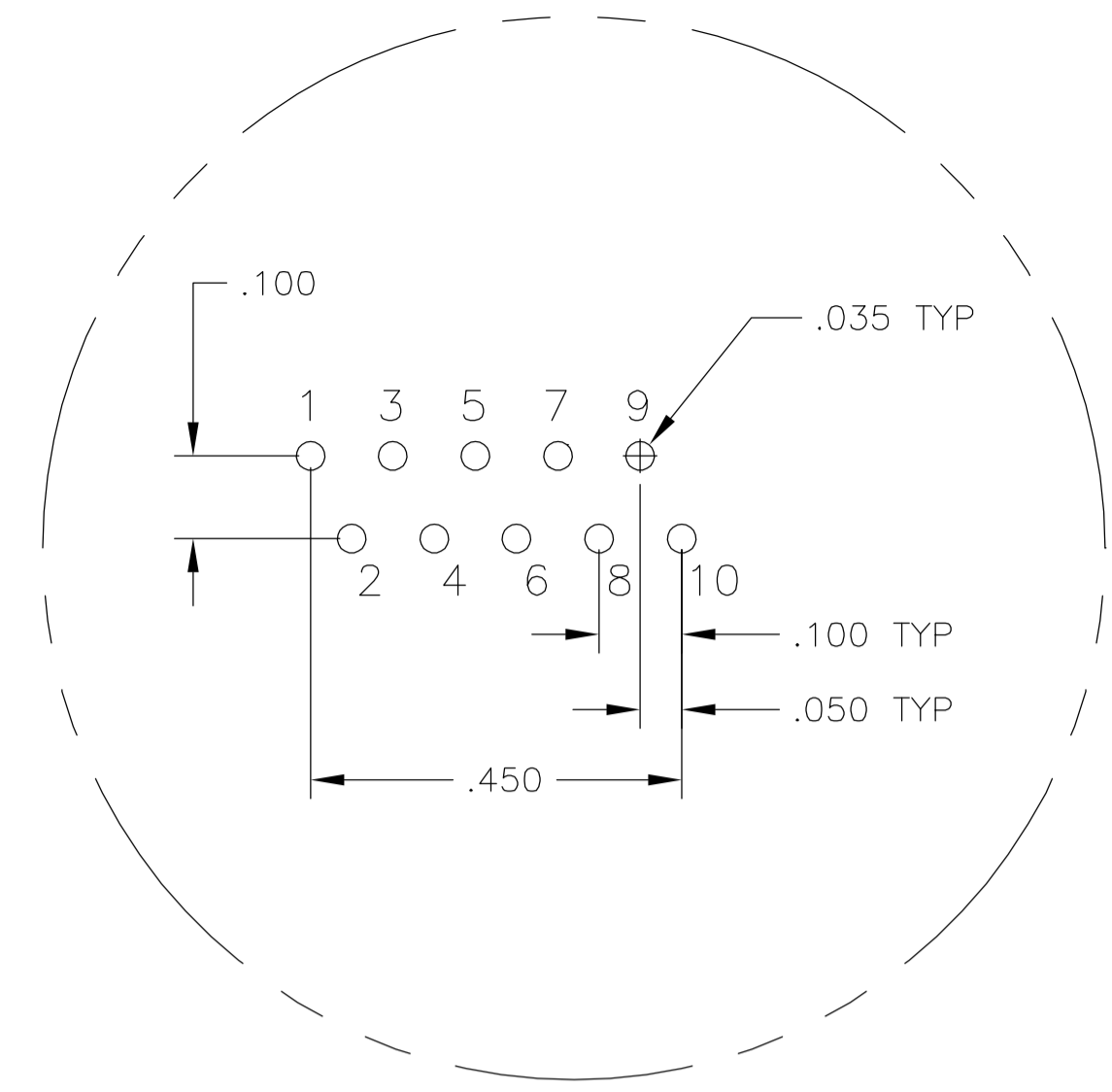
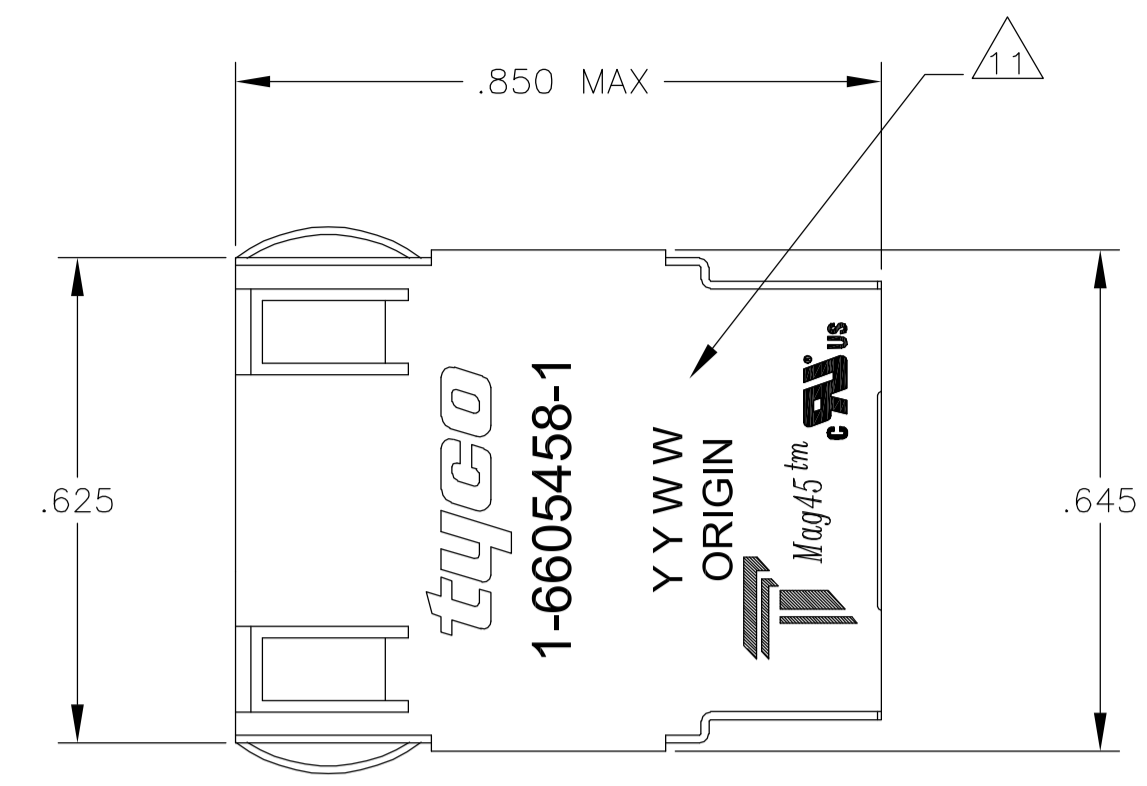
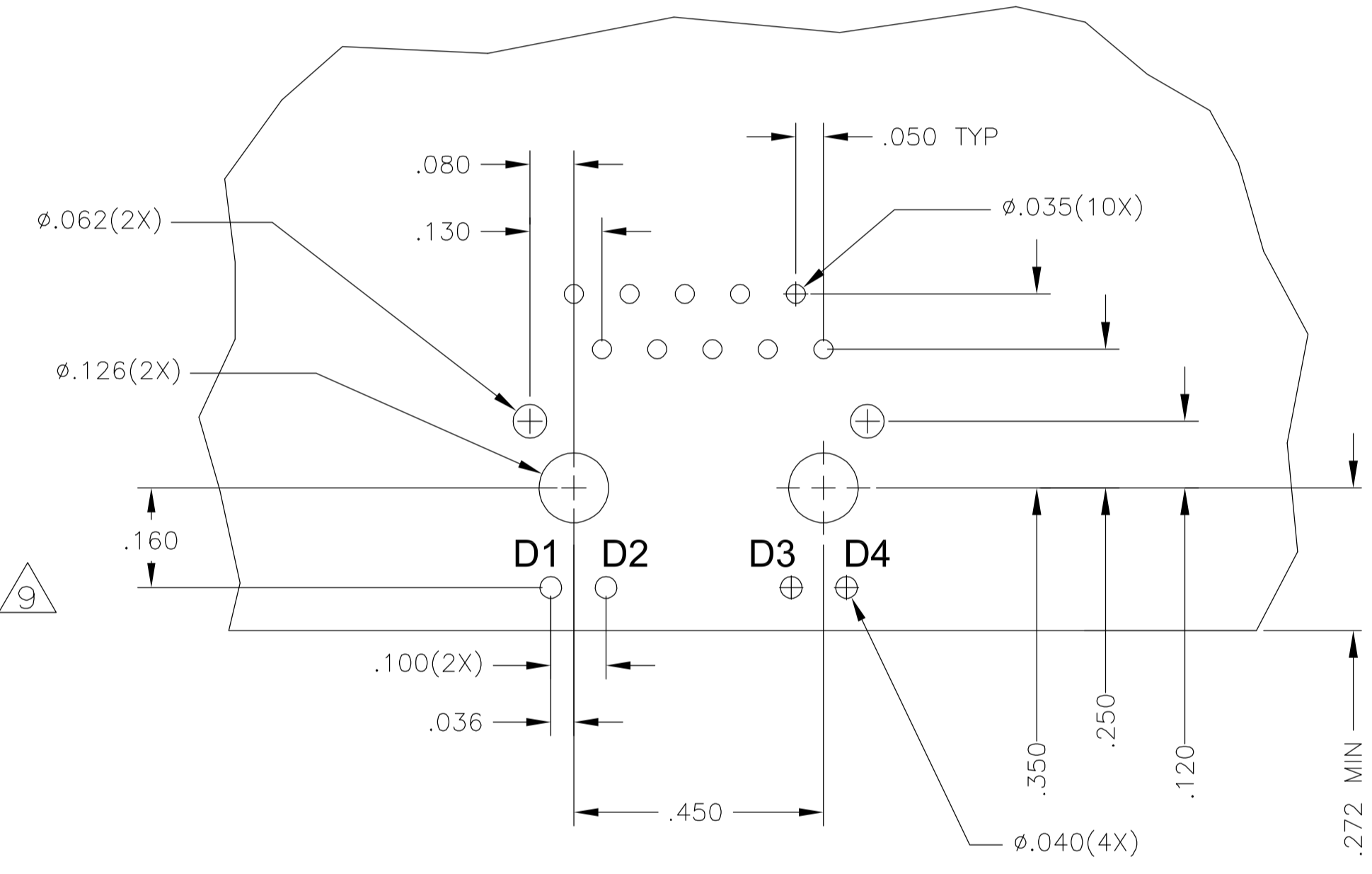
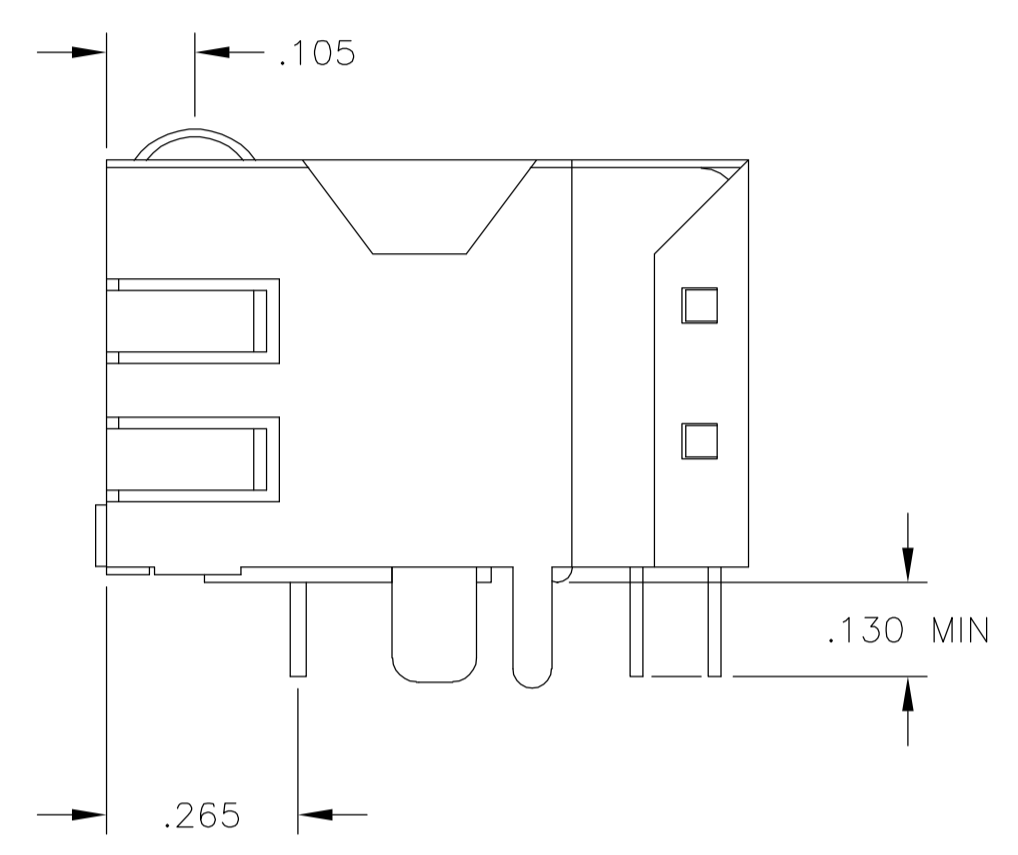
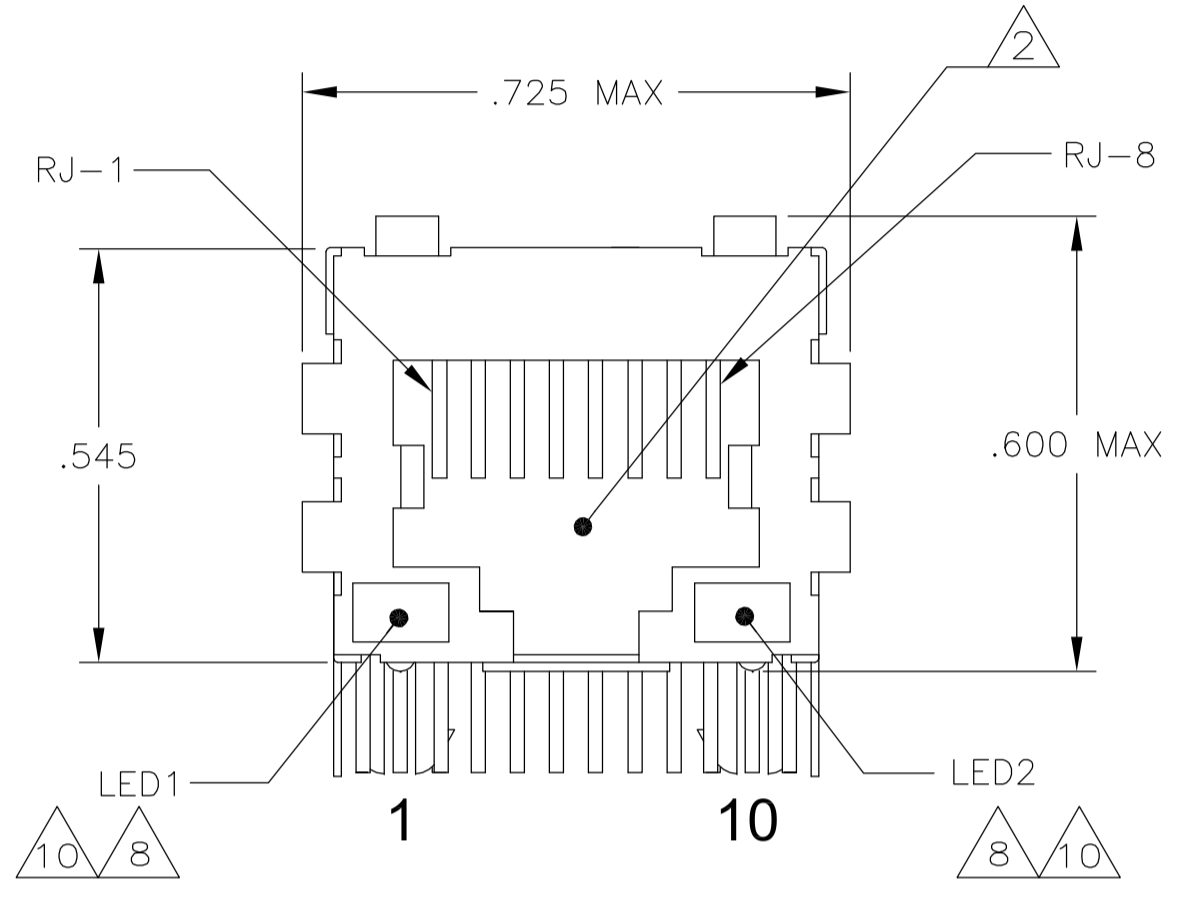


LOC	DIST	REVISIONS					
AA	22	REV	PER	EC	DATE	BY	APP'D
A		REV	PER	EC	0513-0644-04	09MAR2005	LV DF

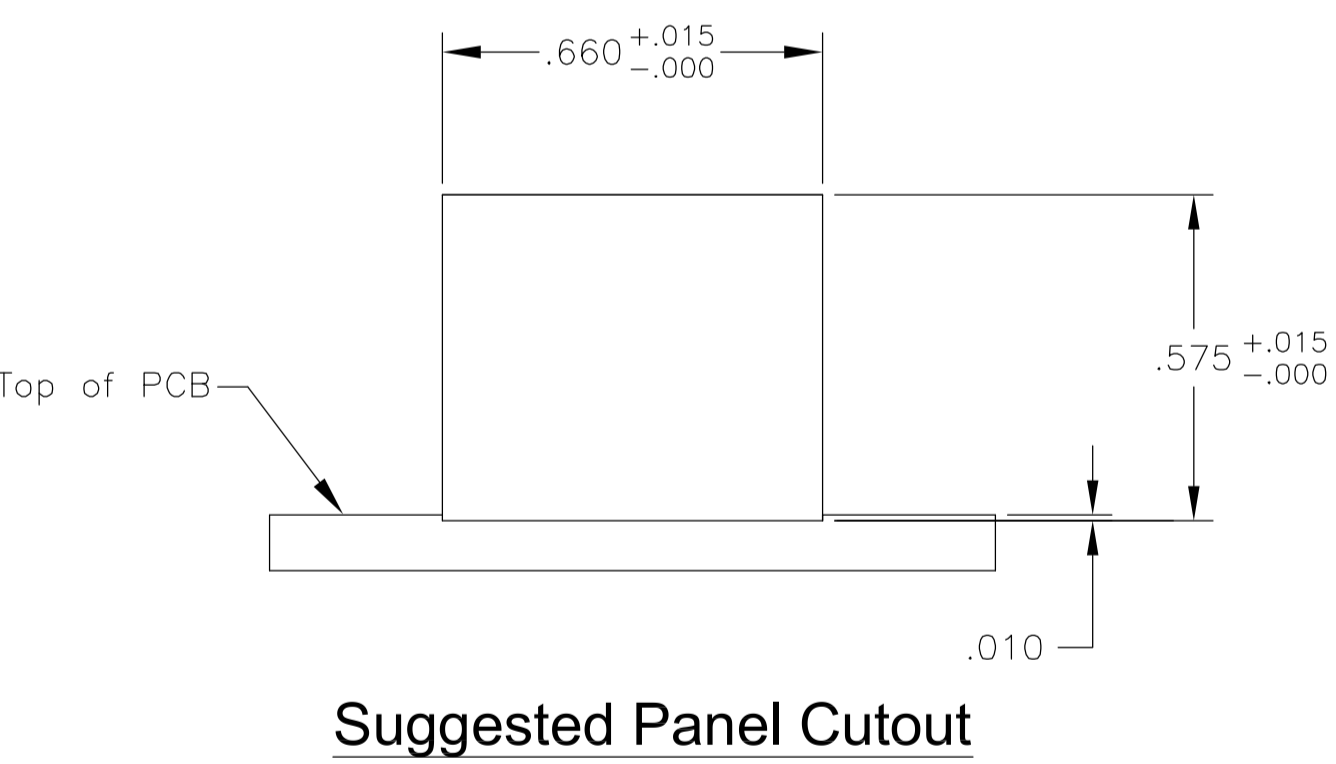
MECHANICAL:



Pin Designations

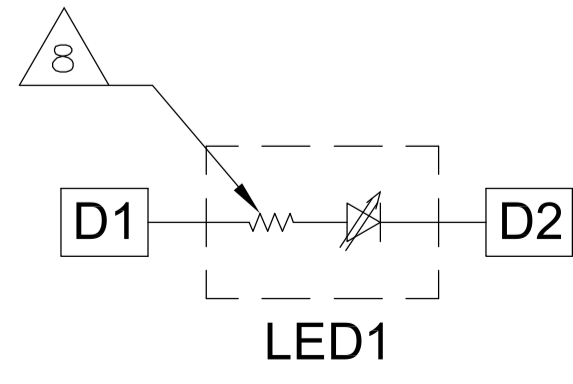
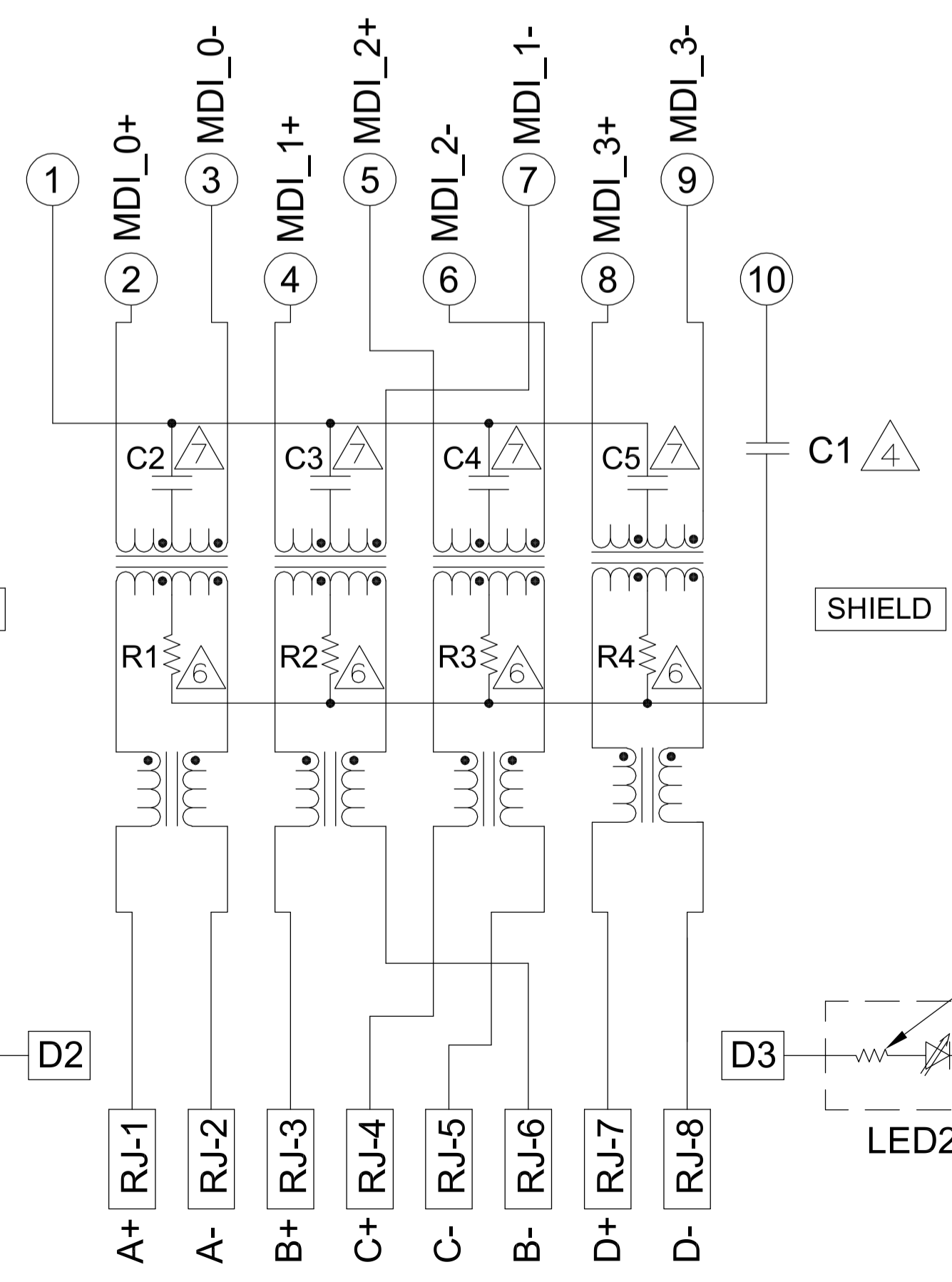


**Suggested PCB Layout
(Component Side)**



Suggested Panel Cutout

4G02 GIGABIT MAGNETIC CIRCUIT



- △ **MATERIALS:**
 HOUSING - THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94 V-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): 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): 11dB 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
 33-20*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 4.0.6.1.1, ITEM a or b.
- △ C1 IS A 1000 pF, 2KV DECOUPLING CAPACITOR.
- 5. OPERATING TEMPERATURE: FROM 0° - +70°C.
- △ R1-R4 = 75 OHMS, 1/16 W, 5% RESISTORS.
- △ C2-C5 = 0.1 μF, 50V CAPACITORS.
- △ LED COMPLIANT WITH IEC60825-1 SAFETY OF LASER PRODUCTS. WHEN OPERATED UP TO 20 mA. THE 250 OHM RESISTOR IS INCLUDED IN THE LED.
- △ THE MAGNETICS ARE SYMMETRICAL, AND 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.

THIS DRAWING IS A CONTROLLED DOCUMENT.		DIN L VARELA - DOCKS		Tyco Electronics Corporation	
DIMENSIONS: INCHES		D FARELE		Harrisburg, PA 17105-3608	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		D FARELE		NAME: 1X1 MAG45(TM), MODULAR JACK (10 PIN HORIZ), 4G2 SCHEMATIC, 4G02 GIGABIT CIRCUIT, SHIELDED, DECOUPLING CAPACITOR, WITH RESISTOR LEDS	
0 PLC ± -		D FARELE		SIZE: A1	
1 PLC ± -		D FARELE		CAGE CODE: 00779	
2 PLC ± .010		D FARELE		DRAWING NO: 6605458	
3 PLC ± .005		D FARELE		CUSTOMER DRAWING	
4 PLC ± -		D FARELE		SCALE: NTS	
ANGLES ± -		D FARELE		SHEET: 1 OF 1	
FINISH		D FARELE		REV: A	