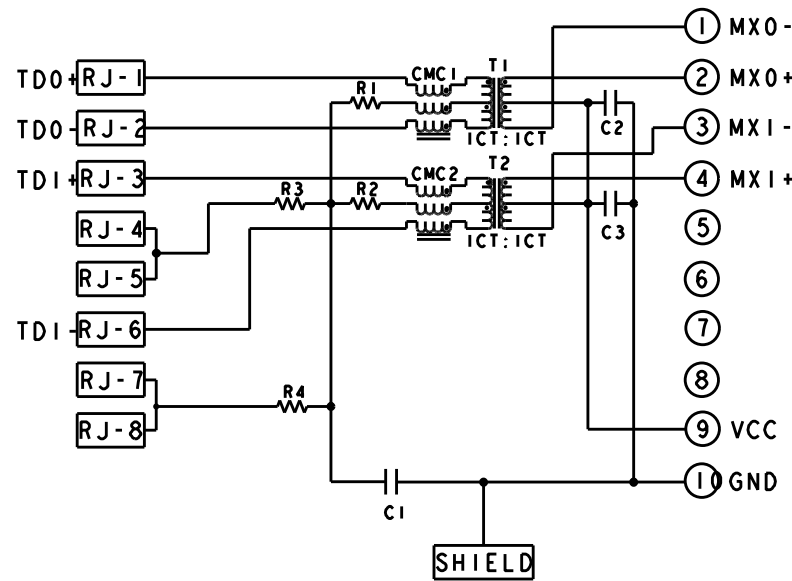


S897 10/100 CIRCUIT   
TOP AND BOTTOM PORTS



C1: 1000PF, 2KV CAPACITOR  
C2 - C3 : 10nF, 50V CAPACITOR  
R1-R4: 75 Ohms, 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 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

**MAGNETICS**  
 10/100 BASE-T  
 MAGNETICS  
 -APPLICATION: 10/100 BASE-T  
 -IMPEDANCE: 100 OHMS  
 -TURNS RATIO (CHIP:CABLE): TX = 1:1, RX = 1:1  
 -OPEN CIRCUIT INDUCTANCE (OCL): 350uH MIN @100kHz, 0.1VRMS,  
 8mADC BIAS FROM 0°C TO 70°C, TX AND RX  
 -PERFORMANCE @ 25°C:  
 INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz  
 RETURN LOSS (RL): 18dB MIN FROM 0.5MHz TO 30MHz  
 18-20LOG(f/30)dB MIN FROM 30.1MHz TO 60MHz  
 12dB MIN FROM 60.1MHz TO 80MHz  
 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.  
 (FOR SINGLE PORT PRODUCT ISOLATION VOLTAGE:2250VDC (MAX) FOR 60 SECONDS WITH A  
 RISE TIME OF 500V/SEC)

**MAGNETICS**  
 PART NUMBER, DATE CODE AND COUNTRY OF ORIGIN ARE  
 LOCATED IN APPROXIMATE AREA SHOWN. DATE CODE: YYWW WHERE "YY" IS YEAR,  
 "WW" IS WEEK, "D" IS DAY OF WEEK, WITH SUNDAY=1.

TRP LOGO AND AGENCY APPROVAL LOGO ARE  
 LOCATED IN APPROXIMATE AREA SHOWN.

OPERATING TEMP: FROM 0°C TO +70°C.

RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F.

INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL AND  
 SUPPORT AUTO-MDI/MDIX.

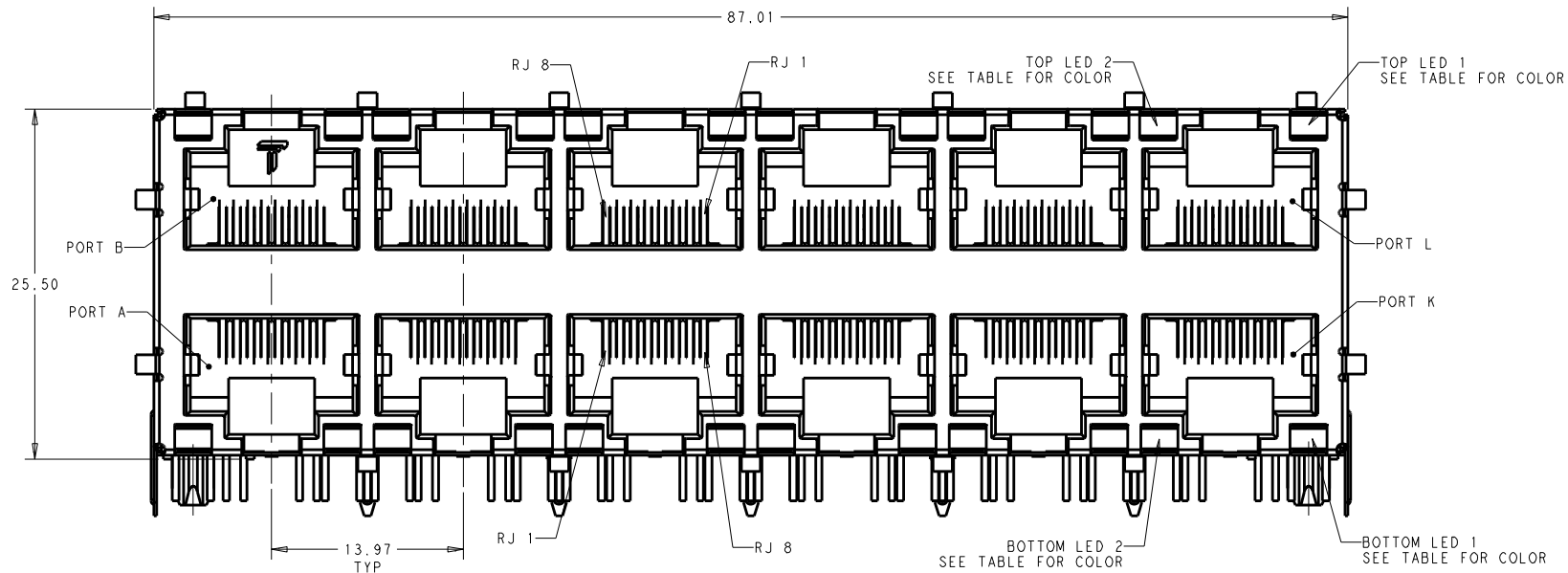
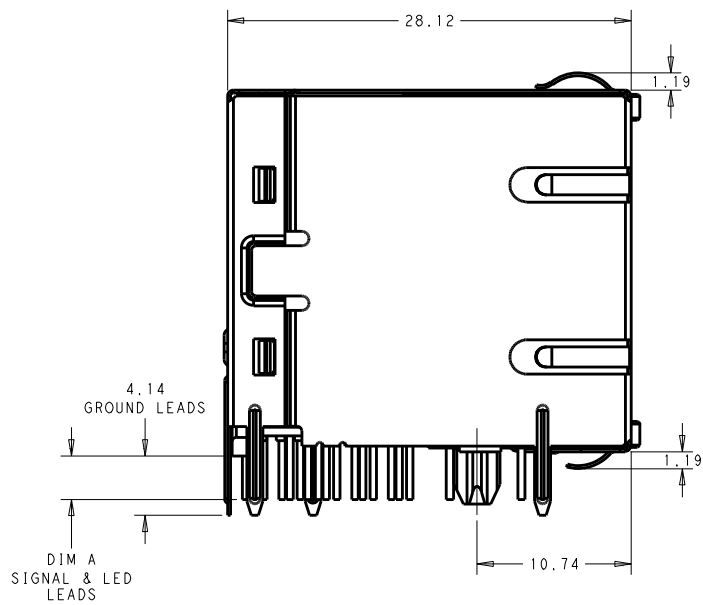
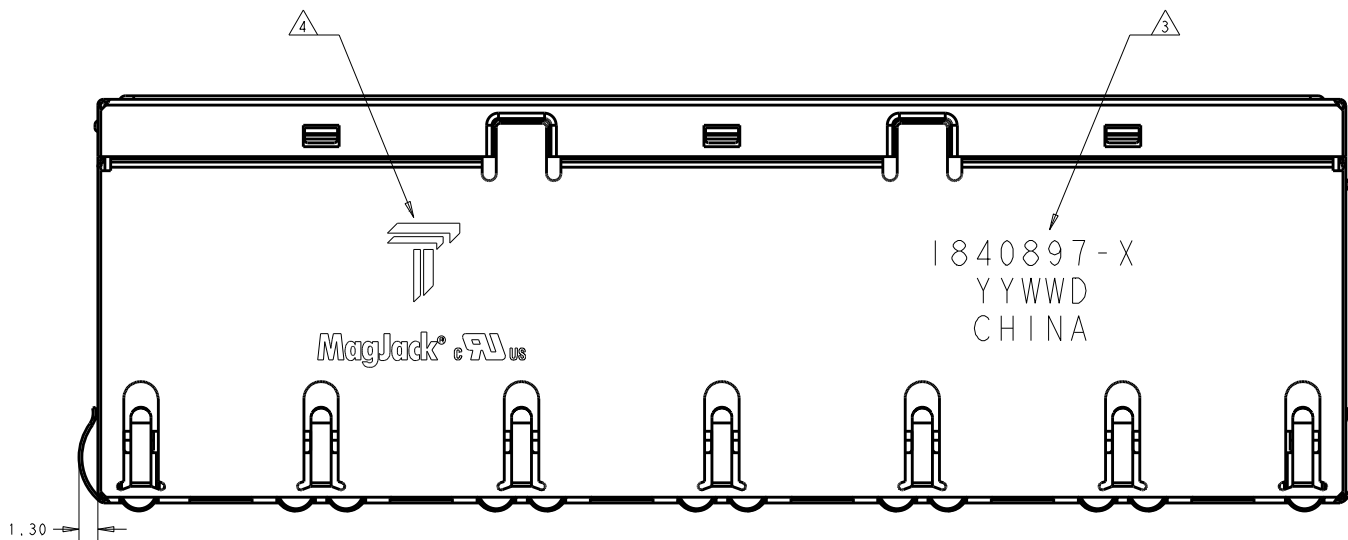
DATUM AND BASIC DIMENSION ESTABLISHED BY CUSTOMER.

BASIC DIMENSION ESTABLISHED BY CUSTOMER, BUT MAY NOT BE  
 GREATER THAN 5.08mm.

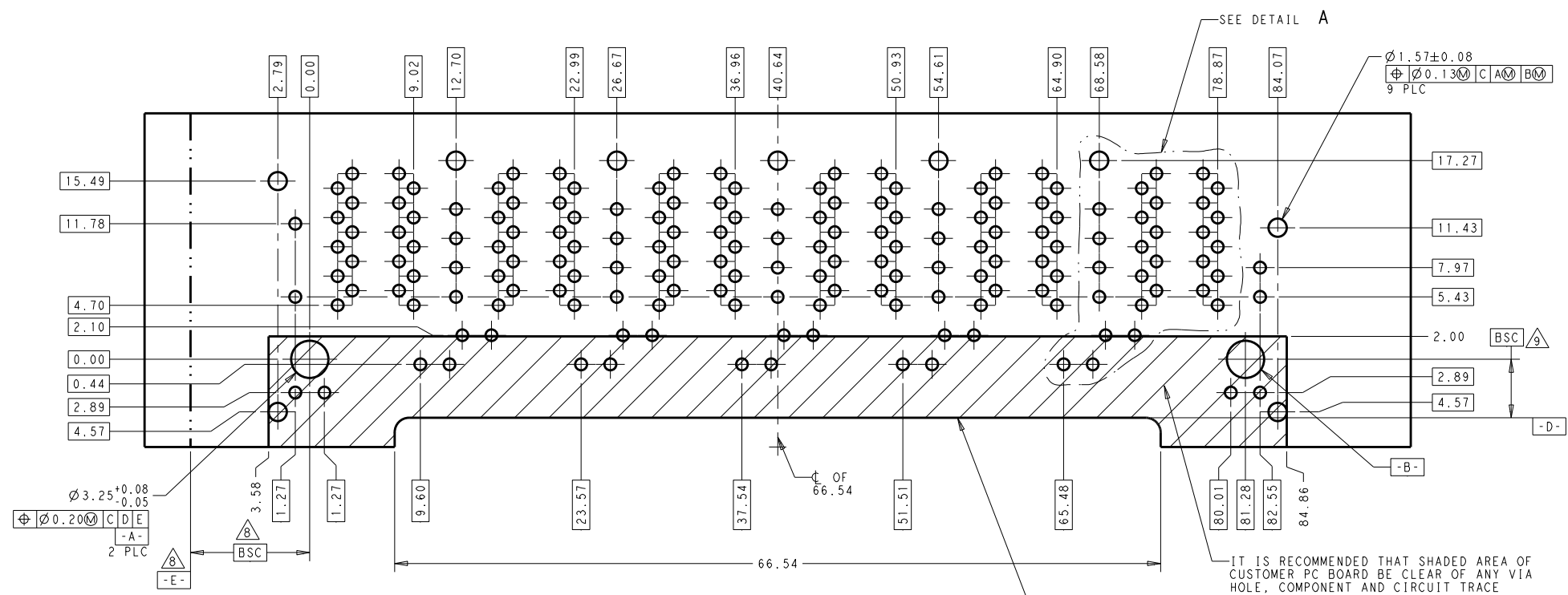
LEDS ARE DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA  
 LED COLOR: DOMINANT WAVELENGTH (λD): GREEN 568 nm TYP. @ IF=20mA  
 FORWARD VOLTAGE (VF): GREEN 2.2V TYP. @ IF=20mA  
 DOMINANT WAVELENGTH (λD): ORANGE 605 nm TYP. @ IF=20mA  
 FORWARD VOLTAGE (VF): ORANGE 2.1V TYP. @ IF=20mA  
 DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP. @ IF=20mA  
 FORWARD VOLTAGE (VF): YELLOW 2.1V TYP. @ IF=20mA

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

|  |              |   |           |  |             |
|--|--------------|---|-----------|--|-------------|
| 3.04   | GREEN        | GREEN   | GREEN     | GREEN  | 1840897-1   |
| DIM A  | BOTTOM LED 2 | BOTTOM LED 1  | TOP LED 2 | TOP LED 1  | PART NUMBER |
| THIS DRAWING IS A CONTROLLED DOCUMENT. <span style="float: right;">DONGGUAN CHINA</span> |              |   |           |  |             |
| DIMENSIONS: mm<br>   |              | TOLERANCES UNLESS OTHERWISE SPECIFIED:<br>0 PLC ±<br>1 PLC ±<br>2 PLC ±0.25<br>3 PLC ±<br>4 PLC ± |           | TRP CONNECTOR<br>2X6 S897 10/100 WITH LED                |             |
| PRODUCT SPEC: 108-104004   |              | APPLICATION SPEC:   |           | MODEL NAME: MAGJACK<br>STACK NON-POE<br>CUSTOMER DRAWING |             |
| DIMENSIONS: mm<br>   |              | TOLERANCES UNLESS OTHERWISE SPECIFIED:<br>0 PLC ±<br>1 PLC ±<br>2 PLC ±0.25<br>3 PLC ±<br>4 PLC ± |           | SIZE: A1<br>SCALE: 4:1<br>SHEET: 1 OF 4<br>REV: D        |             |



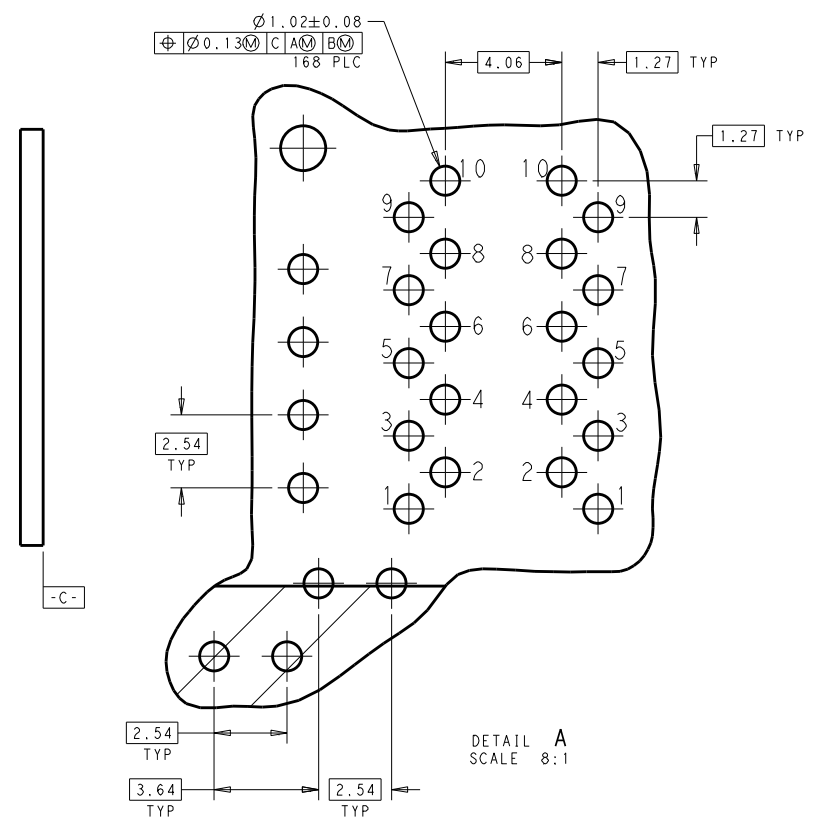
|  |  |  |   |
|--|--|--|---|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |  | DWN: 09MAT2011<br>GABRIEL Z. TERRY, L.<br>CHK: TONY YUAN<br>09MAT2011<br>APVD: KEITH ZHU<br>09MAT2011<br>MODEL NAME: MAGJACK         | trp CONNECTOR<br>a bel group<br>DONGGUAN<br>CHINA |
| DIMENSIONS:<br>mm<br>                  | TOLERANCES UNLESS<br>OTHERWISE SPECIFIED:<br>0 PLC ±<br>1 PLC ±<br>2 PLC ±0.25<br>3 PLC ±<br>4 PLC ±<br>ANGLES ± | DESC: 2X6 S897 10/100 WITH LED<br>SIZE: A1<br>CAGE CODE: C-1840897<br>DRAWING NO: C-1840897<br>REV: D<br>SCALE: 4:1<br>SHEET: 2 OF 4 |   |
| PRODUCT SPEC:<br>108-104004            | APPLICATION SPEC:  | RESTRICTED TO:   | CUSTOMER DRAWING                                  |



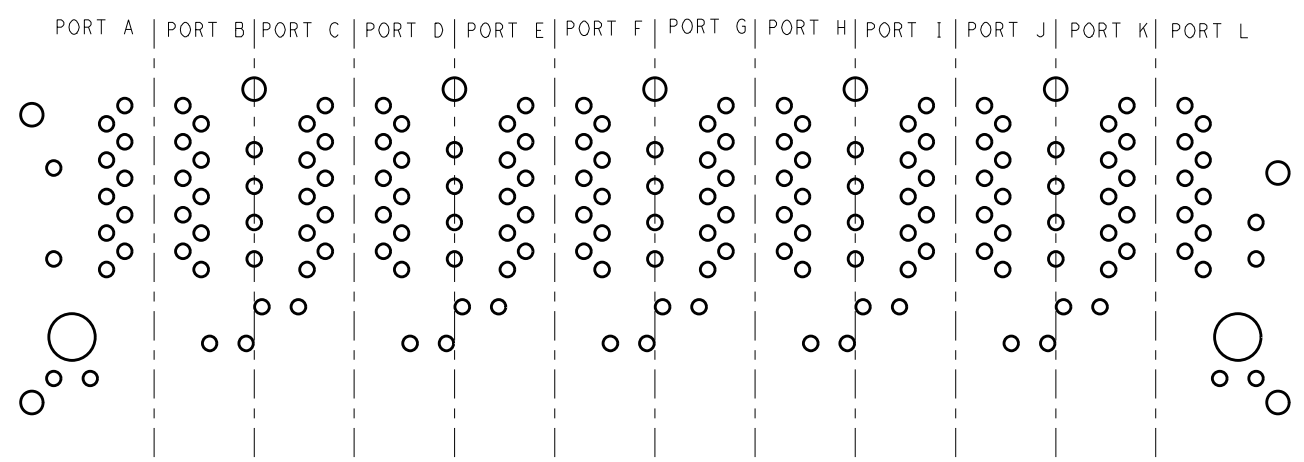
RECOMMENDED PCB LAYOUT COMPONENT SIDE VIEW

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

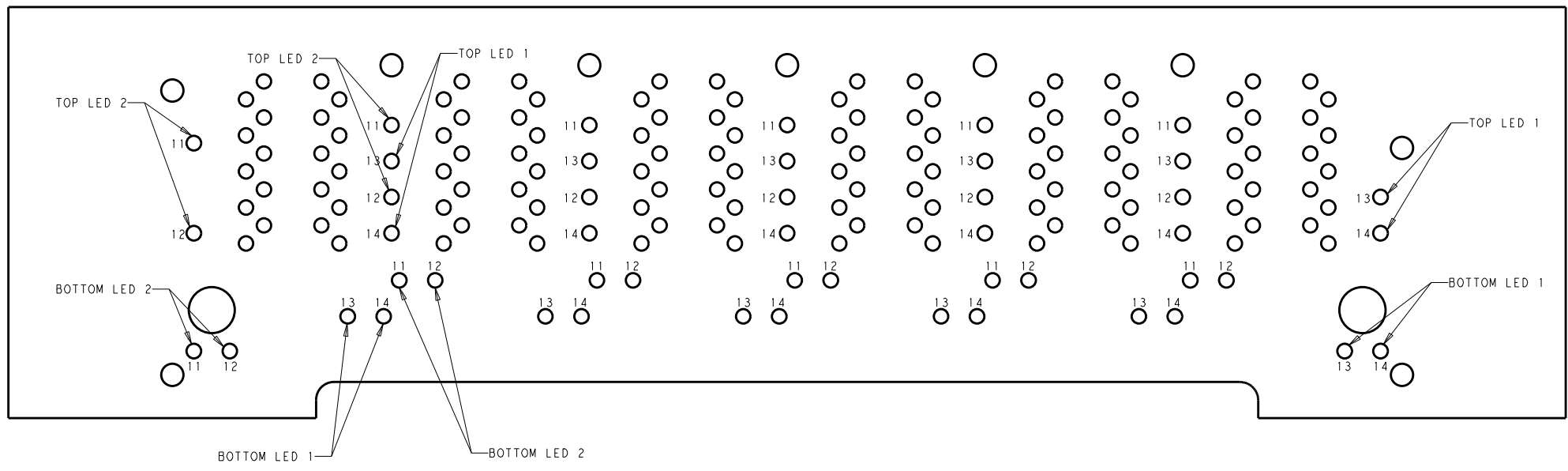


DETAIL A SCALE 8:1

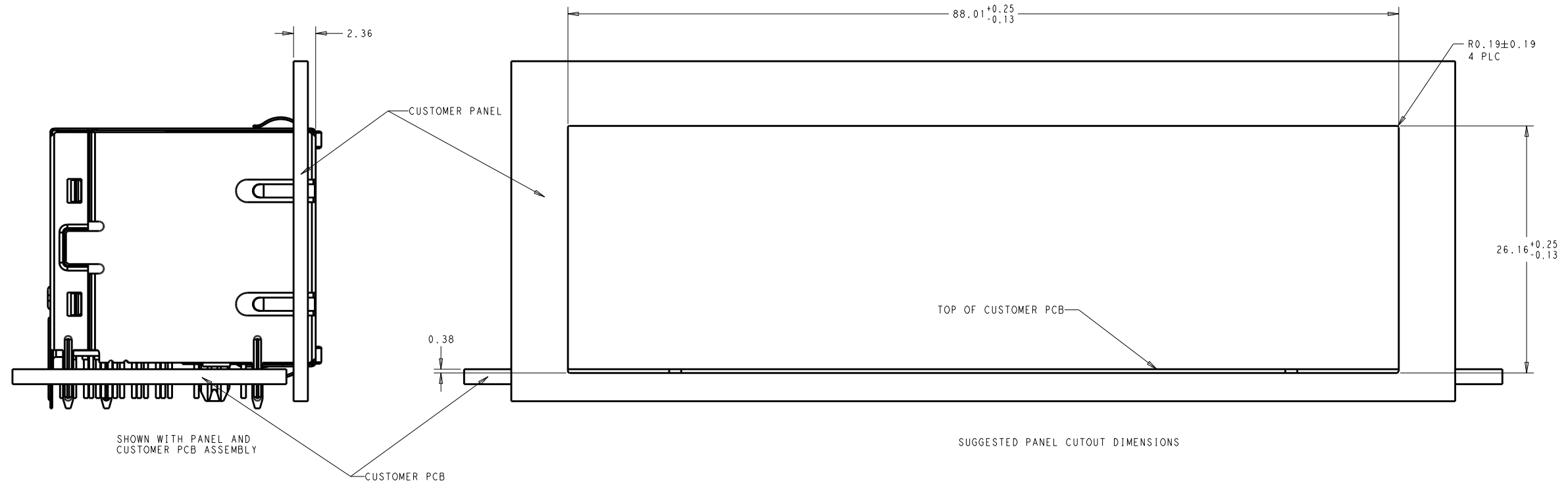
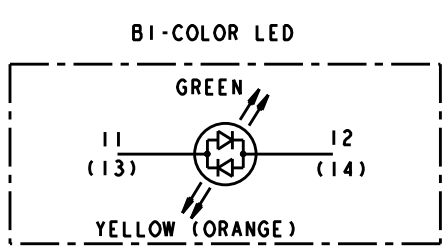
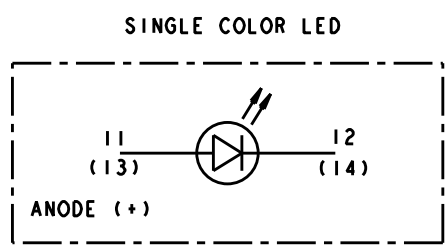


PORT ASSIGNMENT VIEWED FROM COMPONENT SIDE

|  |  |   |  |   |
|--|--|---|--|---|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |  | DWN: 09MAT2011<br>GABRIEL Z.TERRY.L<br>CHK: TONY YUAN<br>APVD: KEITH ZHU<br>09MAT2011                         |  | DONGGUAN CHINA                                  |
| DIMENSIONS: mm<br>                     |  | TOLERANCES UNLESS OTHERWISE SPECIFIED:<br>0 PLC ±<br>1 PLC ±<br>2 PLC ±0.25<br>3 PLC ±<br>4 PLC ±<br>ANGLES ° |  |   |
| PRODUCT SPEC: 108-104004               |  | APPLICATION SPEC:   |  | SIZE: A1<br>CAGE CODE: C-1840897<br>DRAWING NO: |
| CUSTOMER DRAWING                       |  | SCALE: 4:1  |  | SHEET 3 OF 4<br>REV D                           |



LED HOLE DESIGNATIONS VIEWED FROM COMPONENT SIDE



SHOWN WITH PANEL AND CUSTOMER PCB ASSEMBLY

SUGGESTED PANEL CUTOUT DIMENSIONS

|  |                     |   |   |   |
|--|---------------------|---|---|---|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |                     | DWG: 09MAT2011<br>GABRIEL Z. TERRY, L.  |   | <br>DONGGUAN CHINA  |
| DIMENSIONS: mm                         |                     | CHK: TONY YUAN<br>APVD: KEITH ZHU   |   |   |
|  |                     | TOLERANCES UNLESS OTHERWISE SPECIFIED:<br>0 PLC ±<br>1 PLC ±<br>2 PLC ±0.25<br>3 PLC ±<br>4 PLC ± |   | MODEL NAME: 2X6 S897 10/100 WITH LED<br>DESC:             |
| PRODUCT SPEC: 108-104004               | APPLICATION SPEC: - | MAGJACK<br>STACK NON-POE  | SIZE: A1<br>CAGE CODE: -<br>DRAWING NO: C-1840897 | RESTRICTED TO: -<br>SCALE: 4:1<br>SHEET: 4 OF 4<br>REV: D |