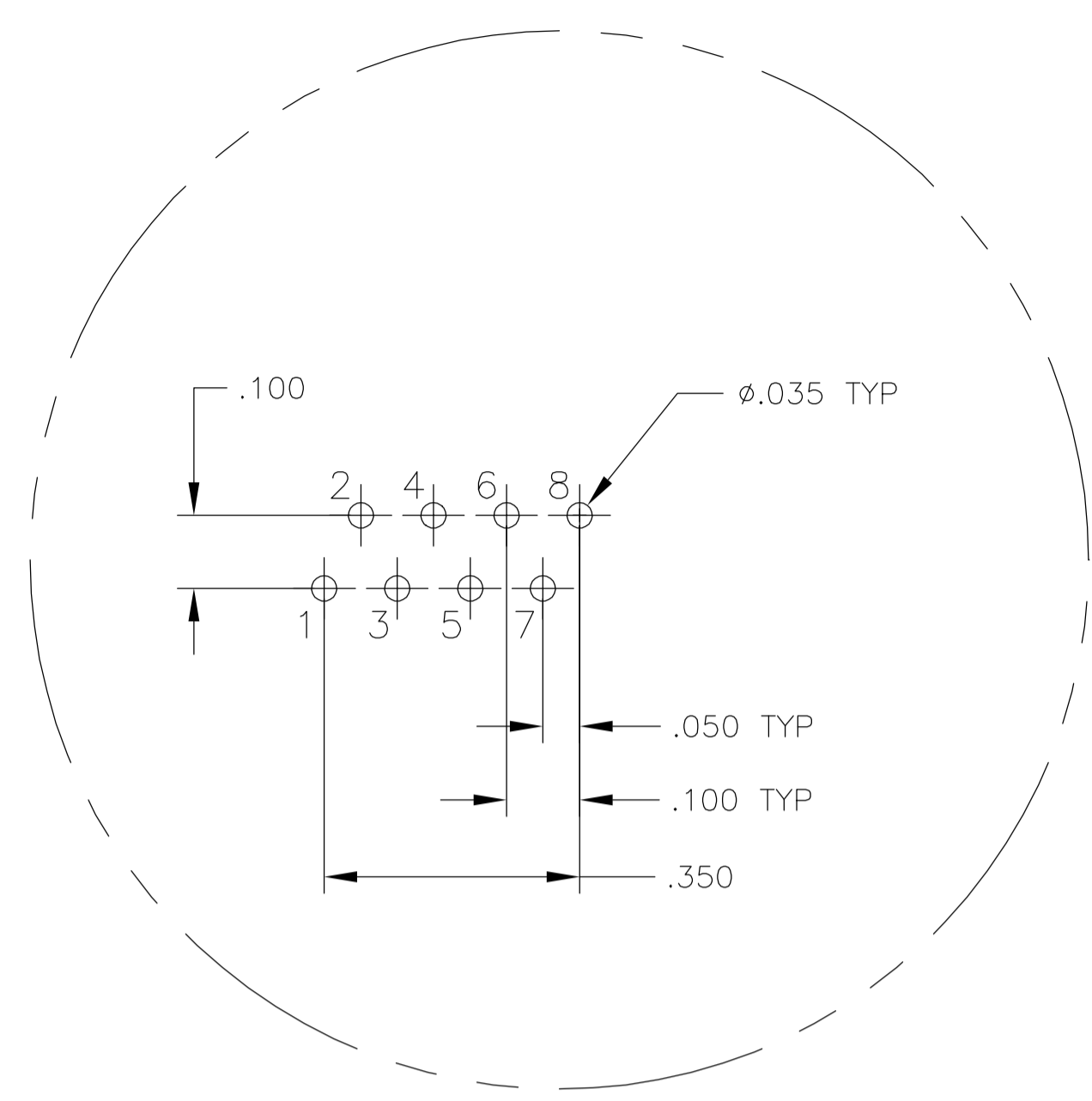
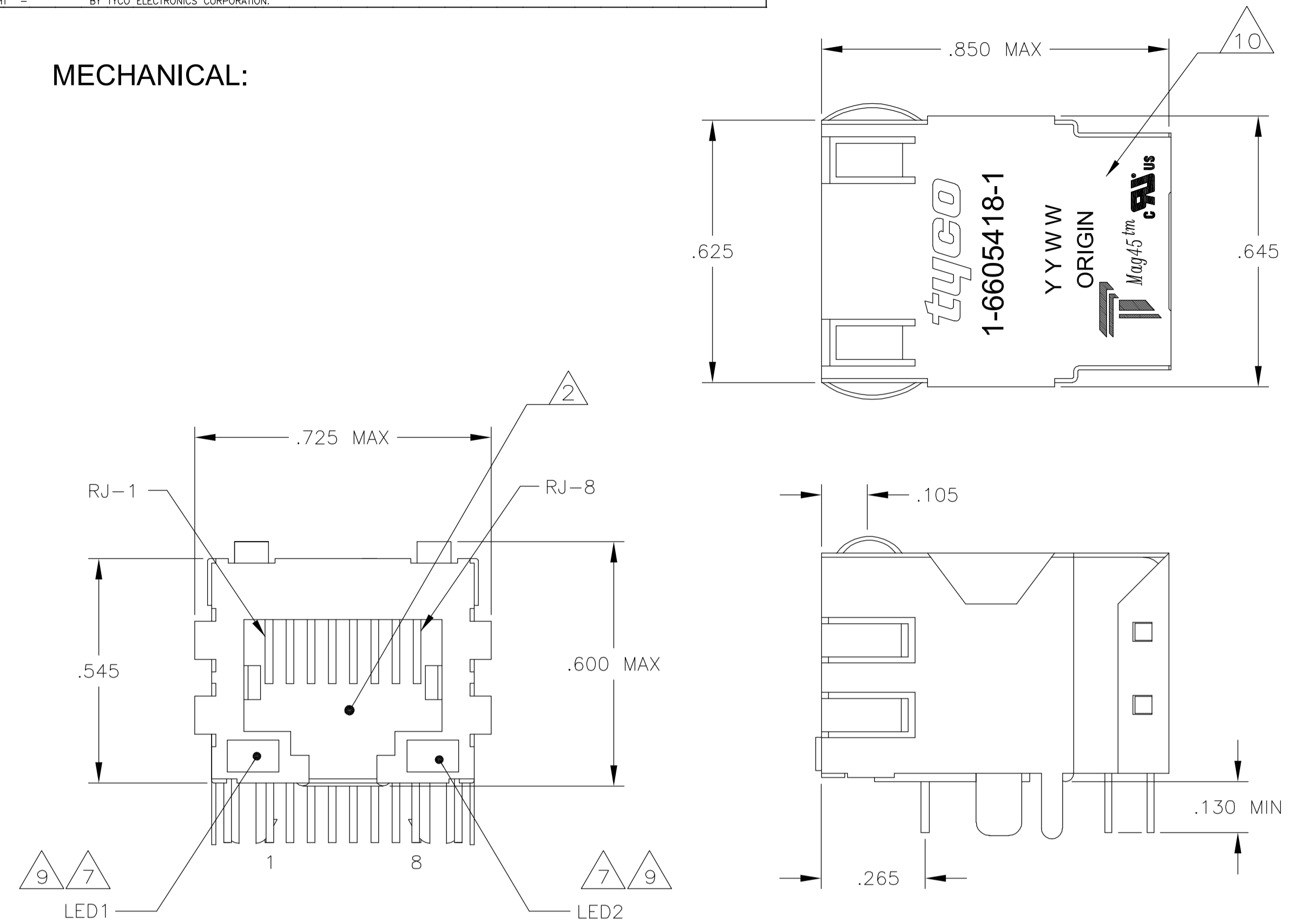
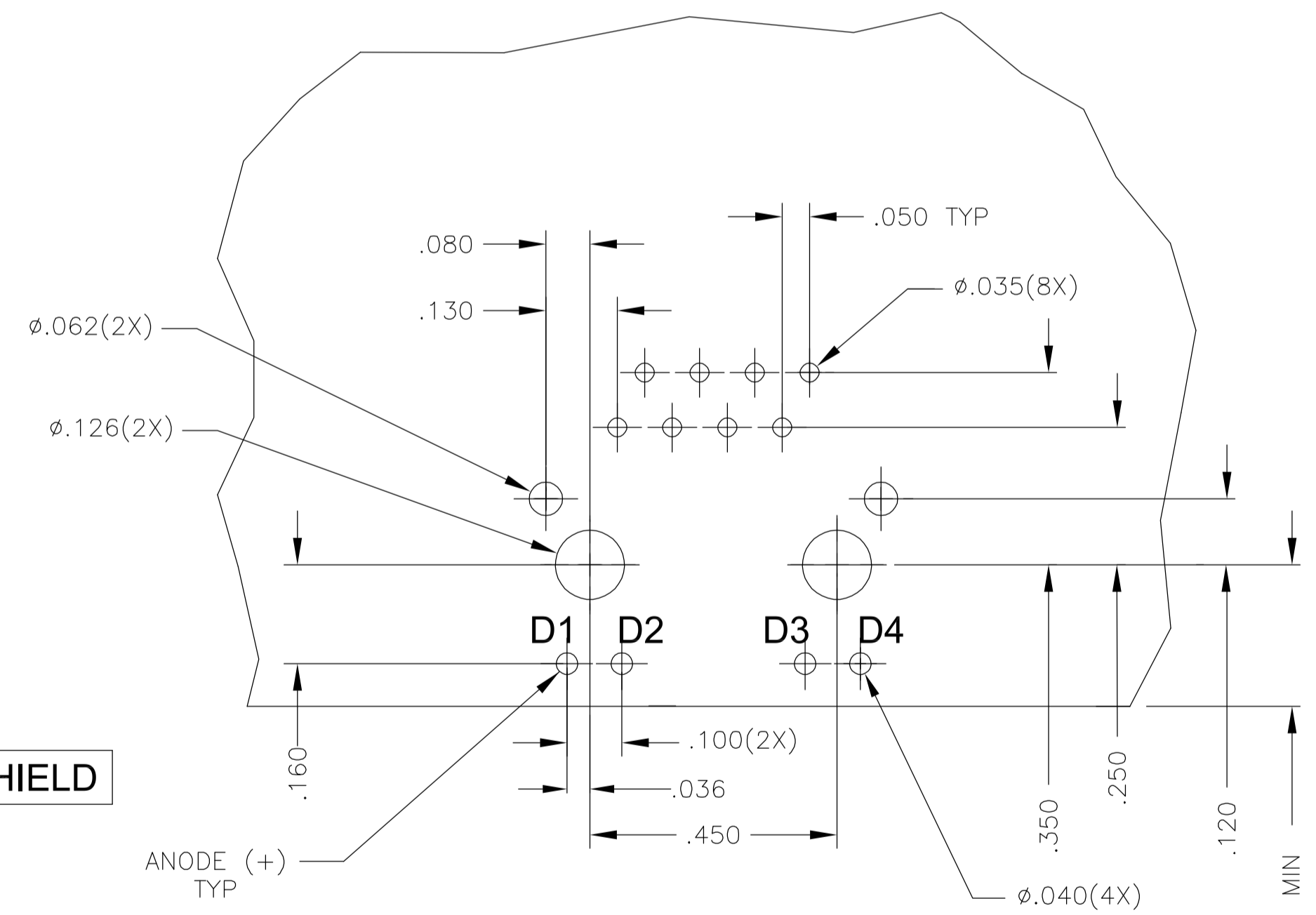
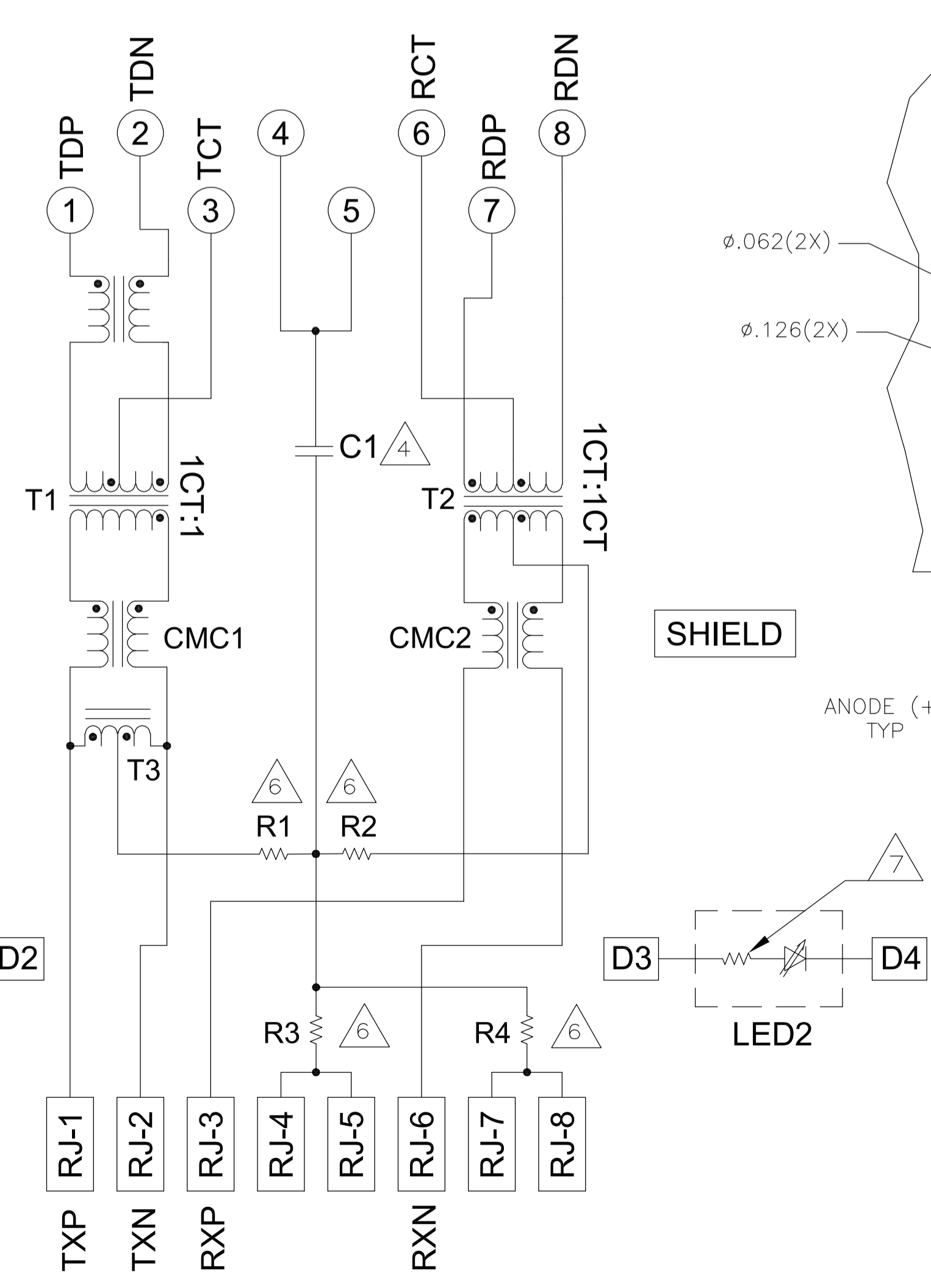
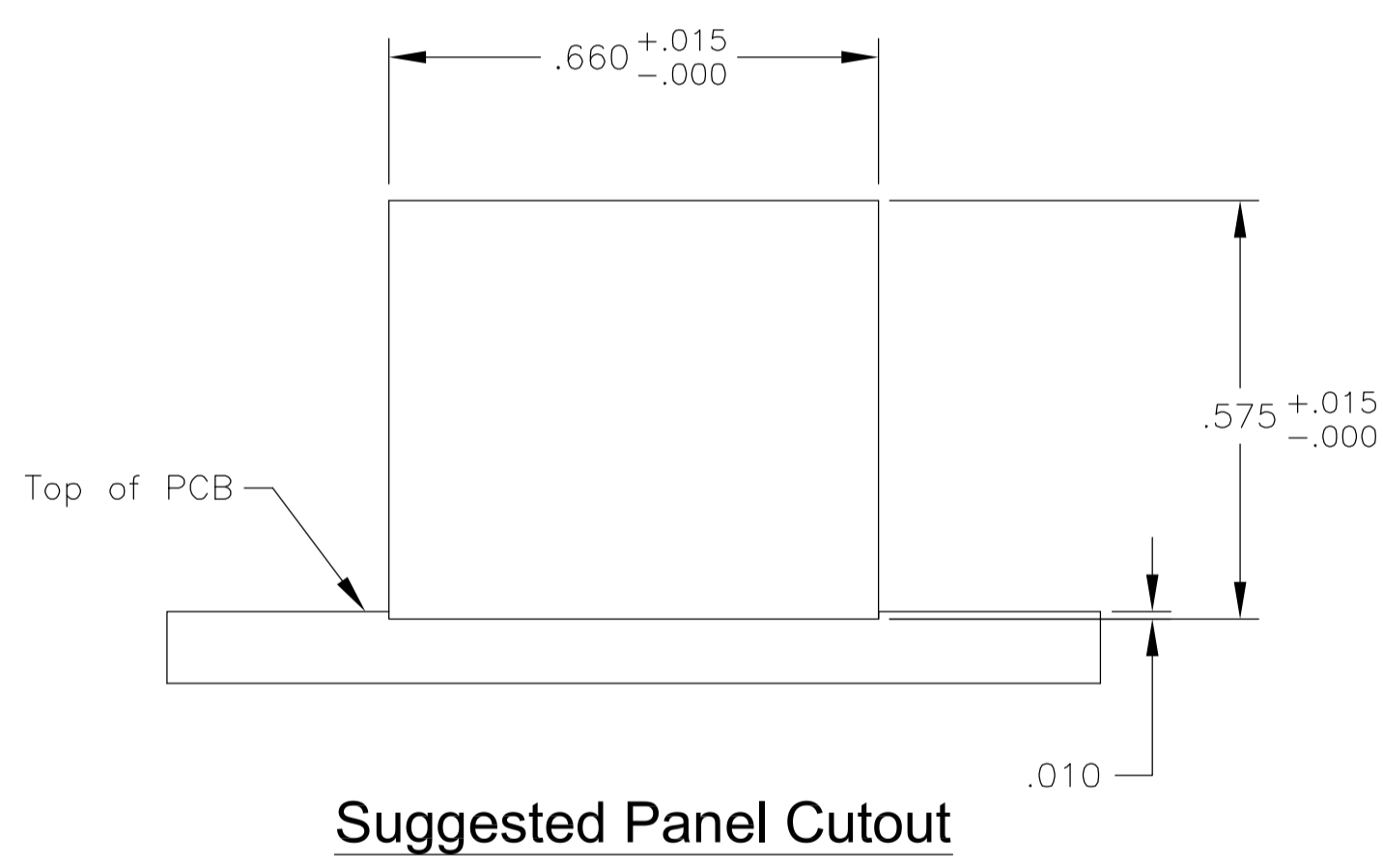


MECHANICAL:



Pin Designations

ELECTRICAL:
 417P10 SERIES MAGNETIC CIRCUIT



Suggested PCB Layout (Component Side)

- △ 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.
- △ RJ45 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68, SUB PART F.
- △ MAGNETICS
 -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 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
 33-20*LOG(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 a or b.
- △ C1 IS A 1000 pF, 2KV DECOUPLING CAPACITOR.
- 5. OPERATING TEMPERATURE: FROM 0°C TO +70°C
- △ R1-R4 = 75 OHMS, 1/16 W, 5% RESISTORS.
- △ LED COMPLIANT WITH IEC60825-1 SAFETY OF LASER PRODUCTS. WHEN OPERATED UP TO 20 mA. THE 250 OHM RESISTOR IS INCLUDED IN THE LEDS.
- △ INDICATED CONNECTIONS ARE FOR NIC CONFIGURATION. THE MAGNETICS ARE ASYMMETRICAL AND DO NOT SUPPORT AUTO-MDI/MDIX.
- △ LED PEAK WAVELENGTH: GREEN(λ) = 565nm
- △ TRADEMARK, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.

GREEN	GREEN	1-6605418-1
LED1	LED2	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.		DIN G. ATTADIA - 02MAR2005		Tyco Electronics Corporation	
DIMENSIONS: INCHES		CHK D. FAROLE 02MAR2005		Harrisburg, PA 17105-3608	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD D. FAROLE 02MAR2005		NAME: 1X1 MAG45(TM), MODULAR JACK, SHIELDED, 4N2P10 SCHEMATIC, 417P10 MAGNETIC CIRCUIT, DECOUPLING CAPACITOR, WITH RESISTOR LEDS	
0 PLC ± -	1 PLC ± .010	PRODUCT SPEC: 108-2100		SIZE: A1	
2 PLC ± .010	3 PLC ± .005	APPLICATION SPEC: -		SCALE: NTS	
4 PLC ± -	ANGLES ± -	WEIGHT: -		SHEET 1 OF 1	
MATERIAL: 1	FINISH: 1	CUSTOMER DRAWING		REV B	