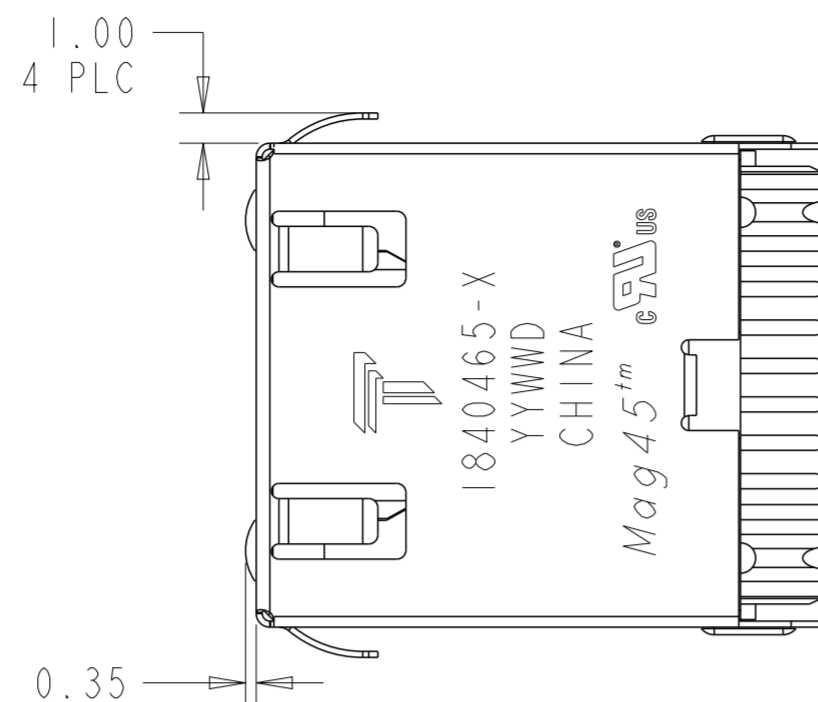
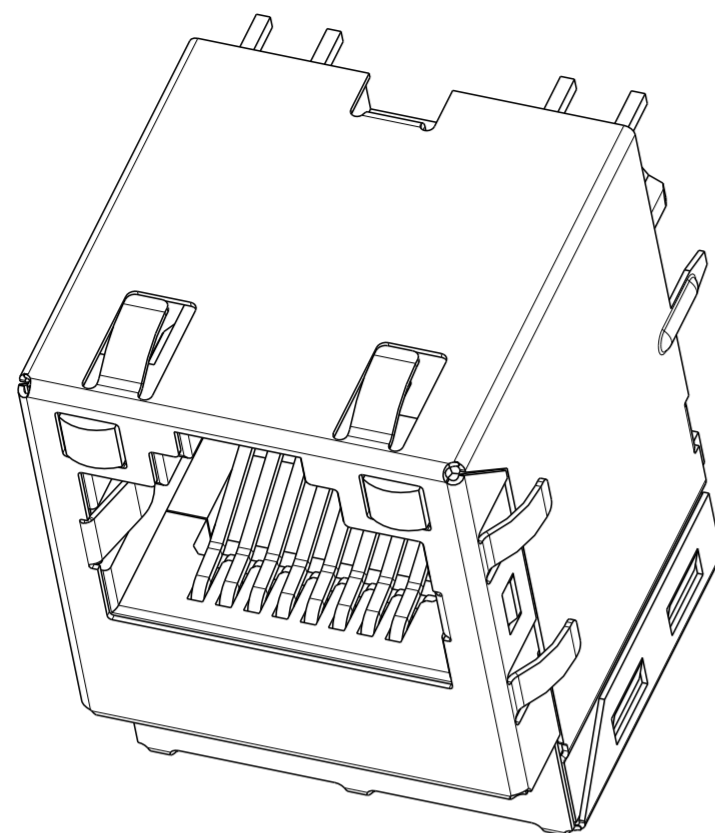


REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
C		LOGO CHANGE	07APR2013	PP	KZ



1. MATERIALS

HOUSING: THERMOPLASTIC, BLACK, FLAMMABILITY RATED UL 94V-0  
 SHIELD: BRASS, 0.20mm THICK, PREPLATED WITH MIN 0.76um SEMI-BRIGHT NICKEL POST DIPPED WITH 2.54um MIN SAC SOLDER AT GROUND PINS.  
 CONTACTS: PHOSPHOR BRONZE, PLATED WITH 1.27um MIN OVERALL NICKEL UNDERPLATE, SELECTIVE 1.27um MIN GOLD AT MATING INTERFACE AND 2.54um MIN MATTE TIN ON SOLDER TAILS. OR 1.27um MIN NICKEL UNDERPLATE, WITH 0.05um GOLD PLATING OVER 0.76um MIN PALLADIUM NICKEL PLATING AT MATING INTERFACE AND 2.54um MIN MATTE TIN ON SOLDER TAILS.  
 SOLDER TAIL: PHOSPHOR BRONZE, WITH 1.27um MIN OVERALL NICKEL UNDERPLATE AND PLATED WITH 2.54um MIN TIN  
 LED: DIFFUSED EPOXY LENS, 0.50mm SQUARE CARBON STEEL WIREFRAME LEADS PREPLATED WITH 2.03um MIN SILVER OVER 1.02um MIN NICKEL OVER 1.02um MIN COPPER UNDERPLATE POST PLATED WITH 2.54um MIN TIN

2

MAGNETICS  
 -APPLICATION: 10/100/1000 BASE-T  
 -IMPEDANCE: 100 OHMS  
 -TURNS RATIO (CHIP:CABLE): 1:1 ALL FOUR PAIRS  
 -OPEN CIRCUIT INDUCTANCE (OCL): 350uH 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): 1.1dB 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  
 33-20LOG(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 40.6.1.1, ITEM b.

3

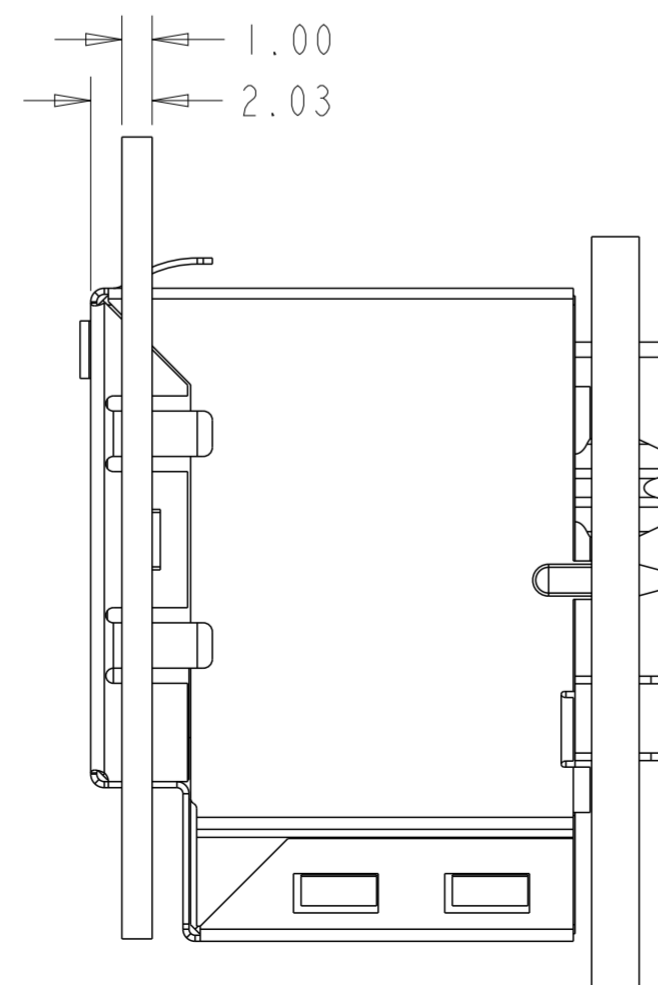
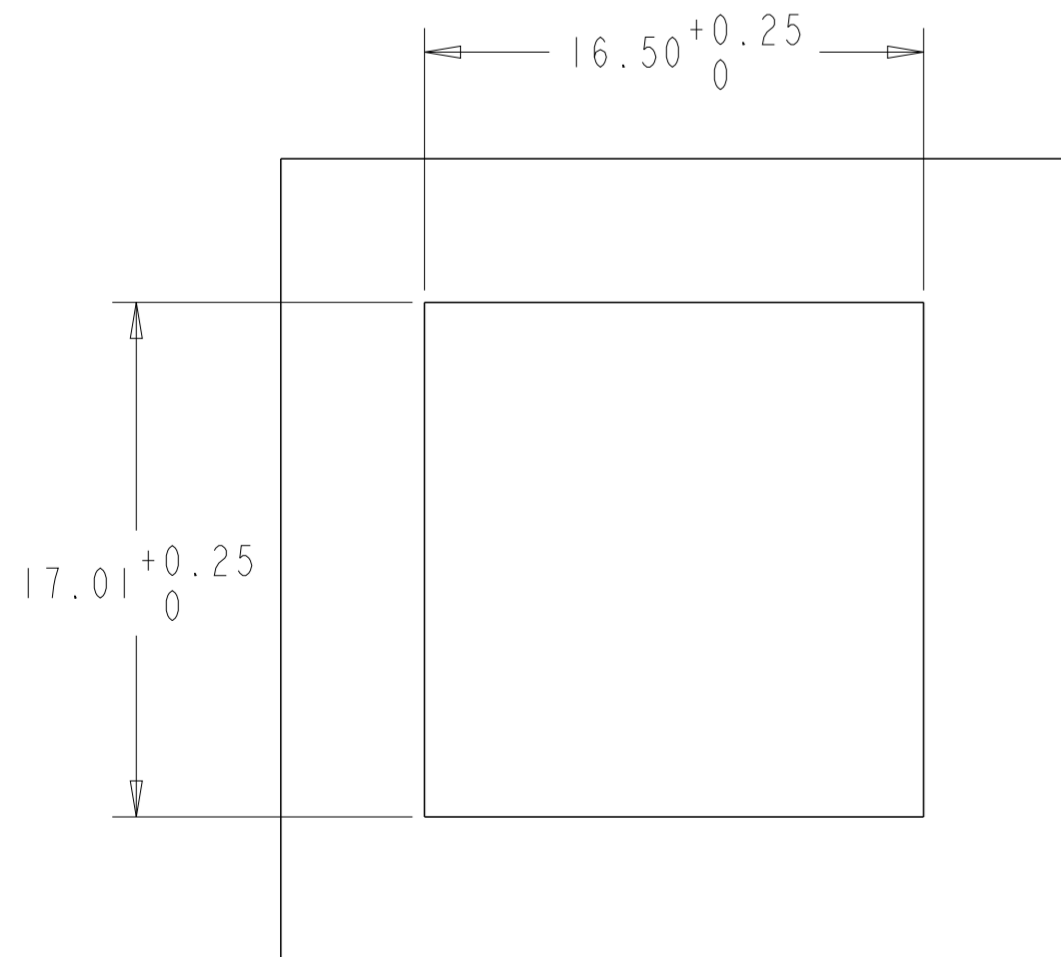
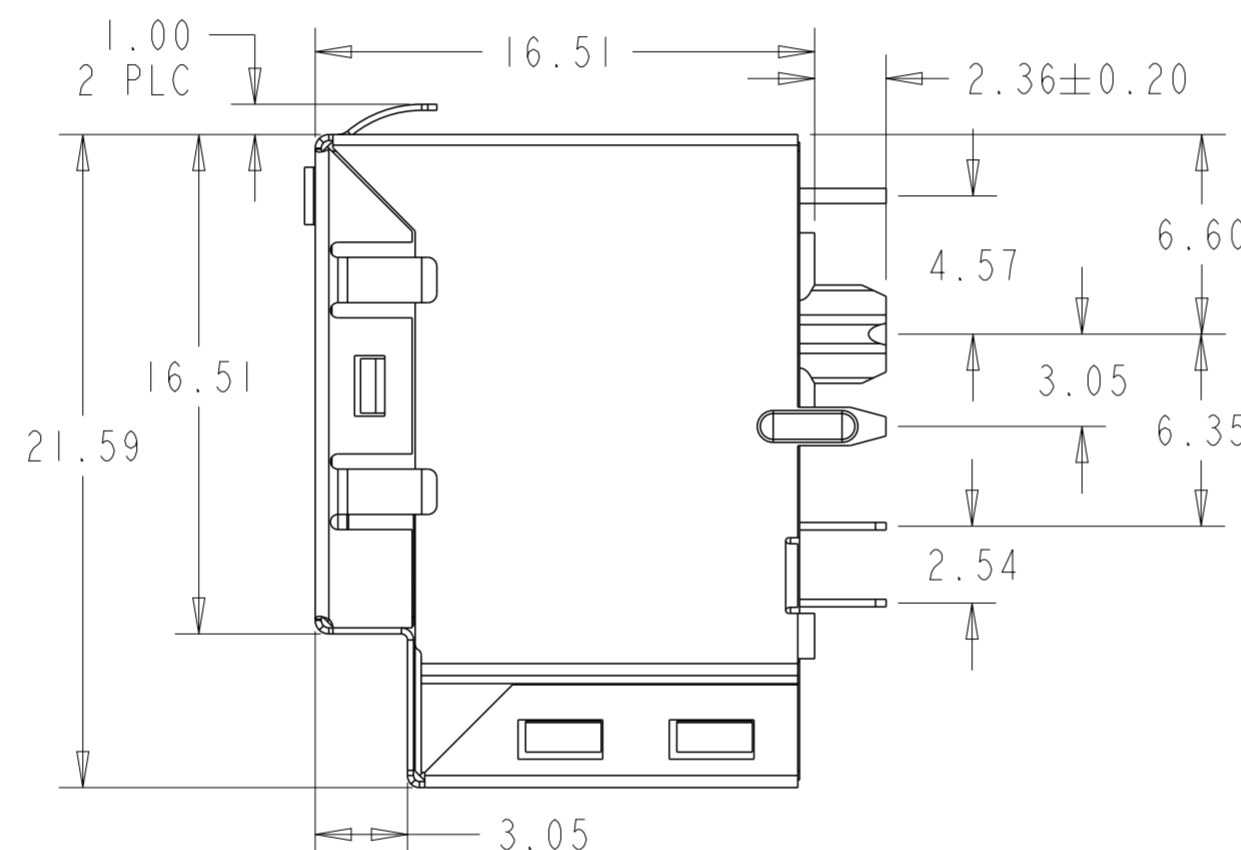
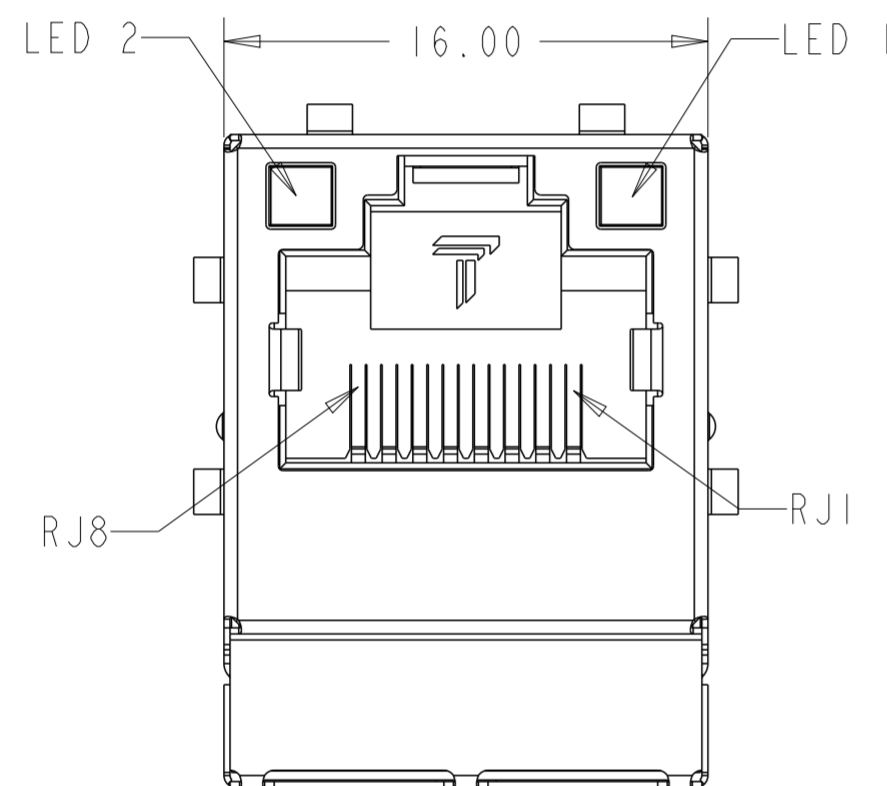
THE MAGNETICS ARE SYMMETRICAL AND SUPPORT AUTO-MDIX OPERATION.

- 4. OPERATING TEMPERATURE: 0 - 70°C
- 5. LED IS DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA.

DOMINANT WAVELENGTH(λ D)  
 GREEN 568nm TYP.at IF=20mA  
 YELLOW 588nm TYP.at IF=20mA

FORWARD VOLTAGE(VF):  
 GREEN 2.2V TYP.at IF=20mA  
 YELLOW 2.1V TYP.at IF=20mA

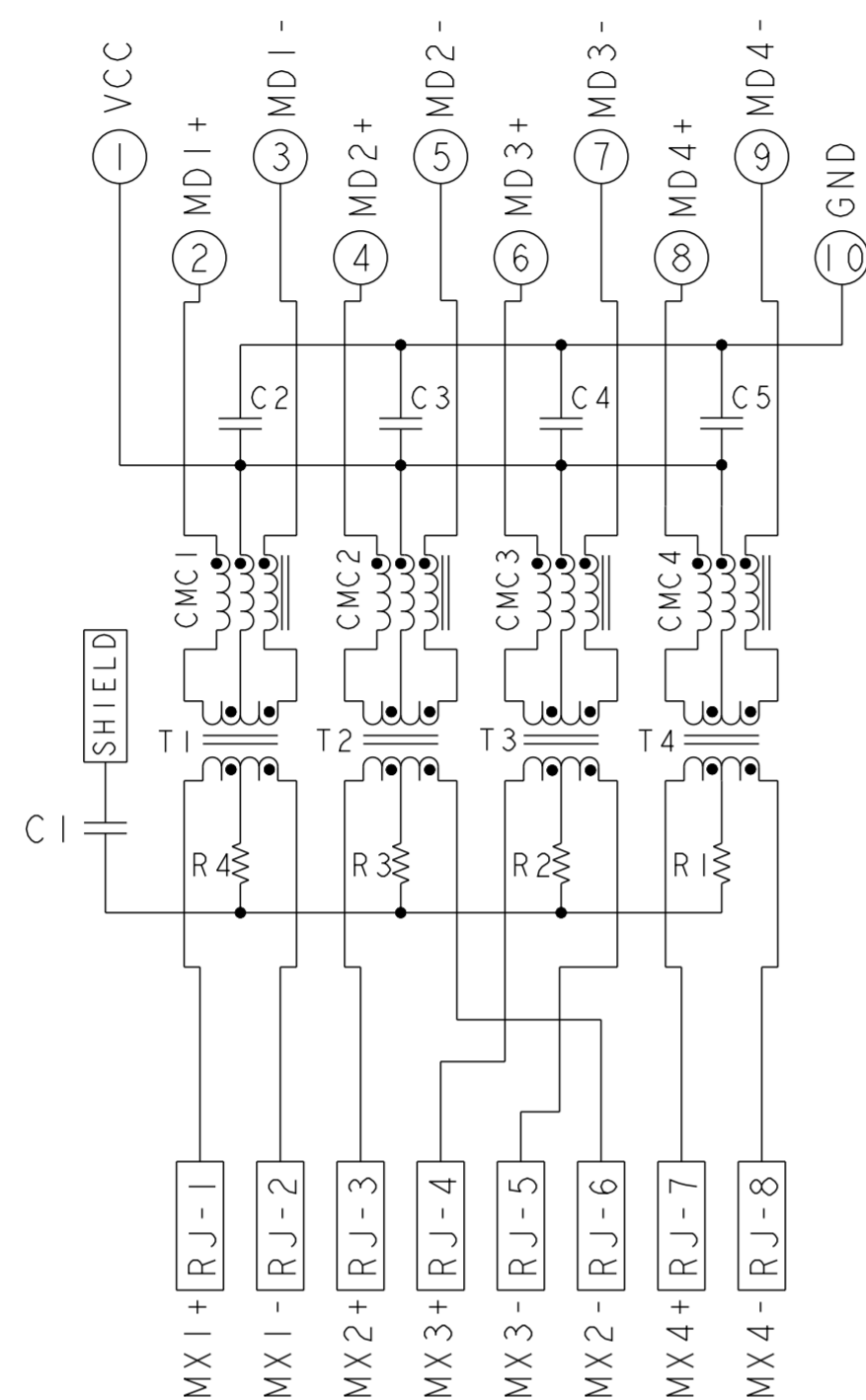
- 6. ALL DIMENSIONS TO BE NOMINAL UNLESS OTHERWISE NOTED
- 7. RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F.
- 8. THESE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS, PEAK TEMPERATURE 260°C MAX, 10 SEC MAX



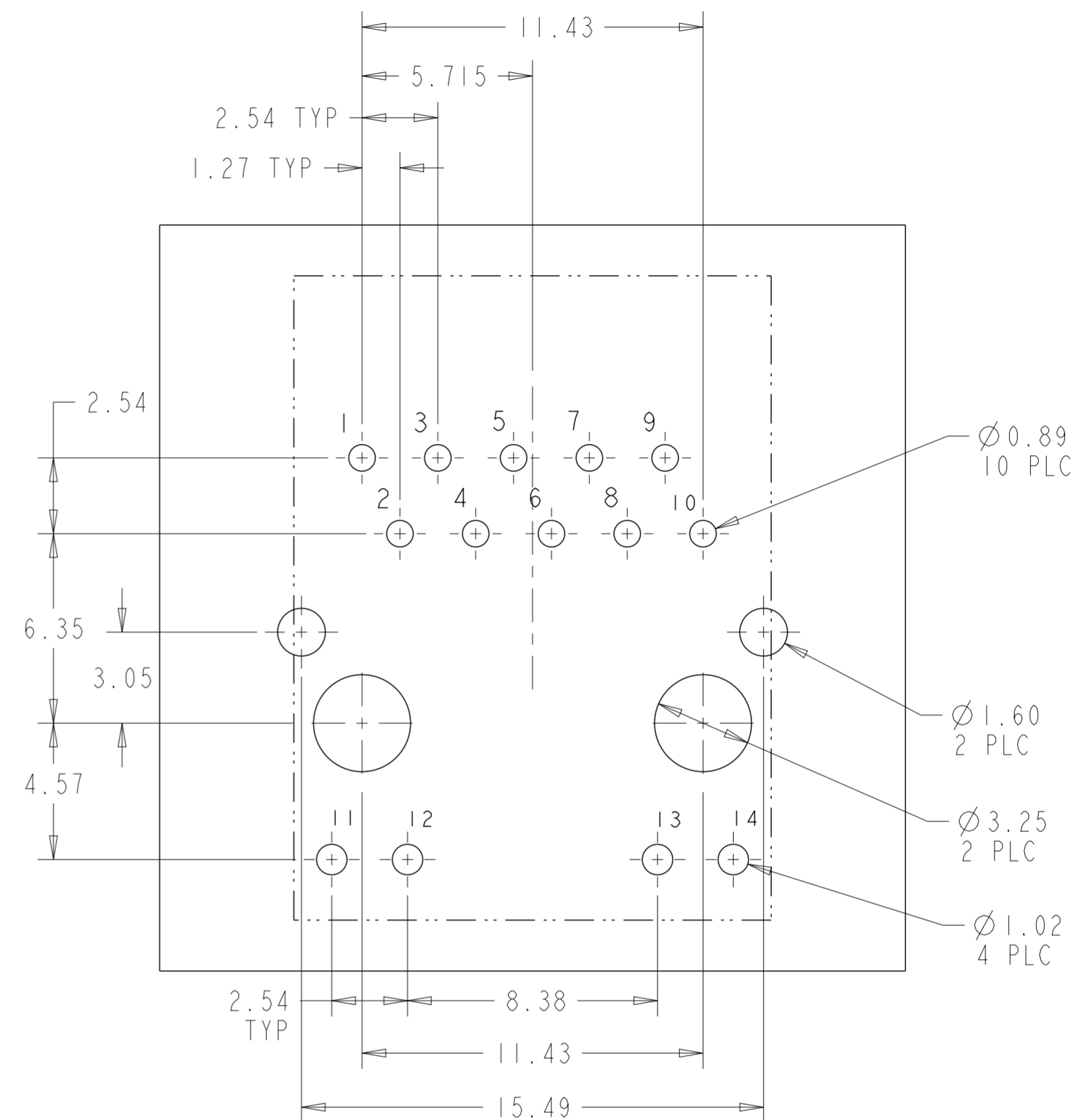
GRN/YEL	GRN/YEL	1840465-4
GREEN	YELLOW	1840465-3
YELLOW	GREEN	1840465-2
GREEN	GREEN	1840465-1
LED 2	LED 1	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN	28AUG2008		TRP connector	
DIMENSIONS:		CHK	28AUG2008		Dongguan China	
mm		APVD	28AUG2008		NAME	
		TEDDY XIONG			1X1 MAG45(TM) MODULAR JACK, VERTICAL, 4G46PI CIRCUIT, WITH LED	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		PRODUCT SPEC		SIZE	CAGE CODE	DRAWING NO
0 PLC ±0.25		108-2100		A2	00779	C-1840465
1 PLC ±0.25		APPLICATION SPEC		RESTRICTED TO		
2 PLC ±0.25		WEIGHT		SCALE 3:1		
3 PLC ±0.25		MATERIAL		SHEET 1 OF 2		
4 PLC ±		CUSTOMER DRAWING		REV C		
ANGLES ±		SCALE 3:1		SHEET 1 OF 2		
FINISH ±		SHEET 1 OF 2		REV C		

# 4G46PI GIGABIT CIRCUIT

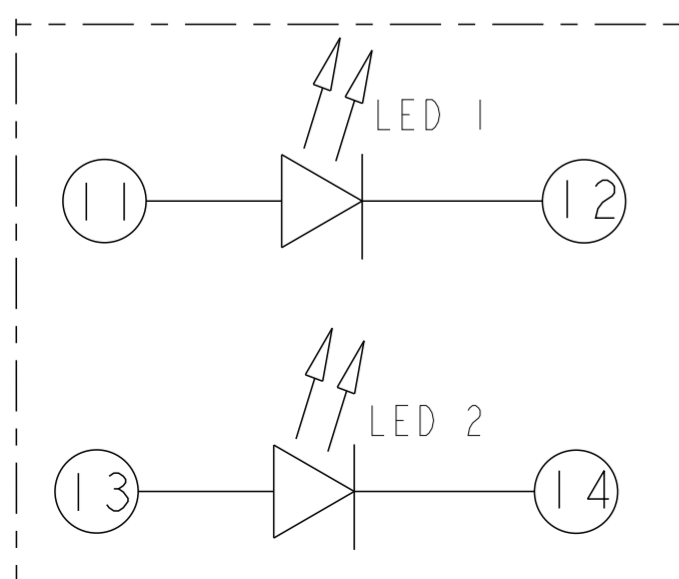


C2 - C5 = 0.1uF, 50V, CAPACITOR  
 C1 = 1000pF, 2KV, CAPACITOR  
 R1 - R4 = 75 ohms, RESISTOR

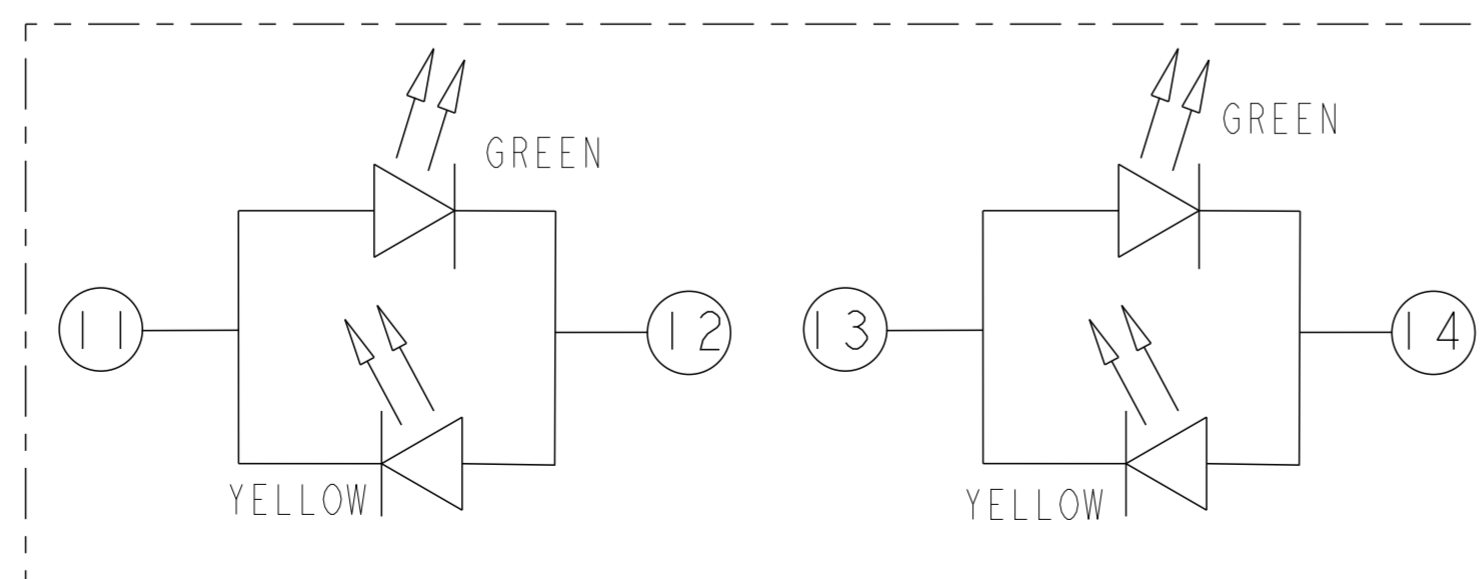



SUGGESTED PCB LAYOUT (TOL: ±0.05)  
 (COMPONENT SIDE VIEW)

SINGLE COLOR LED



BI-COLOR LED



THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: WESLEY YI 28AUG2008	 TRP connector Dongguan China
DIMENSIONS: mm		CHK: KEITH ZHU 28AUG2008	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: TEDDY XIONG 28AUG2008	
0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ±0.25 4 PLC ± ANGLES ± FINISH ±		PRODUCT SPEC: 108-2100 APPLICATION SPEC: - WEIGHT: - MATERIAL: -	
		NAME: 1X1 MAG45(TM) MODULAR JACK, VERTICAL, 4G46PI CIRCUIT, WITH LED	RESTRICTED TO
		SIZE: A2	CAGE CODE: 00779
		DRAWING NO: C-1840465	SCALE: 3:1
		CUSTOMER DRAWING	SHEET 2 OF 2
			REV C