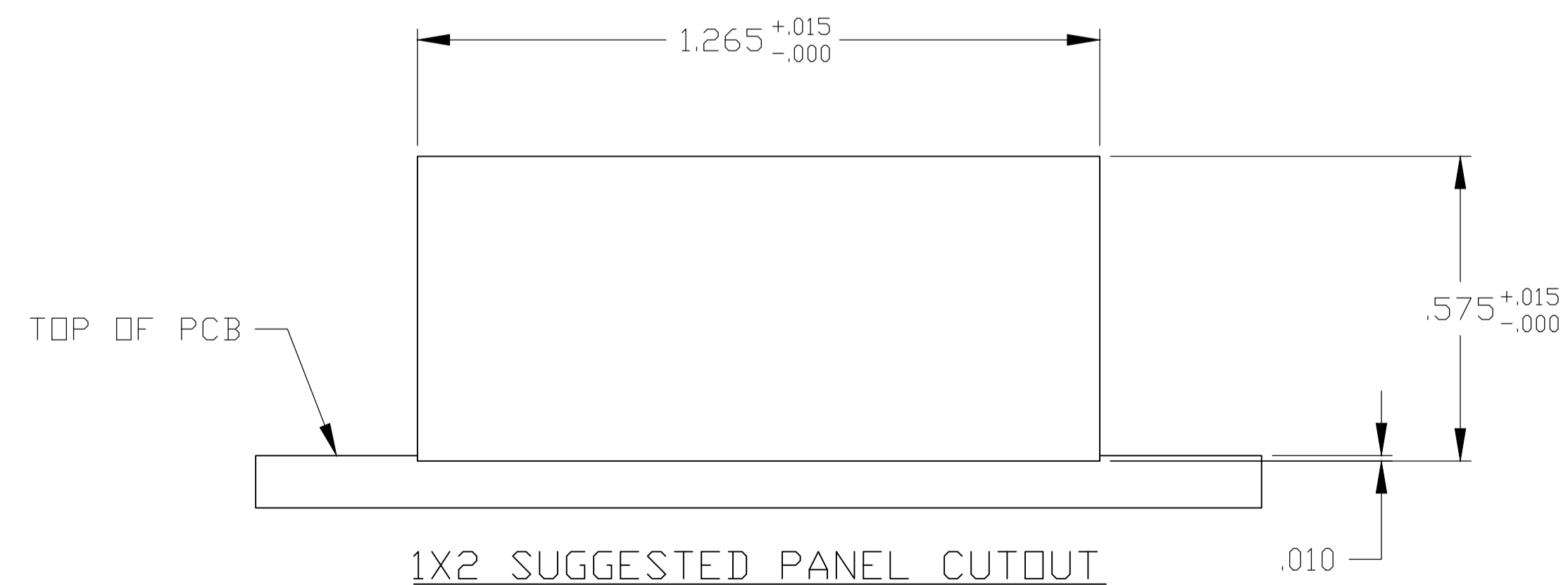
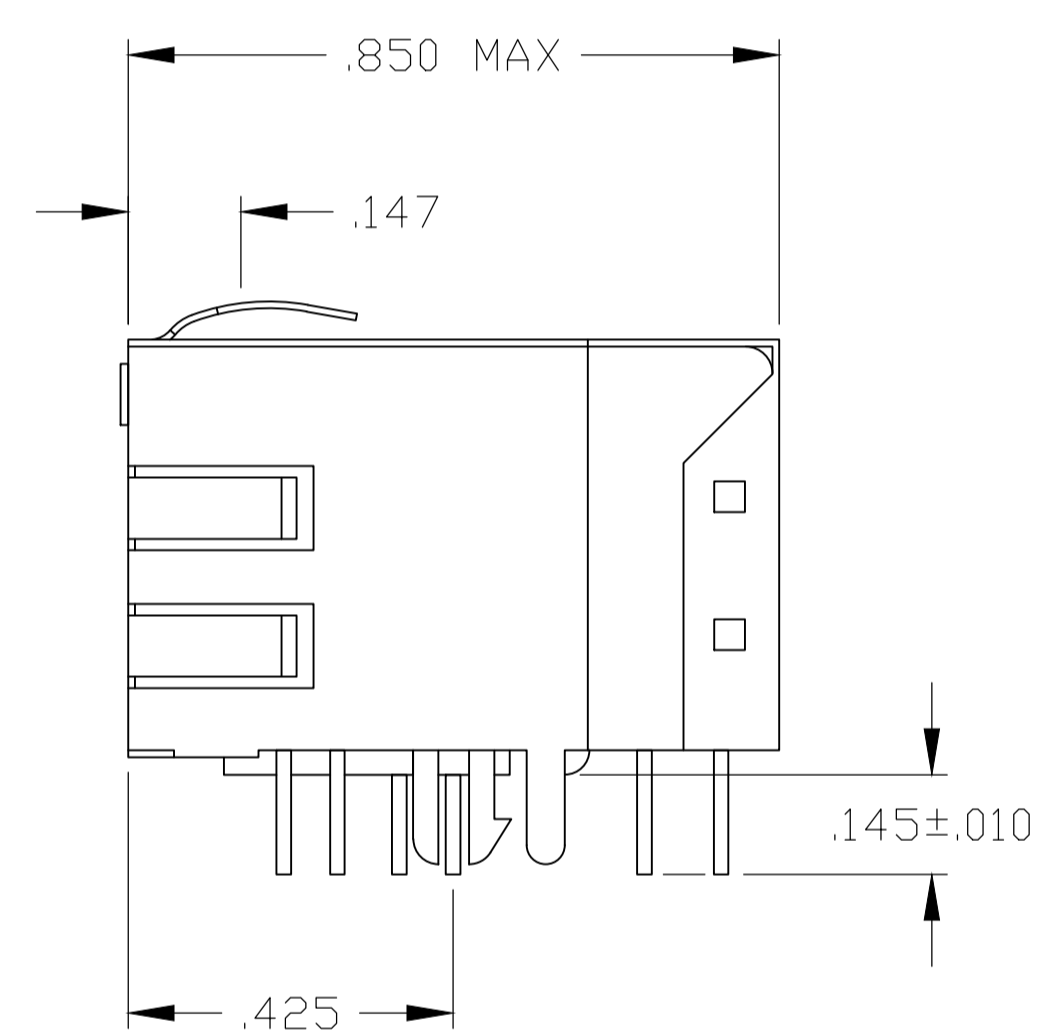
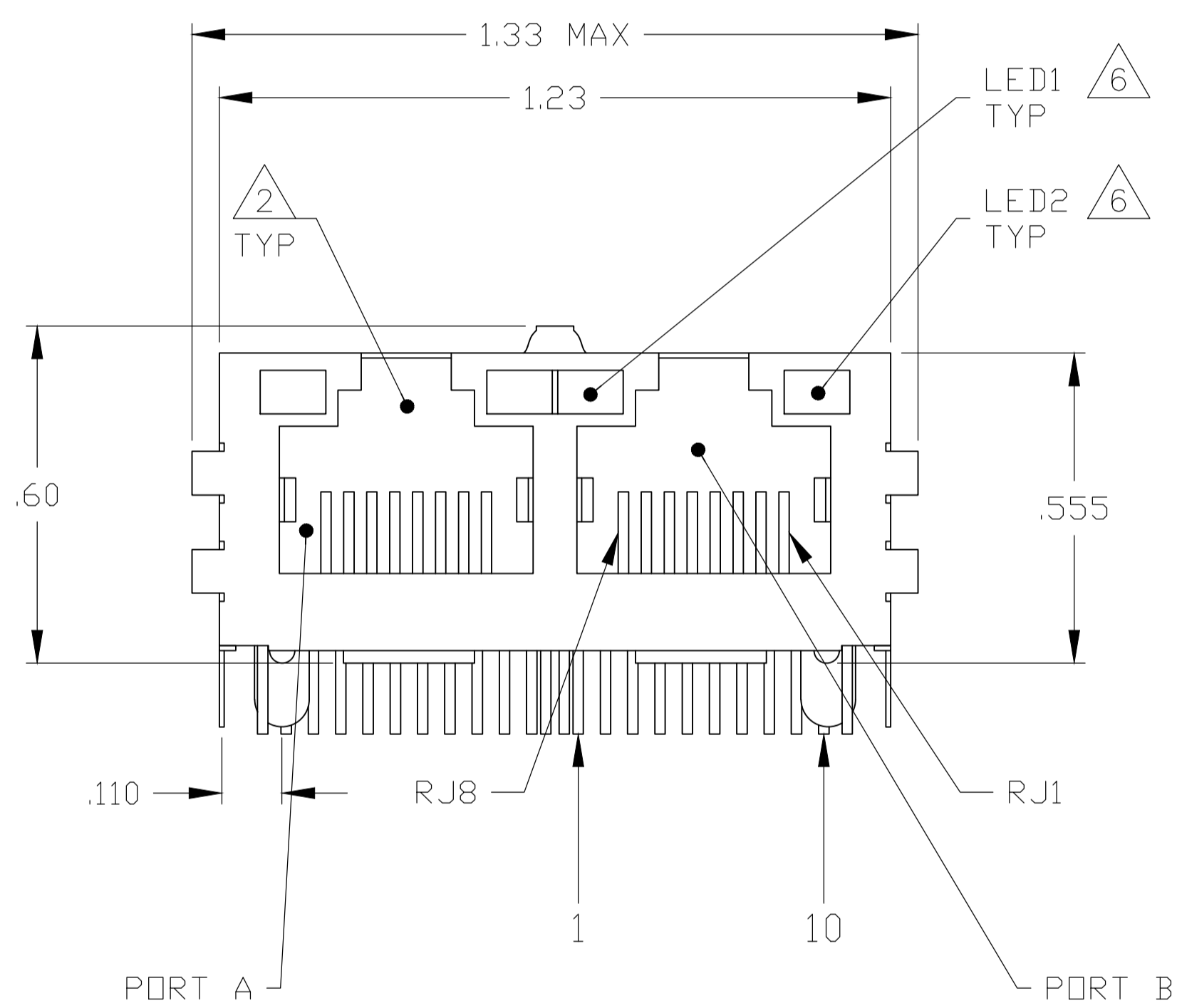
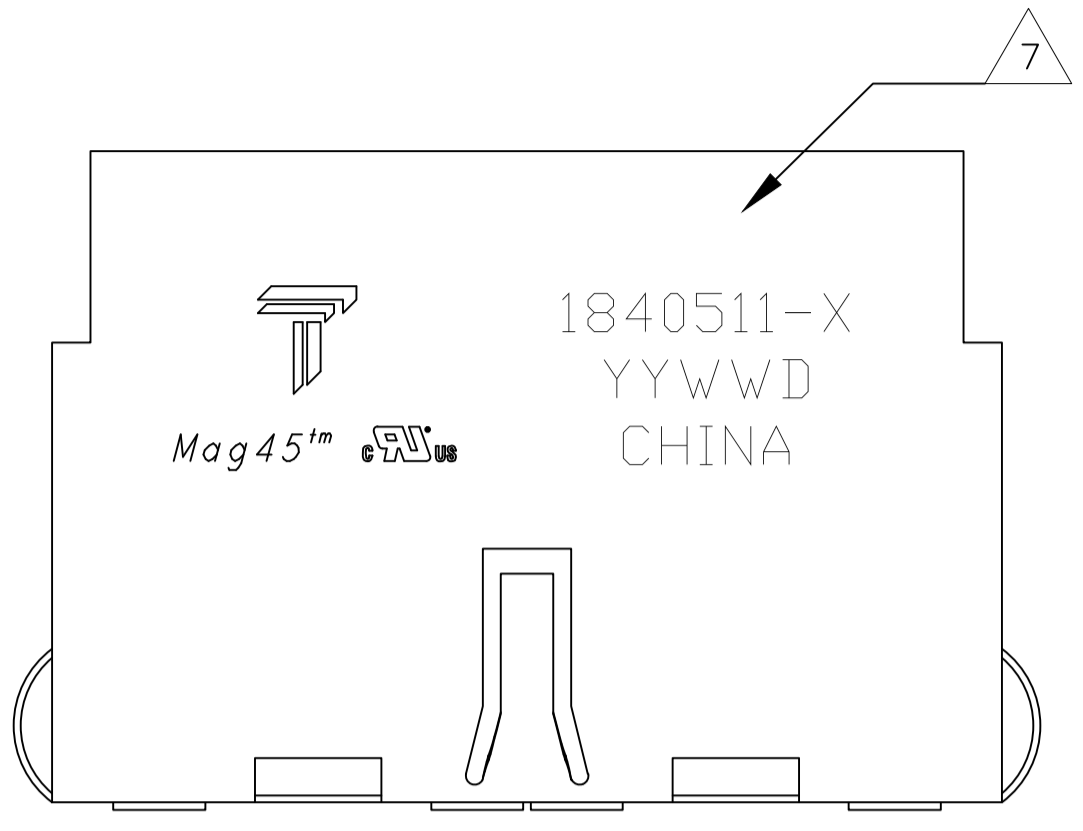


| REVISIONS |     |             |           |         |
|-----------|-----|-------------|-----------|---------|
| #         | LTR | DESCRIPTION | DATE      | DWN APD |
| E         |     | LOGO CHANGE | 07APR2013 | PP KZ   |

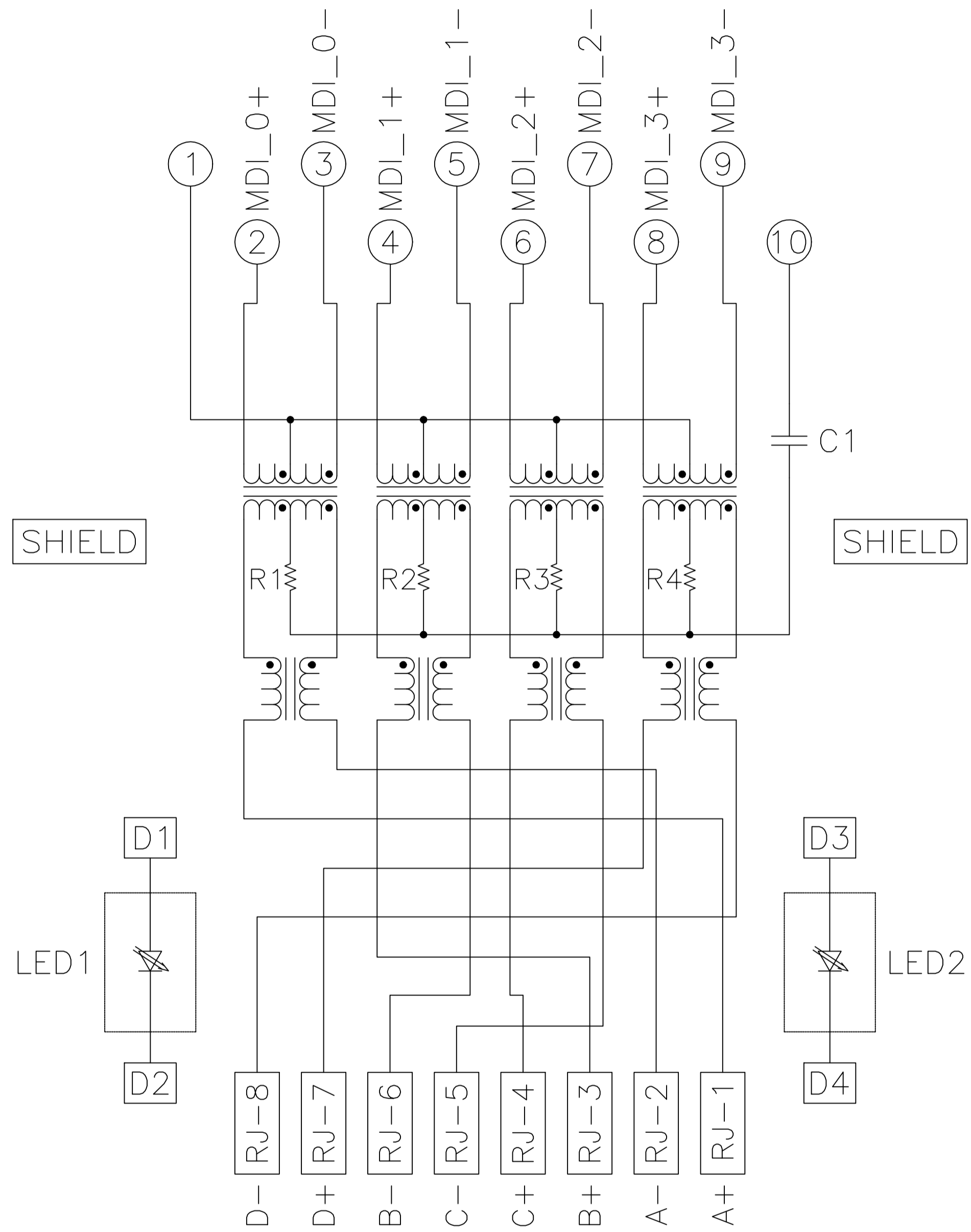
MECHANICAL:



- 1. MATERIALS:
  - HOUSING - THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94V-0.
  - SHIELD - .010" THICK, C26800 BRASS PREPLATED WITH 30μINCH MIN SEMI-BRIGHT NICKEL. SOLDER TABS POST DIPPED WITH 100μINCH MIN SAC SOLDER.
  - MOD JACK CONTACTS - 0.0157 X 0.018" PHOSPHOR BRONZE, 50μINCH MIN OVERALL NICKEL UNDERPLATE WITH SELECT 50μINCH MIN HARD GOLD FINISH PLATE. SOLDER TAILS WITH 100μINCH MIN MATTE TIN AND/OR SAC SOLDER DIP.
  - LIGHT EMITTING DIODE(LED) - DIFFUSED EPOXY LENS, .020" X .020" CARBON STEEL WIREFRAME LEADS PRE-PLATED WITH 80μINCH SILVER OVER 40μINCH NICKEL UNDERPLATE OVER 40μINCH COPPER UNDERPLATE. POST-PLATED WITH 100μIN MIN MATTE TIN AND/OR SAC SOLDER DIP OR PURE TIN SOLDER DIP.
- 2. RJ45 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68, SUB PART F.
- 3. MAGNETICS
  - IMPEDANCE: 100 OHMS
  - TURNS RATIO (CHIP:CABLE): 1:1 ALL FOUR PAIRS
  - OPEN CIRCUIT INDUCTANCE (OCL): 350μH MIN @100kHz, 0.1VRMS, 8mADC BIAS FROM 0°C TO 70°C, ALL FOUR PAIRS
  - ALL FOUR PAIRS BI-DIRECTIONAL
  - 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
    - 33-20xLOG(f/50)dB MIN FROM 40.1MHz TO 100MHz
    - COMMON MODE REJECTION RATIO (CMRR): 30dB MIN FROM 0.5MHz TO 100MHz
    - ISOLATION VOLTAGE: COMPLIES WITH IEEE802.3 2002, PARA 40.6.1.1, ITEM b.
- 4. OPERATING TEMPERATURE: FROM 0°C TO +70°C
- 5. INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL TO ACCOMODATE AUTO-MDI/MDIX.
- 6. LED IS DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA.  
 LED COLOR: DOMINANT WAVELENGTH (λ D): GREEN 568 nm TYP. at IF=20mA  
 FORWARD VOLTAGE (VF): GREEN 2.2V TYP. at IF=20mA  
 DOMINANT WAVELENGTH (λ D): YELLOW 588 nm TYP. at IF=20mA  
 FORWARD VOLTAGE (VF): YELLOW 2.1V TYP. at IF=20mA.
- 7. TRP CONNECTOR LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.
- 8. THE TOP REAR GAP OF OUTER SHIELD IS CLOSED WITH CONDUCTIVE TAPE.
- 9. THE PART IS RECOMMENDED FOR WAVE SOLDERING PROCESS, PREHEAT TEMPERATURE IS 120°C TO 160°C, 120 SECONDS TO 180 SECONDS, PEAK WAVE SOLDERING TEMPERATURE IS 260°C MAX, 10 SECONDS MAX.

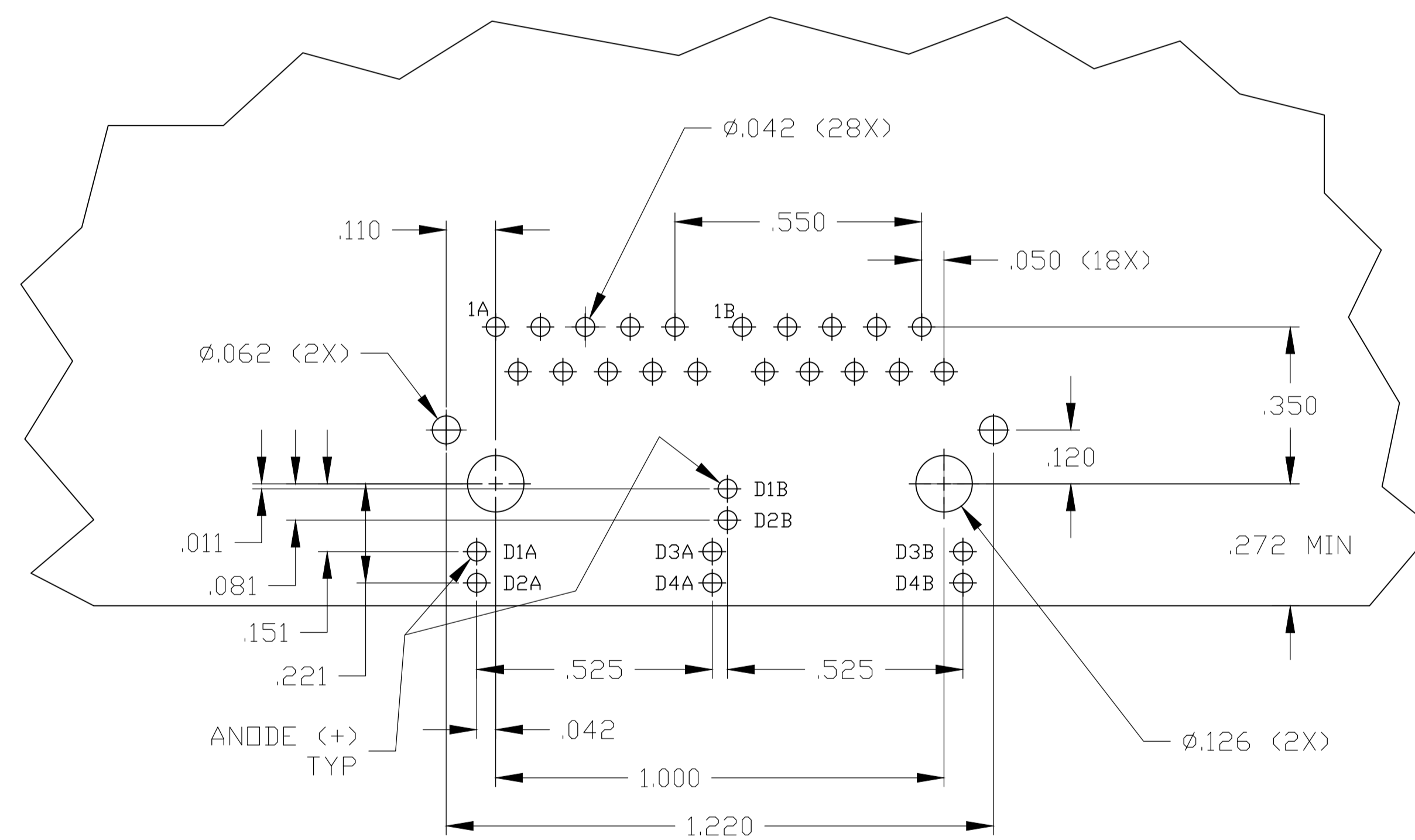
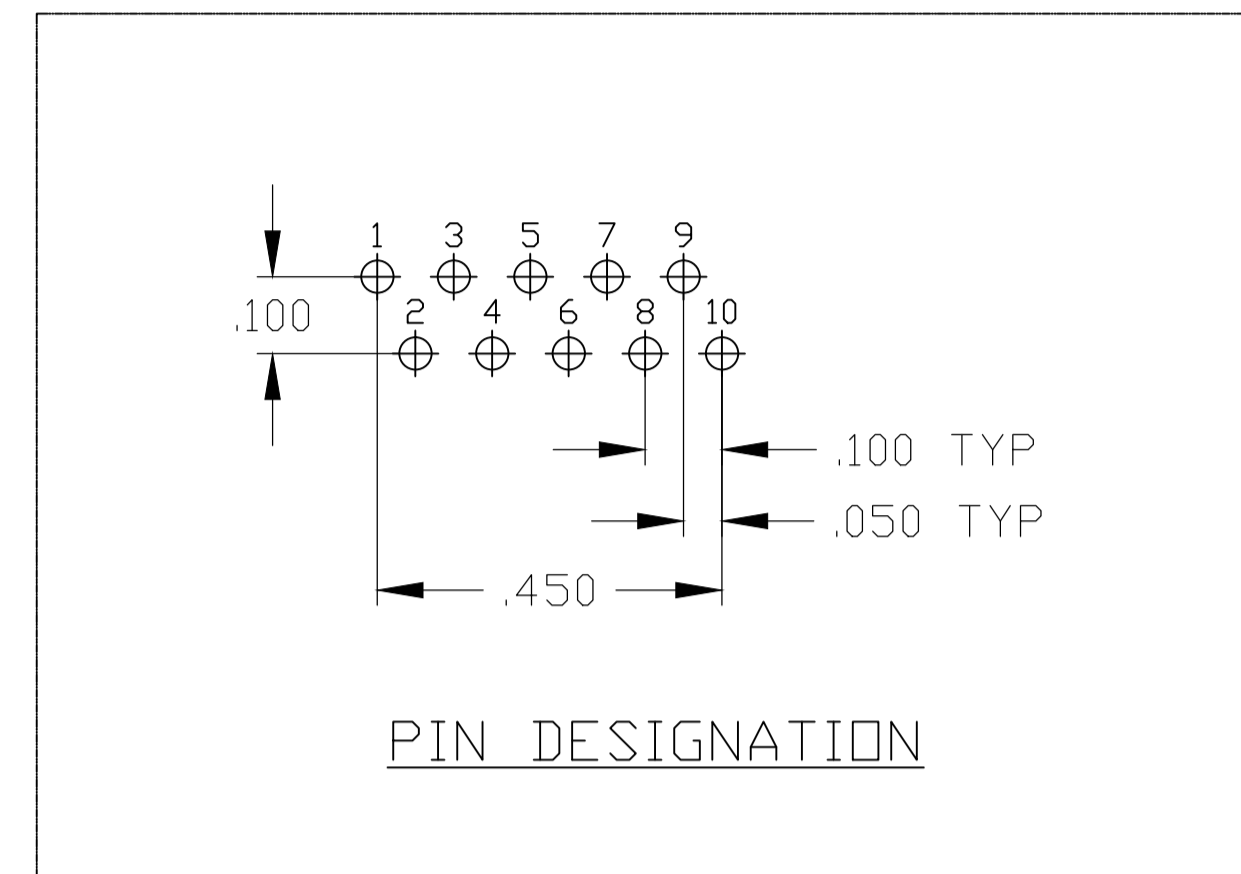
|   |       |   |             |
|---|-------|---|-------------|
| YES   | GREEN | YELLOW  | 5-1840511-8 |
| DECOUPLING CAPACITOR  | LED1  | LED2  | PART NUMBER |
| THIS DRAWING IS A CONTROLLED DOCUMENT.  |       | DWN KEITH ZHU 05JAN2006<br>CHK MICHAEL ZHANG 05JAN2006<br>APD TEDDY XIONG 05JAN2006   |             |
| DIMENSIONS: INCHES<br>0 PLC ± -<br>1 PLC ± -<br>2 PLC ± .010<br>3 PLC ± .005<br>4 PLC ± -<br>ANGLES ± -   |       | TOLERANCES UNLESS OTHERWISE SPECIFIED:<br>0 PLC ± -<br>1 PLC ± -<br>2 PLC ± .010<br>3 PLC ± .005<br>4 PLC ± -<br>ANGLES ± - |             |
| MATERIAL 1<br>FINISH 1  |       | PRODUCT SPEC 108-2100<br>APPLICATION SPEC<br>WEIGHT -<br>CUSTOMER DRAWING   |             |
| NAME 1X2 MAG45(TM) MODULAR JACK, 7G01P1 GIGABIT CIRCUIT, CLASS B (10 PIN HORIZONTAL), SHIELDED, WITH LEDS<br>SIZE CAGE CODE DRAWING NO<br>WEIGHT -<br>SCALE 4:1 |       | TRP connector Dongguan China<br>A1 00779 ©=1840511<br>SHEET 1 OF 2 REV E  |             |

7G01P1 GIGABIT MAGNETIC CIRCUIT  $\triangle 3/5$



C1 = 1000pF, 2kV CAPACITOR

R1-R4 = 75 OHMS, 1/16 W RESISTORS



SUGGESTED PCB LAYOUT  
 (Component Side)

|  |  |                              |  |   |  |
|--|--|------------------------------|--|---|--|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |  | DW: KEITH ZHU 05JAN2006      |  | TRP connector<br>Dongguan China   |  |
| DIMENSIONS: INCHES                     |  | CHK: MICHAEL ZHANG 05JAN2006 |  | APPROVED: TEDDY XIONG 05JAN2006   |  |
| TOLERANCES UNLESS OTHERWISE SPECIFIED: |  | PRODUCT SPEC: 108-2100       |  | NAME: 1X2 MAG45(TM) MODULAR JACK, 7G01P1 GIGABIT CIRCUIT, CLASS B (10 PIN HORIZONTAL), SHIELDED, WITH LEADS |  |
| 0 PLC ± -                              |  | APPLIC. SPEC: -              |  | SIZE: A1  |  |
| 1 PLC ± .010                           |  | WEIGHT: -                    |  | CAGE CODE: 00779  |  |
| 2 PLC ± .005                           |  | FINISH: -                    |  | DRAWING NO: C=1840511   |  |
| 3 PLC ± -                              |  | MATERIAL: -                  |  | SCALE: 4:1  |  |
| 4 PLC ± -                              |  | CUSTOMER DRAWING             |  | SHEET 2 OF 2  |  |
| ANGLES ± -                             |  |                              |  | REV E   |  |