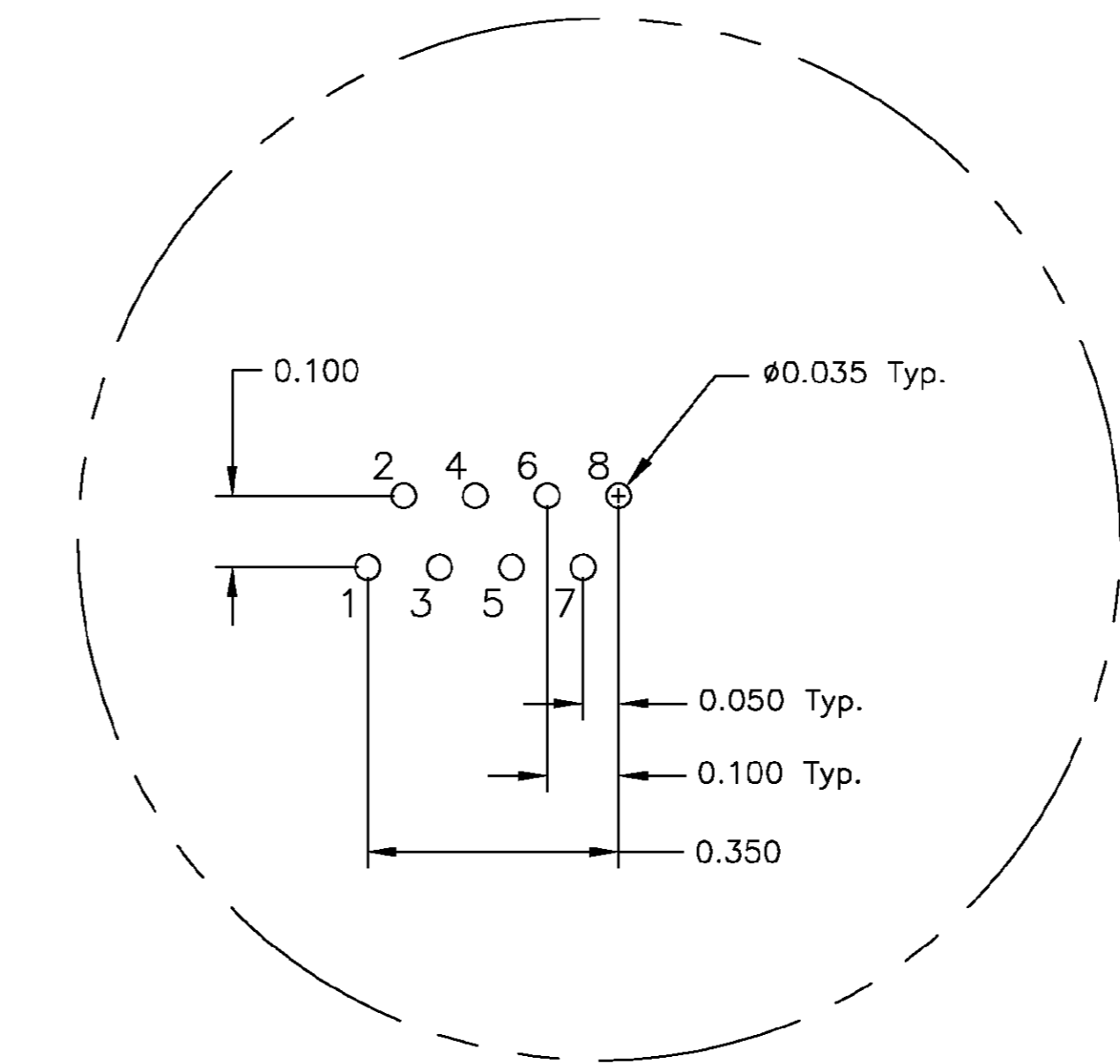
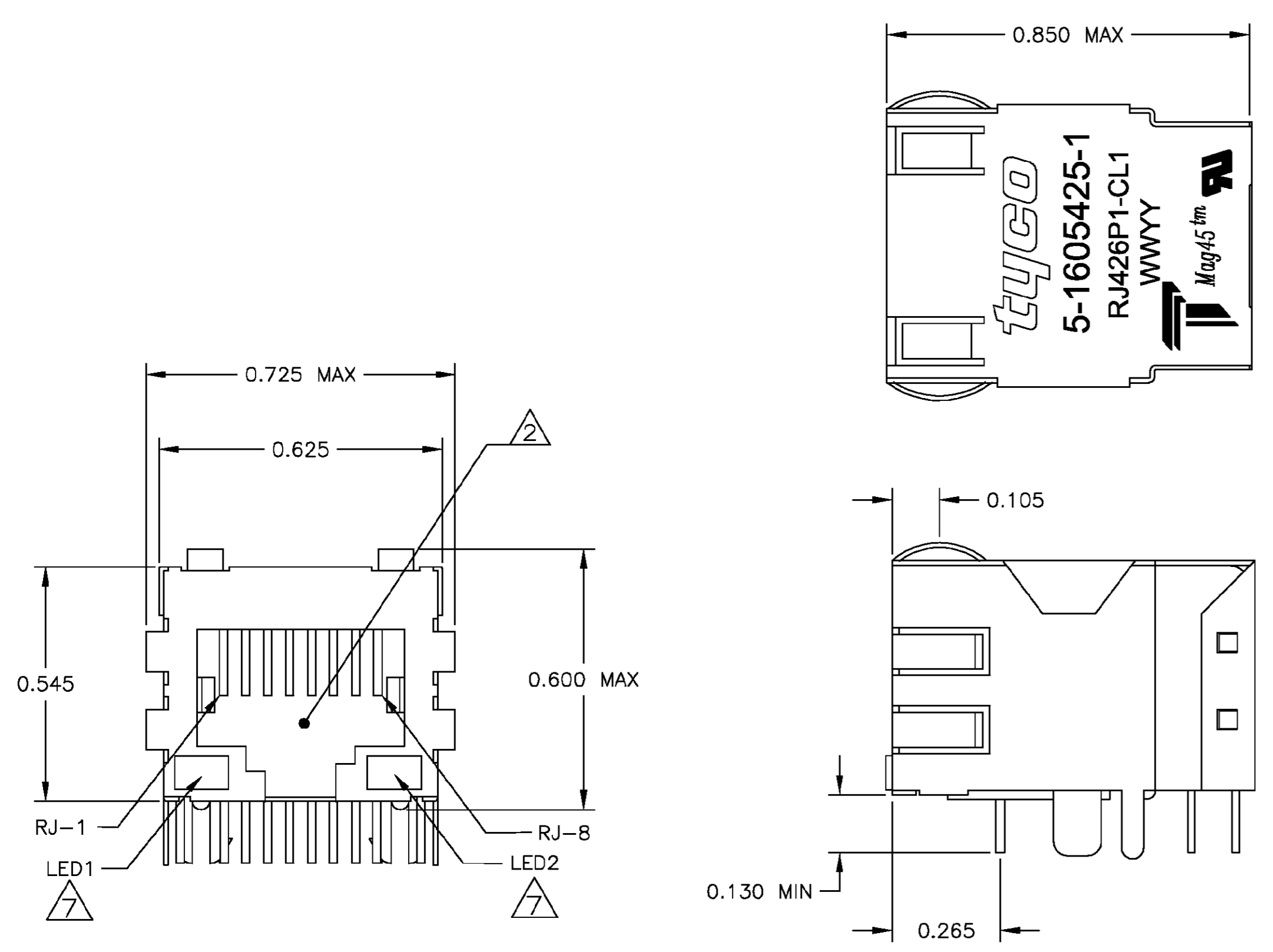


LOC	DIST	REVISIONS			
P	LTR	DESCRIPTION	DATE	BY	APPD
AA	22	B	ADDED: 5- -9 PER EC OS15-0155-02	08JUL2002	MB EL

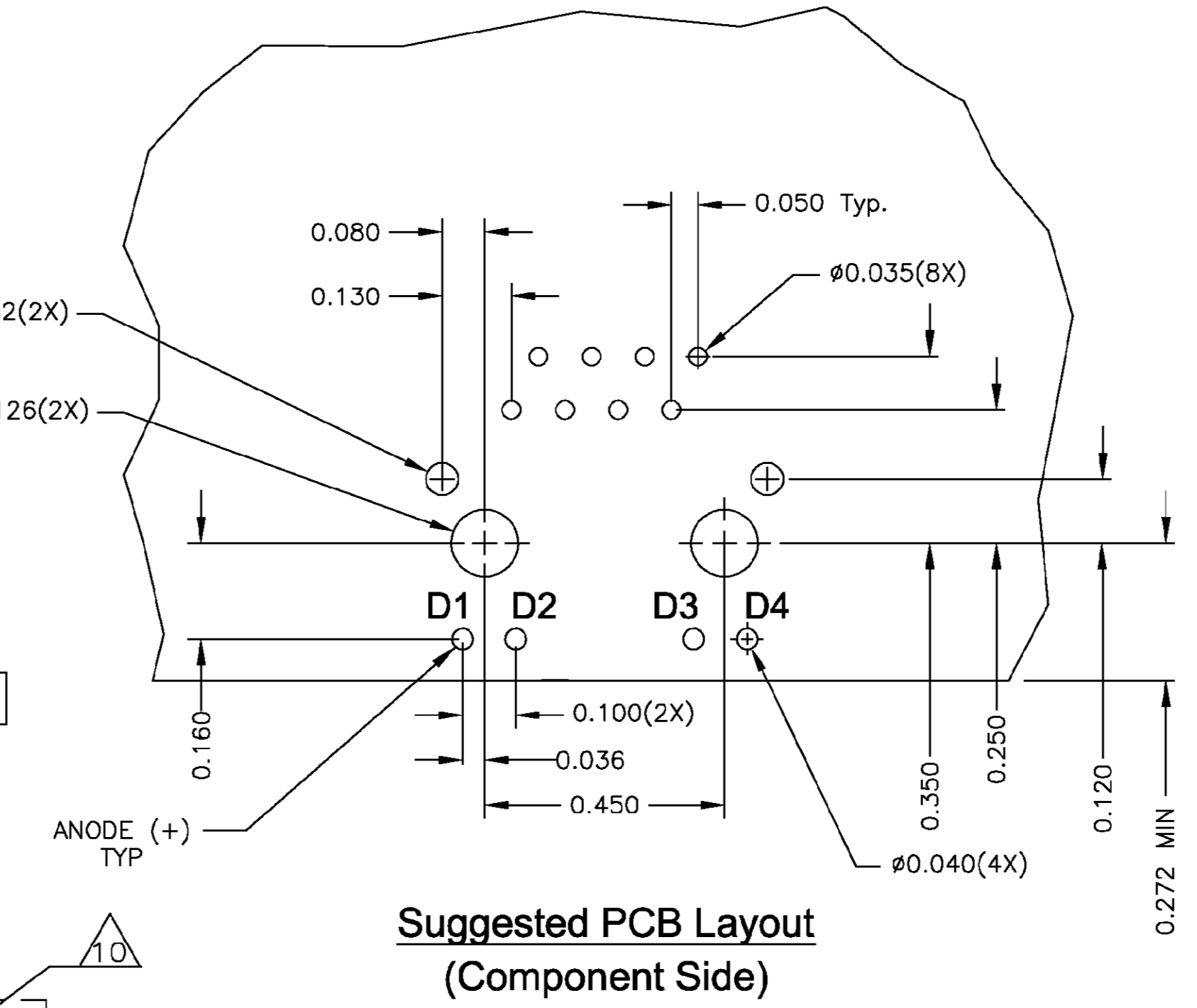
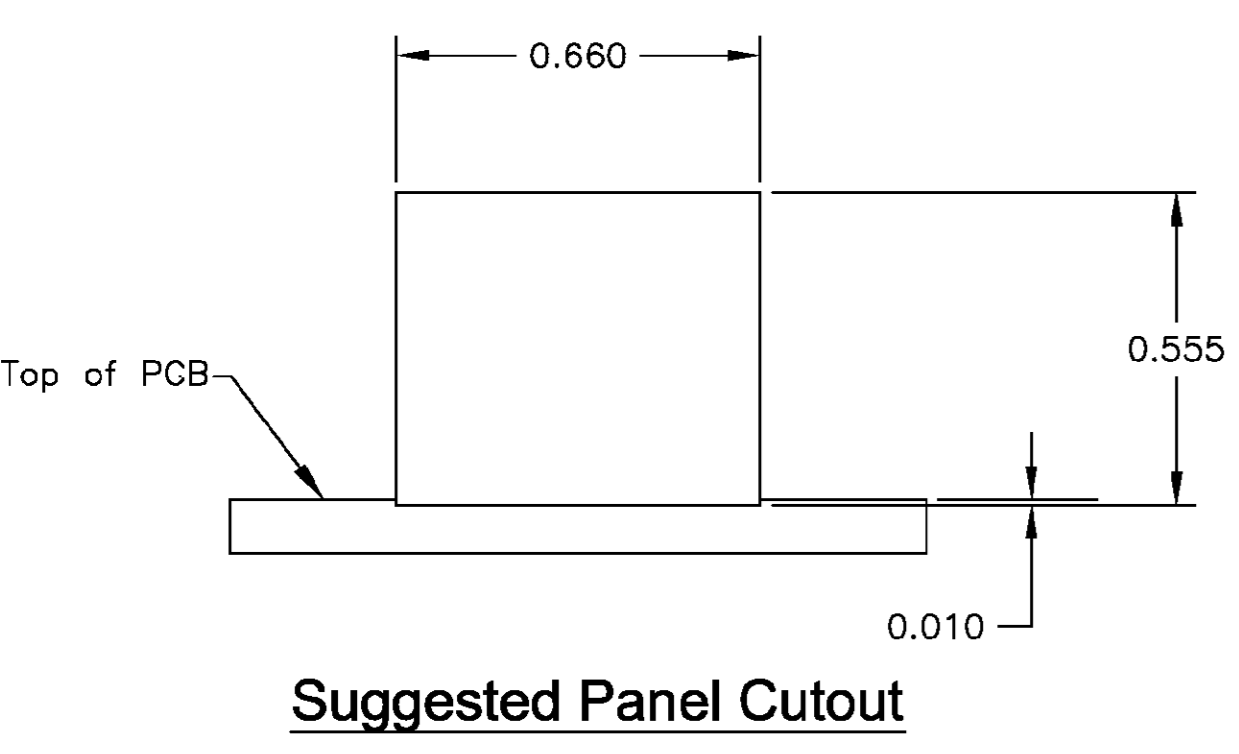
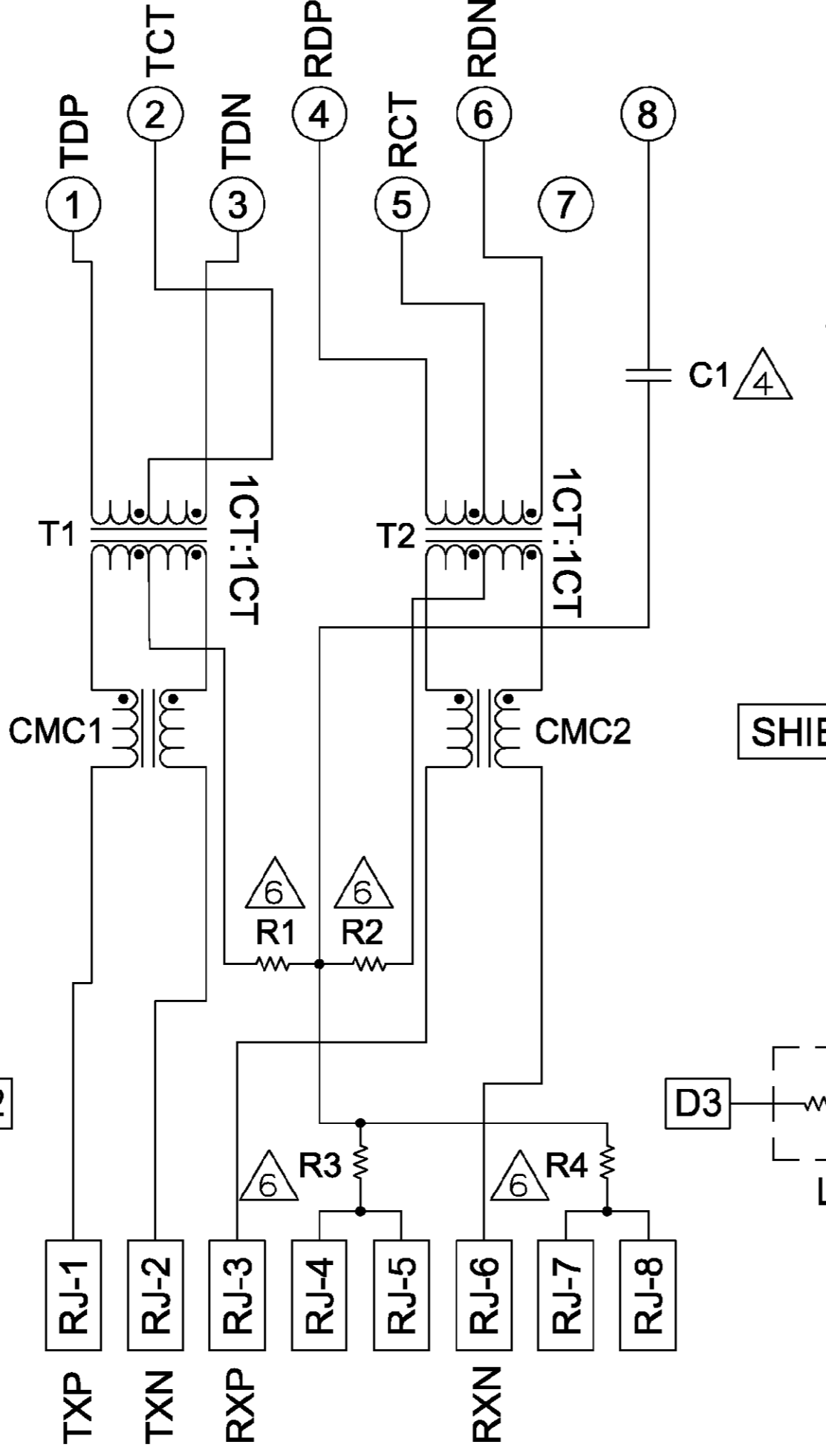
**MECHANICAL:**



**Pin Designations**

- NOTES:**
- MATERIALS: HOUSING - THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94V-0. SHIELD - .010" THICK, C26800 BRASS PREPLATED WITH 80-150µinch SEMI-BRIGHT NICKEL; POST-DIPPED WITH 100µinch MIN TIN-LEAD. MOD JACK CONTACTS - .012" x .018", PHOSPHOR BRONZE, 50µinch MIN OVERALL NICKEL UNDERPLATE, WITH SELECT 50µinch MIN HARD GOLD FINISH PLATE. SOLDER TAILS WITH 50µinch MIN TIN-LEAD FINISH PLATE. LIGHT EMITTING DIODE(LED) - DIFFUSED EPOXY LENS, .020" x .020" CARBON STEEL WIREFRAME LEADS PREPLATED WITH 90µinch SILVER OVER 40µinch NICKEL UNDERPLATE OVER 80µinch COPPER UNDERPLATE; POST-PLATED WITH 300µinch THICK TIN-LEAD.
  - RJ45 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68, SUB PART F.
  - MAGNETICS:
    - IMPEDANCE: 100 OHMS
    - TRANSMIT OPEN CIRCUIT INDUCTANCE (OCL): 350µH (MIN) @100KHZ, 0.1 VRMS WITH 8 mA DC BIAS
    - RISE TIME: 2.5 NANO-SECONDS FROM 10 TO 90 PERCENT.
    - TURNS RATIO (CHIP: CABLE): TX: 1:1, RX: 1:1
  - PERFORMANCE:
    - TRANSMIT RJ1 & 2. RECEIVE RJ3 & 6.
    - INSERTION LOSS: FREQUENCY: 100 KHZ TO 100 MHZ TX/RX: -1.1 DB (MAX)
    - RETURN LOSS: FREQUENCY: 1 MHZ TO 60 MHZ TX/RX: -18.0 DB (MIN) FREQUENCY: 60.1 MHZ TO 80 MHZ TX/RX: -15.0 DB (MIN) FREQUENCY: 80.1 MHZ TO 100 MHZ TX/RX: -12.0 DB (MIN)
    - CROSSTALK: NEXT (TX TO RX) 35.0 DB (MIN) @100MHZ
    - TX CMRR: FREQUENCY: 100KHZ TO 100 MHZ, 42.0 DB (MIN)
    - RX CMRR: FREQUENCY: 100KHZ TO 100 MHZ, 33.0 DB (MIN)
  - HIPOT (ISOLATION VOLTAGE):
    - 2250 VDC (1mA CUTOFF CURRENT) FOR 60 SECONDS DURATION.
    - ALL BRIDGED ON EITHER SIDE OF MAGNETICS PACKAGE FOR RJ-45 CONTACTS.
  - OPERATING TEMPERATURE: FROM 0° - +70°C

**4N2P1 SERIES MAGNETIC CIRCUIT**

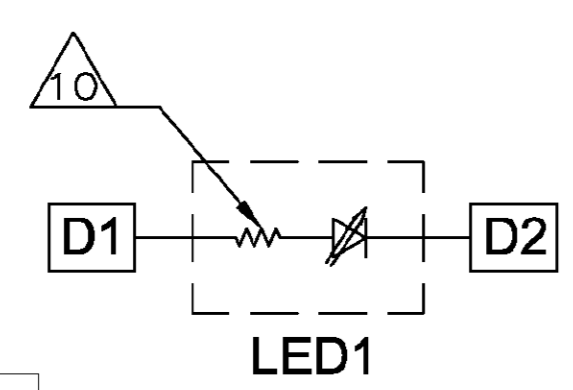


**Suggested PCB Layout (Component Side)**

- C1 IS 1000 pF, 2kV DECOUPLING CAPACITOR.
- ALL DIMENSIONS NOMINAL UNLESS OTHERWISE NOTED.
- R1-R4 = 75 OHMS, 1/16 W, 5%.
- LED COMPLIANT WITH IEC60825-1 SAFETY OF LASER PRODUCTS. WHEN OPERATED UP TO 20 mA.
- INDICATED CONNECTIONS ARE FOR NIC CONFIGURATION. THE MAGNETICS ARE SYMMETRICAL, AND THEREFORE ARE AUTO-MDI/MDIX CAPABLE.
- LED PEAK WAVELENGTH: GREEN(λ) = 565nm YELLOW(λ) = 585nm
- THESE 250 OHM RESISTORS ARE INCLUDED IN THE LEDS ON 5-1605425-1 AND 6-1605425-1 ONLY.

Part Number	TYCO P/N	TYCO P/N
RJ426P1-C	6-1605425-1	
RJ426P1-CL9	5-1605425-9	
RJ426P1-CL7	5-1605425-7	
RJ426P1-CL1	5-1605425-1	
TRANSPOWER P/N	TYCO P/N	

CROSS REFERENCE



Color	Part Number
GREEN	6-1605425-1
YELLOW	5-1605425-9
GREEN	5-1605425-7
GREEN	5-1605425-1

THIS DRAWING IS A CONTROLLED DOCUMENT.

APPROVED: M. BROOKS	DATE: 08JUL2002	DESIGNED: M. HOSIER	DATE: 26JUL2002
DIMENSIONS: INCHES		TOLERANCES UNLESS OTHERWISE SPECIFIED:	
0 PLC	± .005	1 PLC	± .010
1 PLC	± .010	2 PLC	± .015
2 PLC	± .015	3 PLC	± .020
3 PLC	± .020	4 PLC	± .025
4 PLC	± .025	5 PLC	± .030
5 PLC	± .030	6 PLC	± .035
6 PLC	± .035	7 PLC	± .040
7 PLC	± .040	8 PLC	± .045
8 PLC	± .045	9 PLC	± .050
9 PLC	± .050	10 PLC	± .055
10 PLC	± .055		

NAME: 1X1 MAG45(TM), 4N2P1 SCHEMATIC, 426 SERIES CIRCUIT, SHIELDED, DECOUPLING CAPACITOR, WITH LEDS

SCALE: NTS SHEET 1 OF 1 REV B