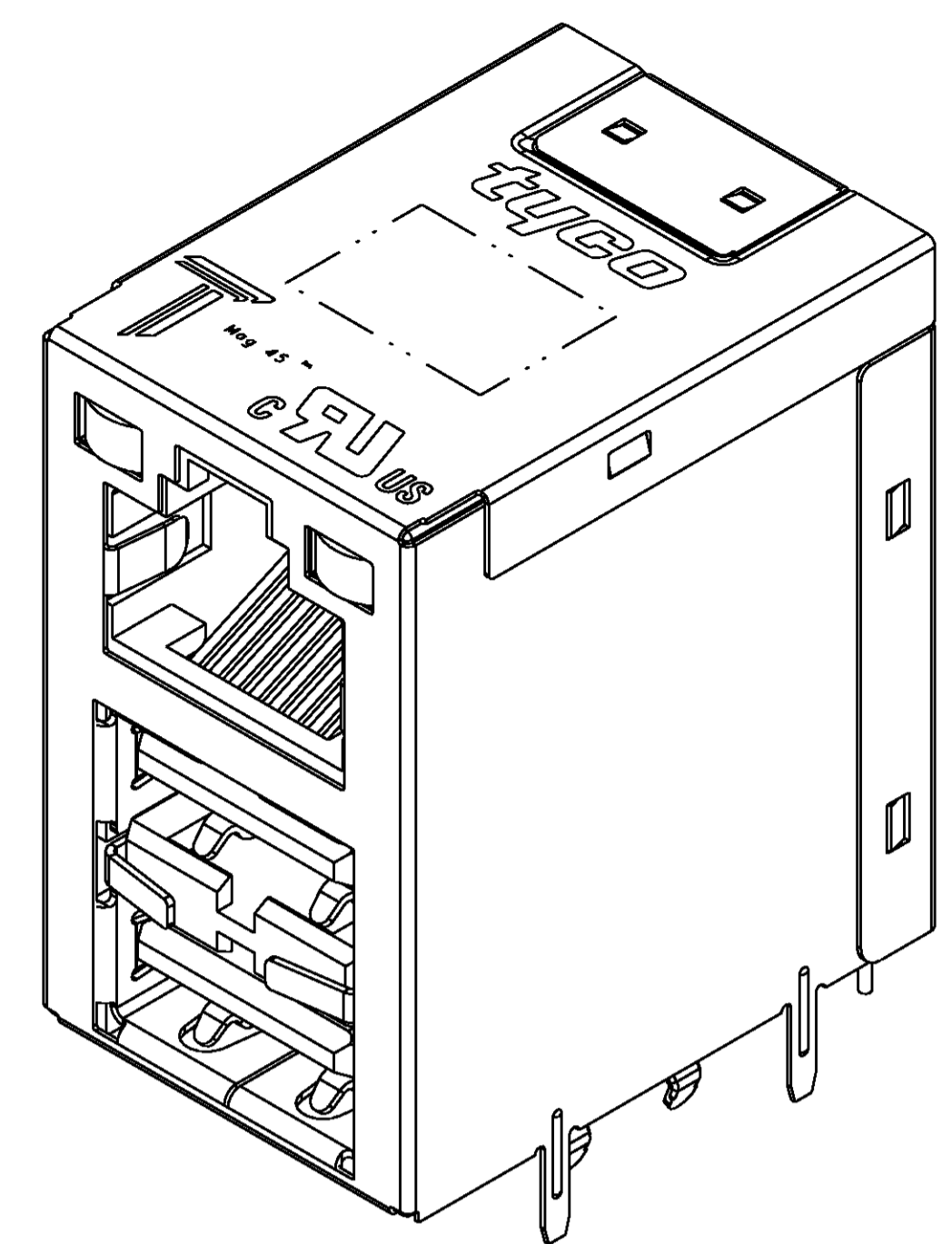
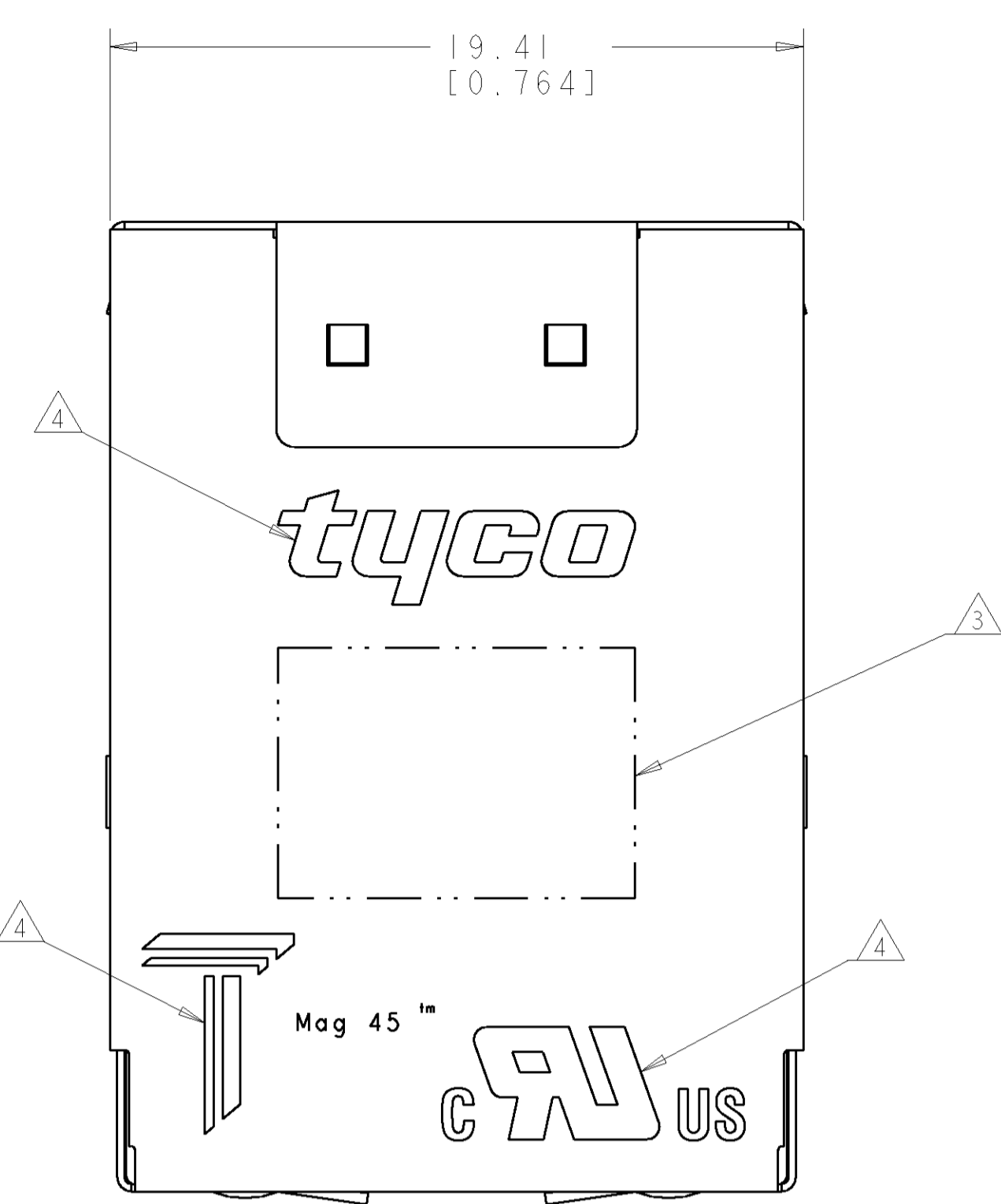


REVISONS		DATE	BY	APPV
3	REV PER EC 0513-0291-04	02SEP2004	EB	NN
4	EC 0513-0557-04	27OCT2004	MDL	SF
5	EC 0513-0579-04	04NOV2004	MDL	SF
6	REVISED ECO-09-027197	12JAN10	KK	AEG



SCALE 4:1

**USB MATERIALS:**  
 SHELL: BRASS, PLATED WITH TIN-LEAD 2.54μ MIN  
 HOUSING: BLACK, THERMOPLASTIC, GLASS FILLED, UL 94V-0 RATED  
 CONTACT: PHOSPHOR BRONZE WITH SELECTIVE GOLD PLATING

**RJ45 MATERIALS:**  
 PLASTIC HOUSING: BLACK, THERMOPLASTIC FLAMMABILITY RATING UL 94V-0  
 SHIELD: BRASS, PLATED WITH 0.76 μm MIN BRIGHT NICKEL,  
 SELECTED TIN-LEAD, 2.0-3.8 μm ON SOLDER TAILS ONLY  
 CONTACTS: PHOSPHOR BRONZE  
 PLATING: 1.27 μm MIN NICKEL UNDER PLATE WITH SELECT  
 1.27 μm MIN GOLD AT MATING SELECT INTERFACE AND  
 2.54 μm MIN TIN/LEAD ON CONTACT TAILS.

LED: DIFFUSED EPOXY LENS, CARBON STEEL LEAD FRAME WITH TIN-LEAD/SILVER/NICKEL/COPPER PLATING.

**RJ45 ELECTRICAL REQUIREMENTS @ 25° C**  
**MAGNETICS:**  
 - IMPEDANCE: 100 OHMS  
 - TRANSMIT OPEN CIRCUIT INDUCTANCE (OCL): 350 μH (MIN) @ 100KHZ,  
 100 MVRMS @ 25° C WITH 8 mA DC BIAS  
 - TURNS RATIO (CHIP:CABLE): TX: 1:1, RX: 1:1  
**PERFORMANCE:**

FREQUENCY	CROSSTALK ATTENUATION	COMMON MODE REJECTION RATIO
.100 MHZ - .999 MHZ	43.0 dB (MIN)	46.0 dB (MIN)
1 MHZ - 15.0 MHZ	35.0 dB (MIN)	46.0 dB (MIN)
15.1 MHZ - 60.0 MHZ	35.0 dB (MIN)	46.0 dB (MIN)
60.1 MHZ - 80.0 MHZ	30.0 dB (MIN)	42.0 dB (MIN)
80.1 MHZ - 100.0 MHZ	30.0 dB (MIN)	42.0 dB (MIN)

FREQUENCY	INSERTION LOSS	RETURN LOSS
.5 MHZ - 40.0 MHZ	1.1 dB (MAX)	18 dB (MIN)
40.1 MHZ - 100.0 MHZ	1.1 dB (MAX)	12-20LOG(f/80) dB (MIN)

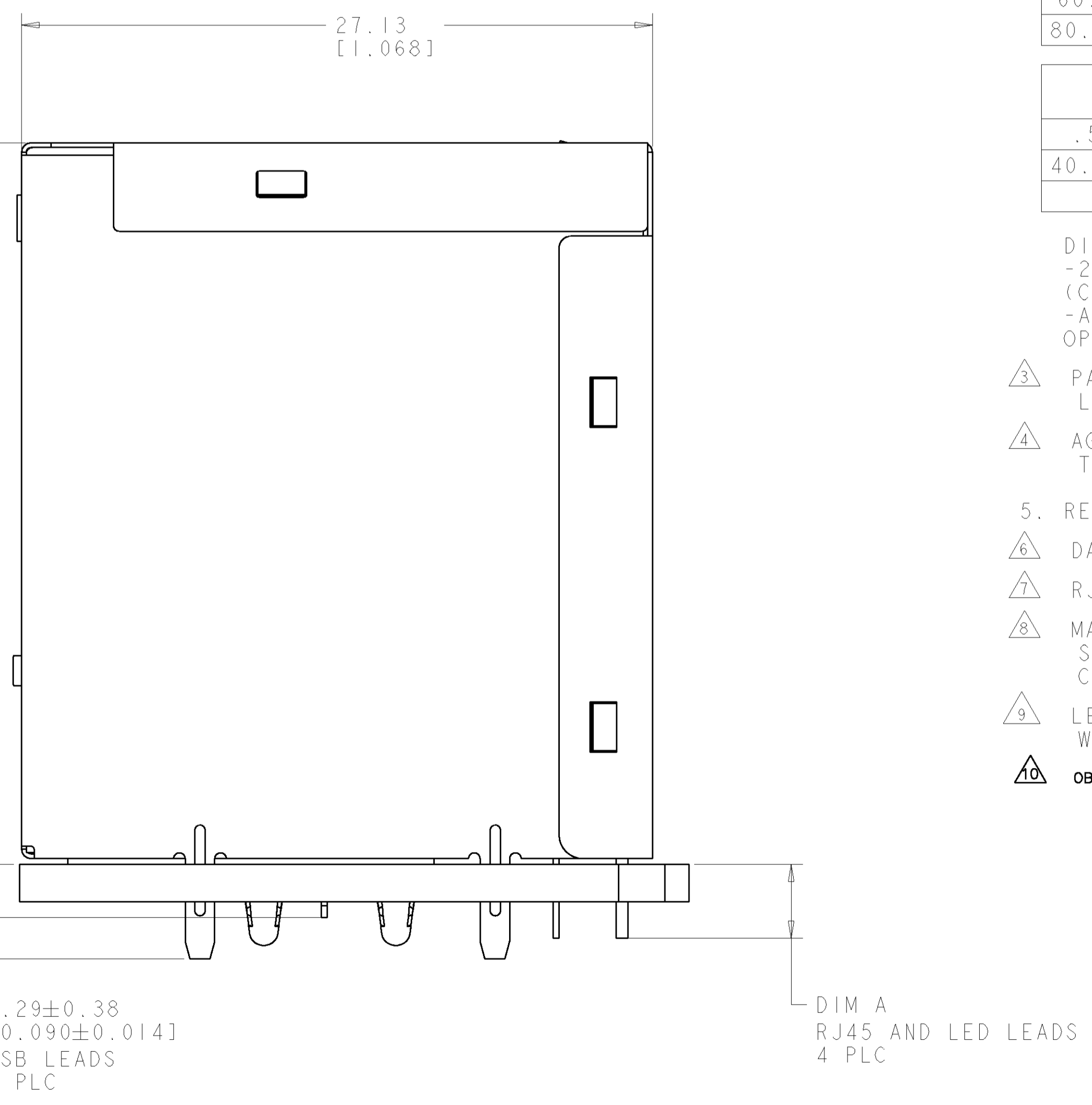
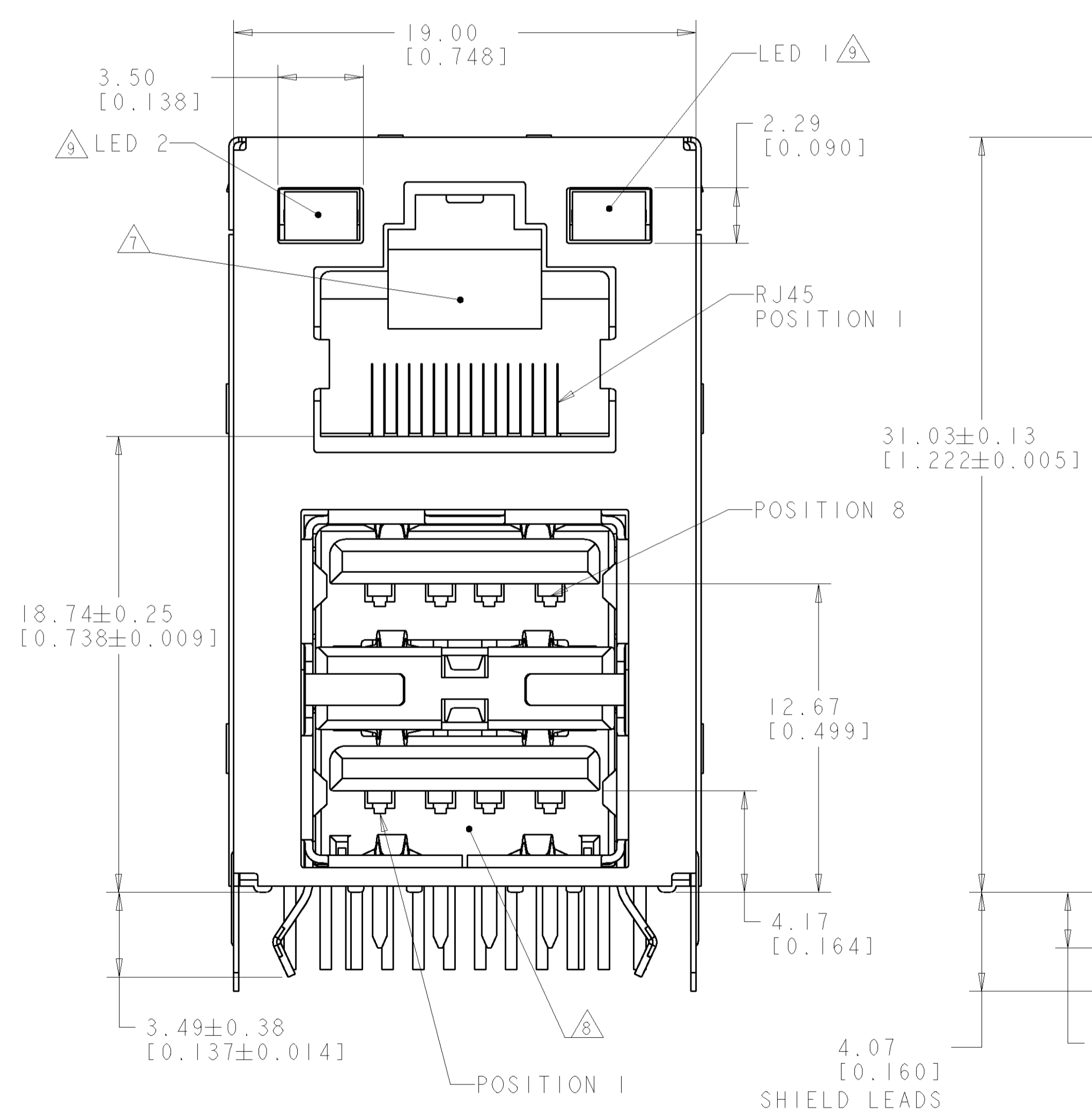
f IS FREQUENCY IN MHZ

**DIELECTRIC ISOLATION VOLTAGE:**  
 -2250 VDC FOR 60 SECONDS DURATION (PRIMARY TO SECONDARY)  
 (CUTOFF CURRENT = 1 mA)  
 -ALL BRIDGED ON EITHER SIDE OF MAGNETICS PACKAGE FOR RJ-45 CONTACTS.  
**OPERATING TEMPERATURE: -FROM 0° C TO + 70° C**

- 3 PART NUMBER, DATE CODE AND COUNTRY OF ORIGIN LOCATED IN APPROXIMATE LOCATION SHOWN.
- 4 AGENCY APPROVAL LOGO, TYCO LOGO AND TRANSPOWER LOGO TO BE LOCATED IN APPROXIMATE AREA SHOWN.
- 5. RECOMMENDED PCB THICKNESS 1.57mm (.062") THK.
- 6 DATUM LOCATION AND DIMENSION TO BE ESTABLISHED BY CUSTOMER.
- 7 RJ45 CAVITY COMFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F.
- 8 MATING INTERFACE COMPLIES WITH USB (UNIVERSAL SERIAL BUS) SPECIFICATION REV 2.0, UTILIZING TYCO P/N 292323-2 WITH USB 2.0 CERTIFICATE TEST ID NO. 60000242.
- 9 LED'S COMPLIANT WITH IEC60825-1 SAFETY OF LASER PRODUCTS. WHEN OPERATED AT CURRENT OF 20 MA.

**OBsolete PARTS: OBSOLETE CIS STREAMLINING PER D.RENAUD/D.SINISI**

DESIGN APPROVED THIS PRINT IS  
**PRELIMINARY**  
 TO FIRST PIECE APPROVAL  
 CONTACT PRODUCT ENGINEERING  
 BEFORE USING THIS PRINT



DIM A	LED 2	LED 1	PART NUMBER
4.06[.160]	GREEN	GREEN/YELLOW	1620009-2
3.18[.125]	GREEN	GREEN/YELLOW	1620009-1

DIMENSIONS: mm 0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ±0.25 4 PLC ±0.25 ANGLES ±0.25	TOLERANCES UNLESS OTHERWISE SPECIFIED: mm 0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ±0.25 4 PLC ±0.25 ANGLES ±0.25	DIM A LED 2 LED 1 PART NUMBER	DIM A LED 2 LED 1 PART NUMBER
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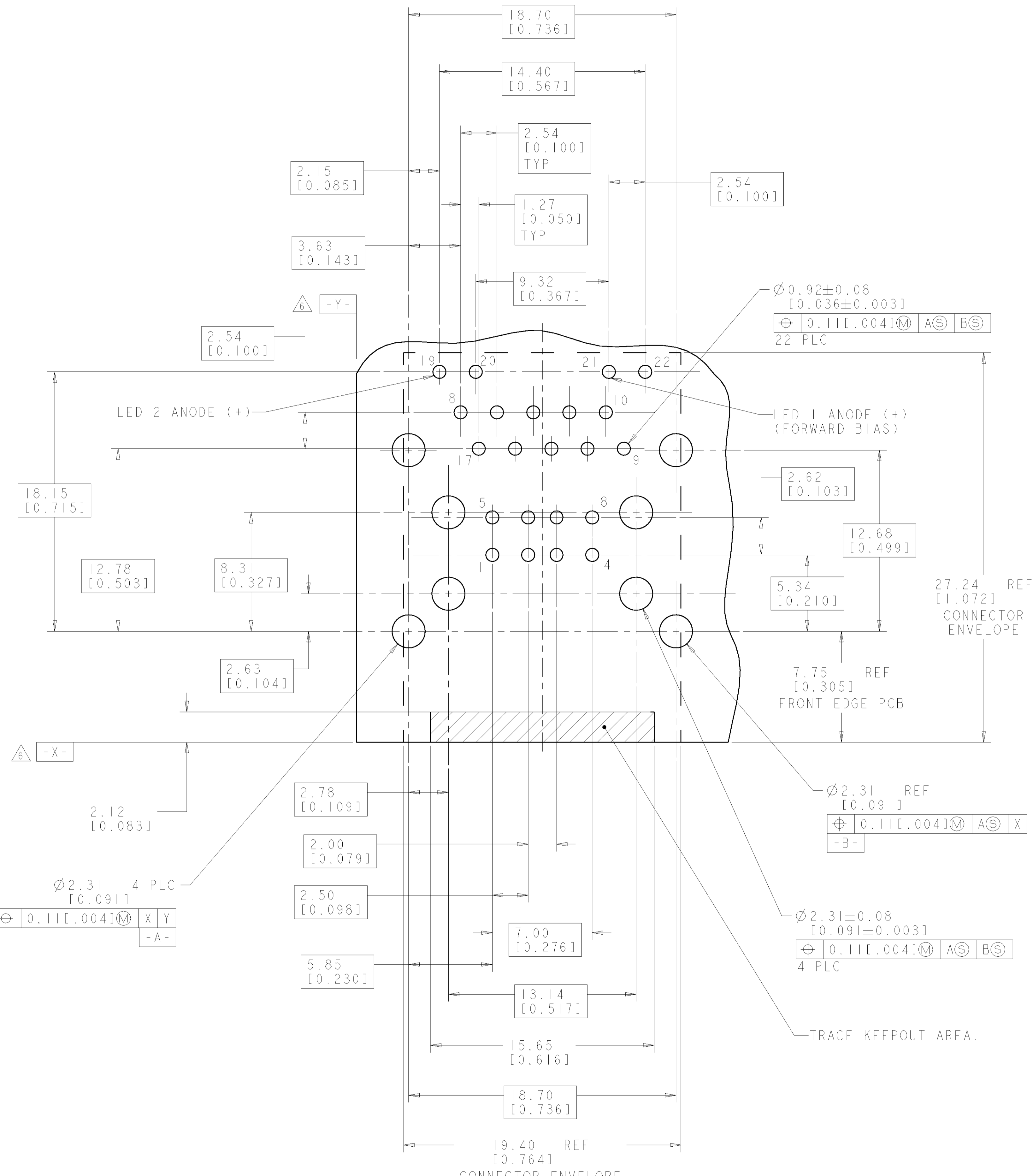
DIMENSIONS: mm 0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ±0.25 4 PLC ±0.25 ANGLES ±0.25	TOLERANCES UNLESS OTHERWISE SPECIFIED: mm 0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ±0.25 4 PLC ±0.25 ANGLES ±0.25	DIM A LED 2 LED 1 PART NUMBER	DIM A LED 2 LED 1 PART NUMBER
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DIMENSIONS: mm 0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ±0.25 4 PLC ±0.25 ANGLES ±0.25	TOLERANCES UNLESS OTHERWISE SPECIFIED: mm 0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ±0.25 4 PLC ±0.25 ANGLES ±0.25	DIM A LED 2 LED 1 PART NUMBER	DIM A LED 2 LED 1 PART NUMBER
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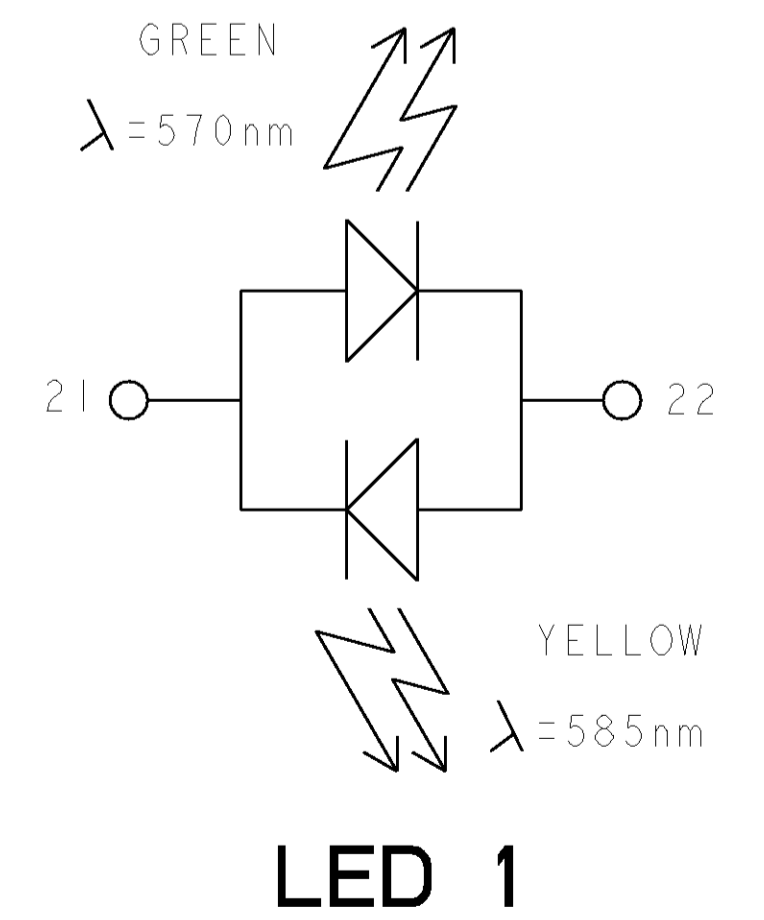
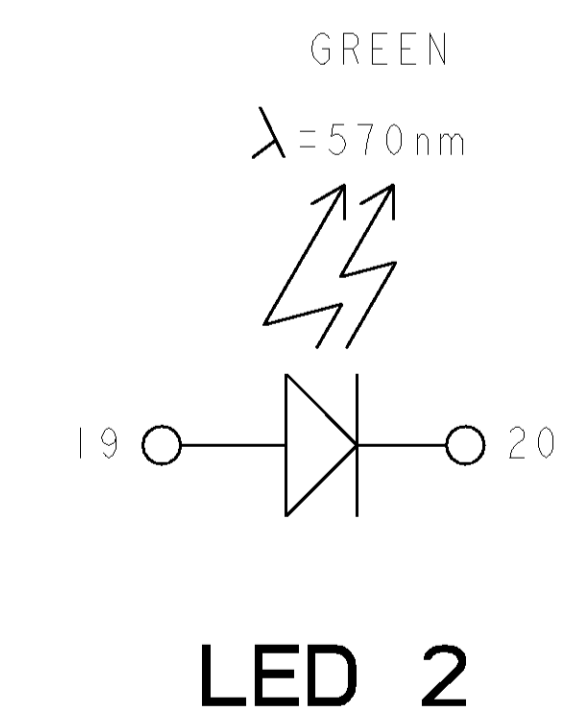
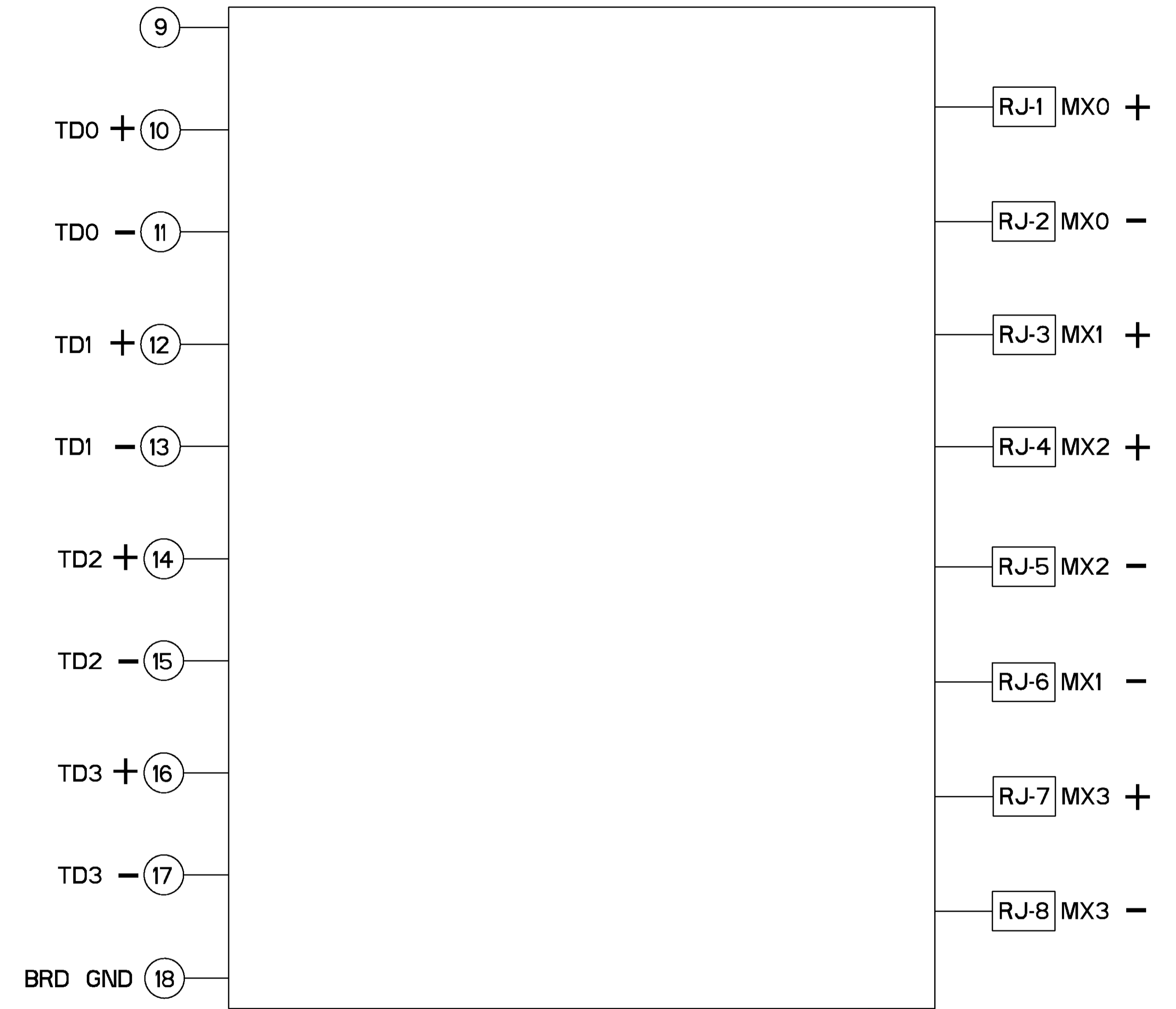
# MAGNETIC CONNECTION BLOCK DIAGRAM

LOC	DIST	REVISIONS					
AA	00	P	LTB	DESCRIPTION	DATE	DWN	APVD
		-	-	SEE SHEET 1	-	-	-



RECOMMENDED P.C.B. FOOTPRINT COMPONENT SIDE

## COMMON CT, VCT



DESIGN APPROVED THIS PRINT IS  
**PRELIMINARY**  
 TO FIRST PIECE APPROVAL CONTACT PRODUCT ENGINEERING BEFORE USING THIS PRINT

DIMENSIONS:		TOLERANCES UNLESS OTHERWISE SPECIFIED:		DWN E. BRIANT 03MAR2004		tyco Electronics		Tyco Electronics Harrisburg, PA 17105-3608	
mm	0 PLC ±0.25	1 PLC ±0.25	2 PLC ±0.25	3 PLC ±0.25	4 PLC ±0.25	ENR N. NORRIS 03MAR2004	NAME	MAGNETIC RJ45 MOD JACK OVER USB STACKED RECEPTACLE 10 PIN GIGABIT MAG45™	
MATERIAL		FINISH		APVD M. WALMSLEY 03MAR2004		PRODUCT SPEC		SIZE CAGE CODE DRAWING NO	
				CUSTOMER DRAWING		APPLICATION SPEC		A1 00779 C=1620009	
				WEIGHT		SCALE		SHEET 2 OF 2 REV 6	