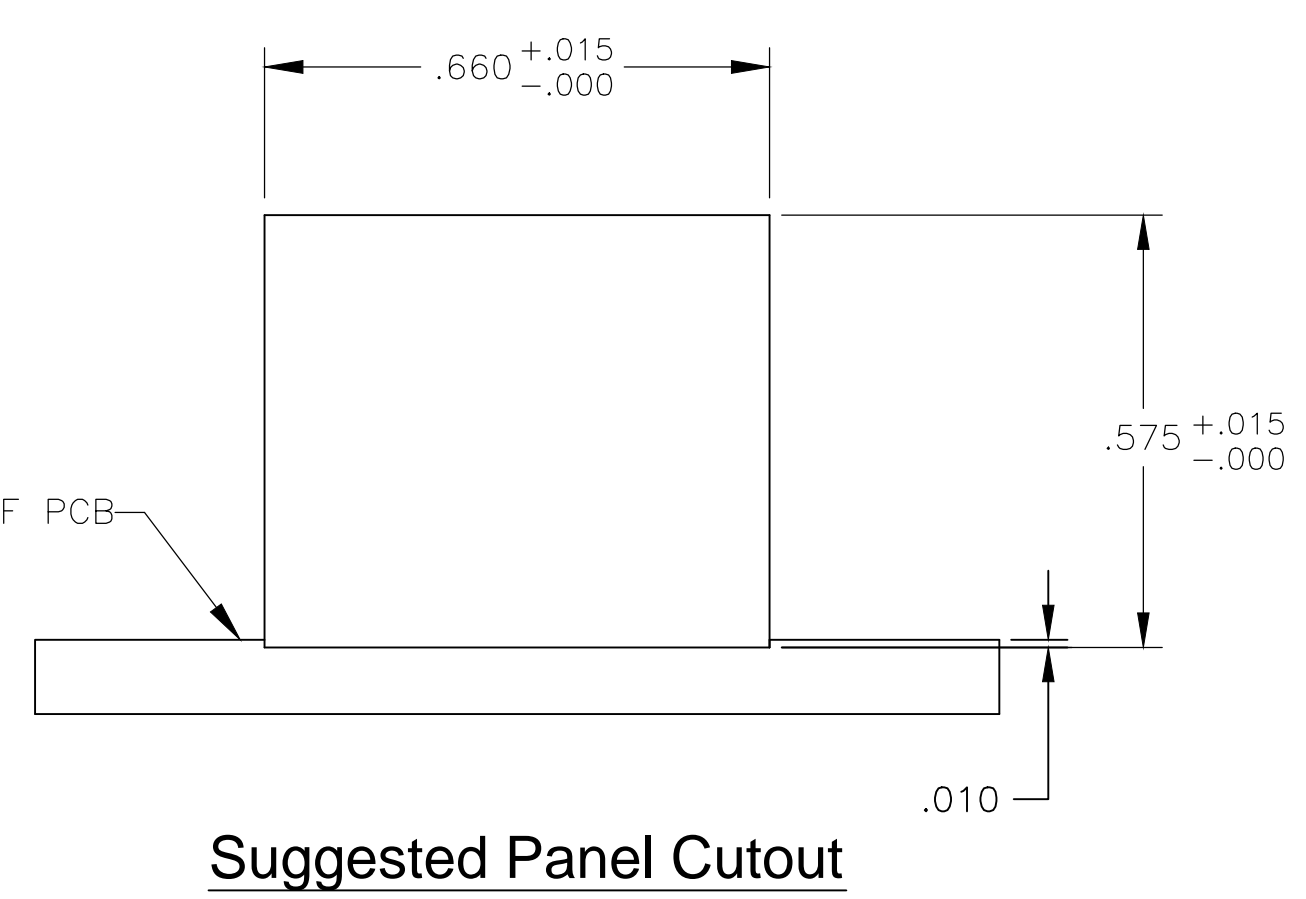
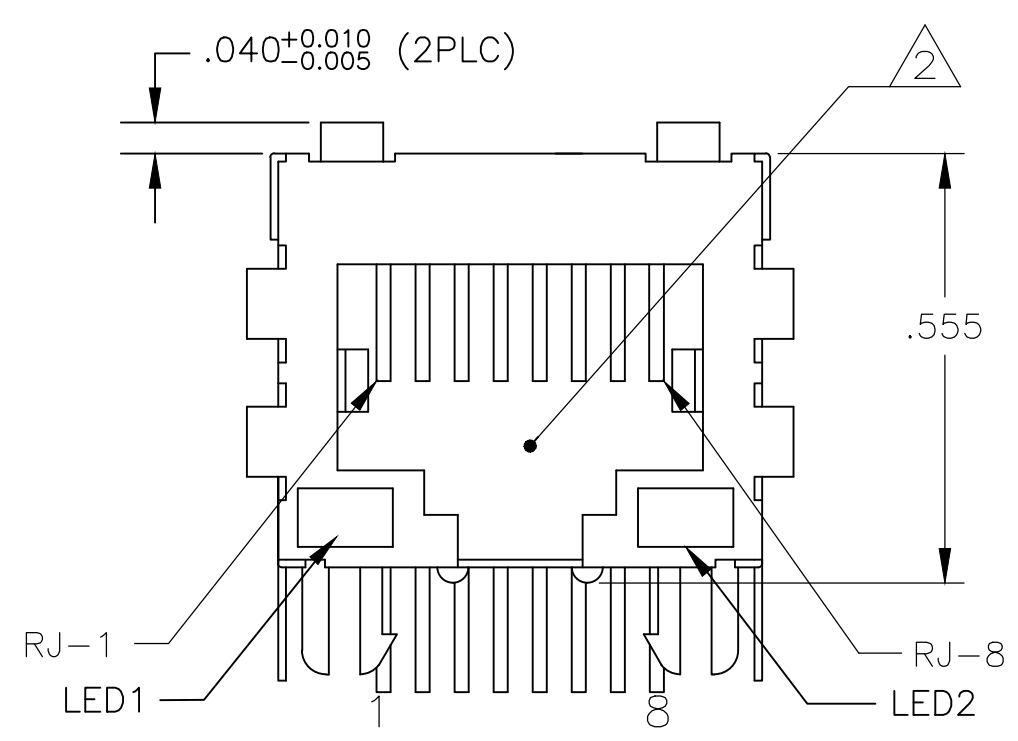
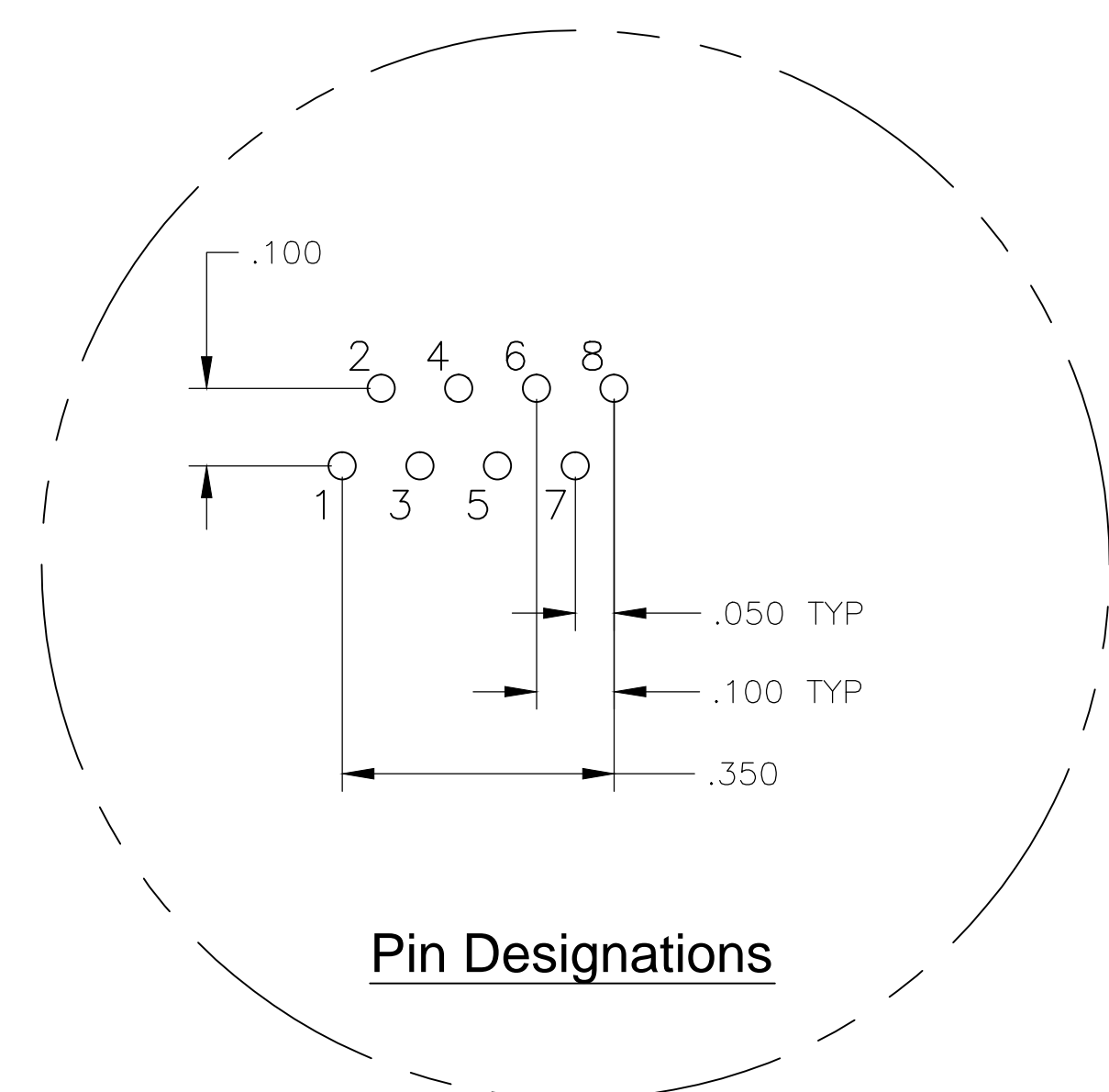
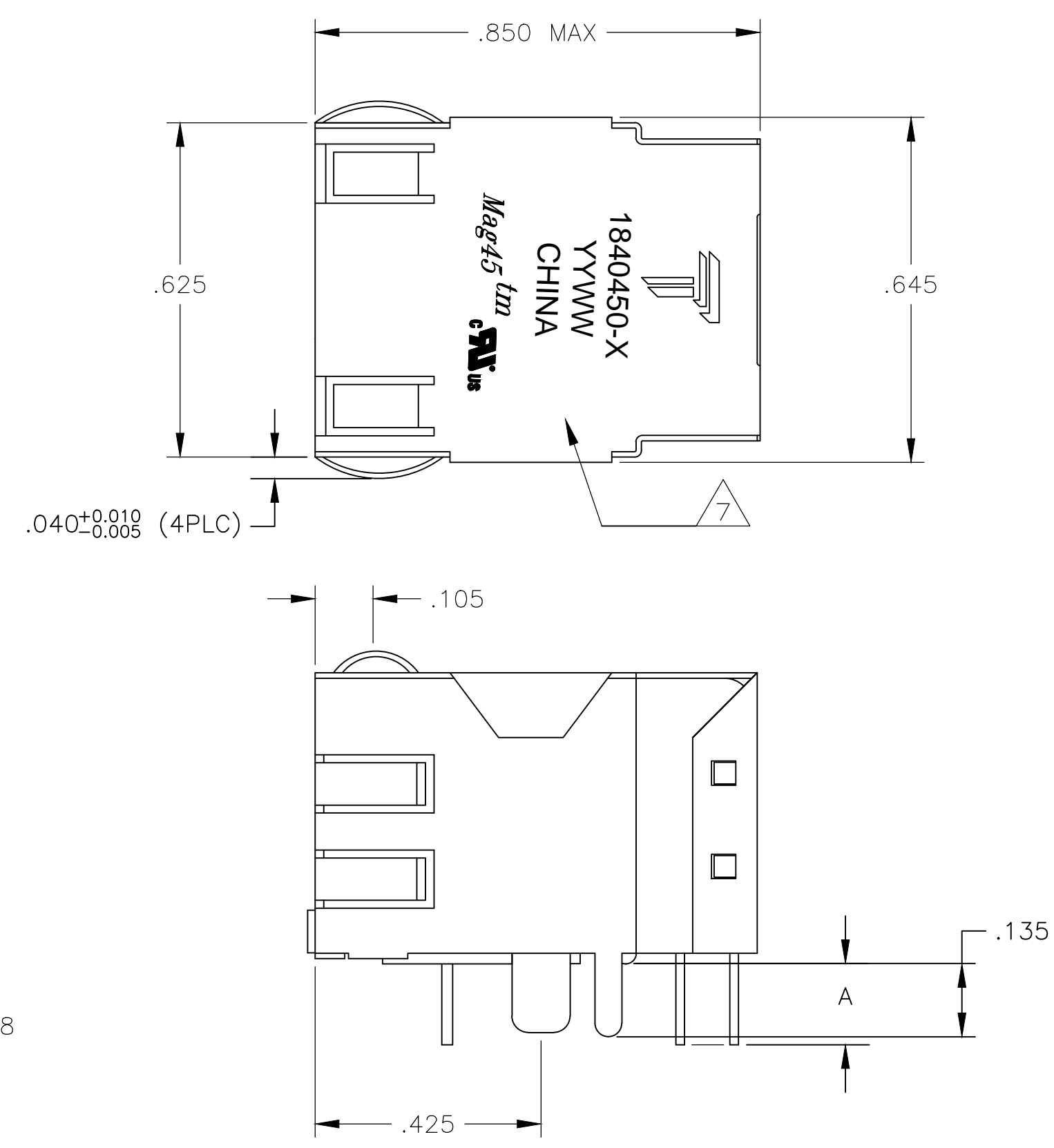
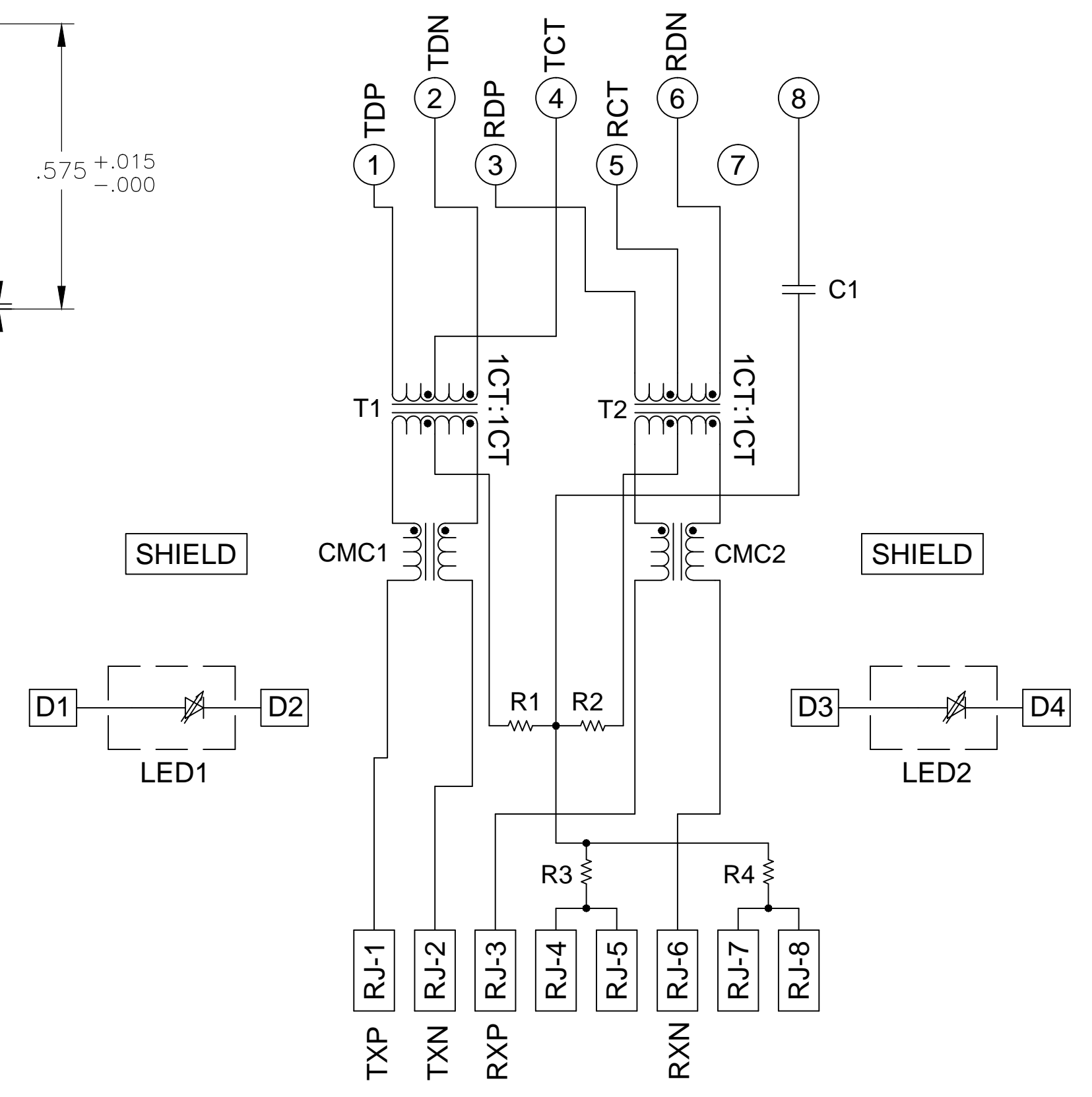


REVISIONS				
P	LTR	DESCRIPTION	DATE	OWN APD
E		LOGO CHANGE	07APR2013	PP KZ

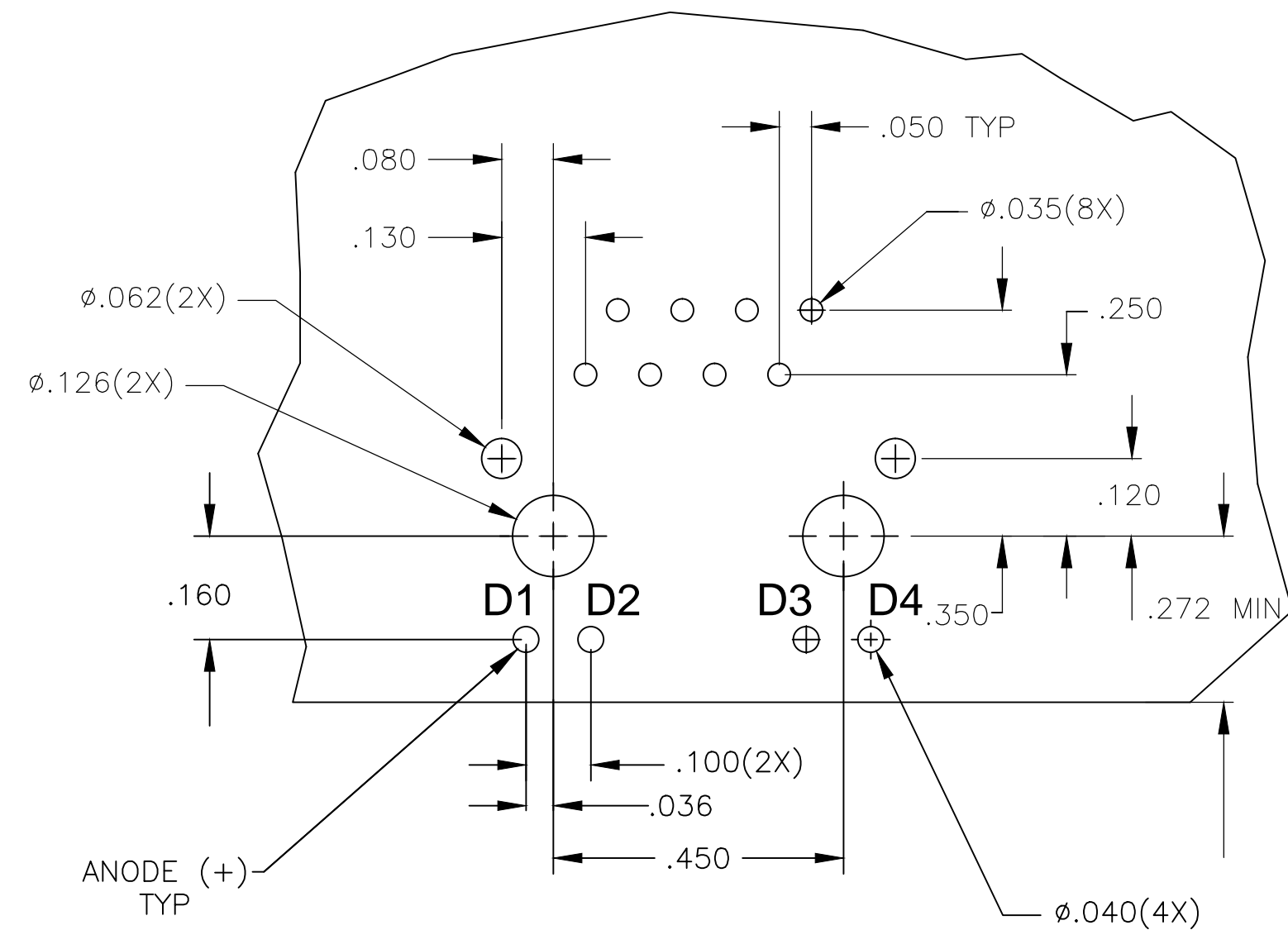
**MECHANICAL:**



**ELECTRICAL:**  
 426ETP13 MAGNETIC CIRCUIT



C1 = 1000 pF, 2kV DECOUPLING CAPACITOR  
 R1-R4 = 75 OHMS, 1/16 W RESISTORS



**Suggested PCB Layout**  
 (Component Side)

- 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 100µINCH 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  
 -APPLICATION: 10/100 BASE-T, EXTENDED TEMPERATURE  
 -IMPEDANCE: 100 OHMS  
 -TURNS RATIO (CHIP: CABLE): TX = 1:1, RX = 1:1  
 -OPEN CIRCUIT INDUCTANCE (OCL): 350µH MIN @100kHz, 0.1VRMS, 8mADC BIAS FROM -40°C TO +85°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: COMPLIES WITH IEEE802.3 2002, PARA 23.5.1.1, ITEM b.
- 4 OPERATING TEMPERATURE: FROM -40° ~ +85°C.
- 5 INDICATED CONNECTIONS ARE FOR NIC CONFIGURATION. THE MAGNETICS ARE SYMMETRICAL, AND THEREFORE SUPPORT AUTO-MDI/MDIX.
- 6 LED IS DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA.  
 DOMINANT WAVELENGTH(λD)  
 GREEN 565nm TYP. at IF=20mA
- 7 TRP CONNECTOR LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.
- 8 THESE PARTS ARE 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.

.120±.010	YELLOW	GREEN	2-1840450-9
.145±.010	GREEN	GREEN	5-1840450-7
.120±.010	GREEN	YELLOW	2-1840450-8
DIM A	LED1	LED2	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DWG: RANDY QU 110CT2007	TRP connector
INCHES:		CHK: KEITH ZHU 110CT2007	Dongguan China
		APD: TEDDY XIONG 110CT2007	
		PRODUCT SPEC	NAME
		108-2100	1X1 MAG45(TM), 10/100 ETHERNET
		APPLICATION SPEC	SCHEMATIC, 426ETP13 MAGNETIC CIRCUIT, SHIELDED, DECOUPLING CAPACITOR, WITH LEADS
		SIZE	CAGE CODE   DRAWING NO
		A1	00779   1840450
		WEIGHT	RESTRICTED TO
		CUSTOMER DRAWING	SCALE NTS SHEET 1 OF 1 REV E