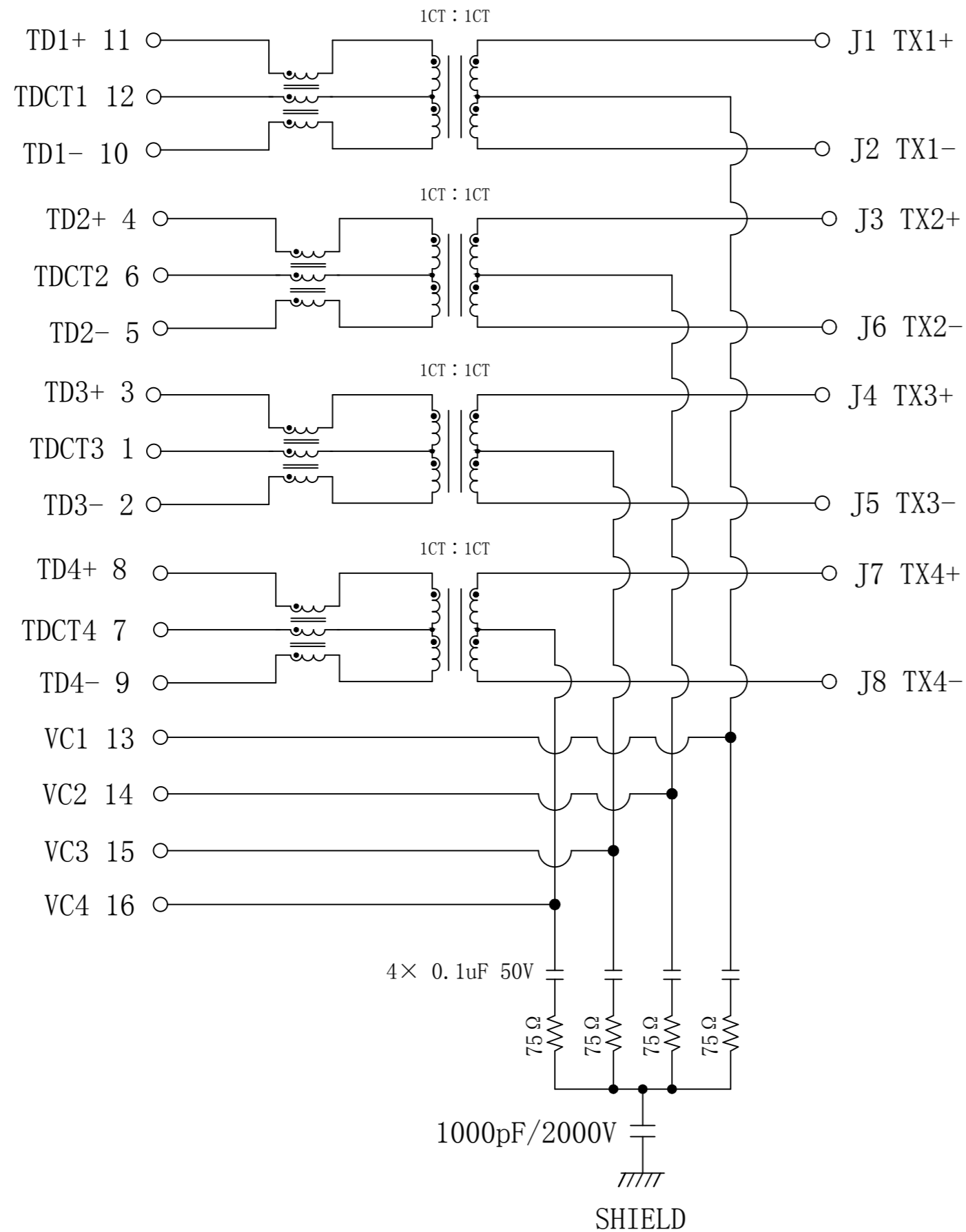


# Schematic:

REV.	ECN NO.	DESCRIPTION	DATE	APPD
A6	REL		2023-03-19	

PC BOARD CONNECTIONS

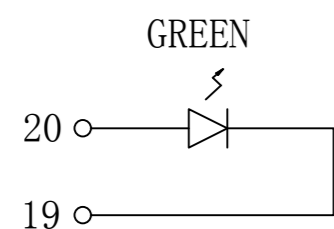


RJ45 CONNECTOR

### ELECTRICAL SPECIFICATIONS @25°C

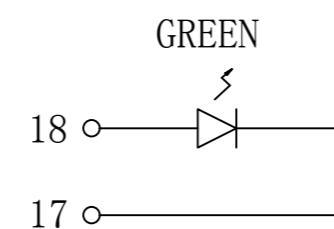
- Turn Ratio : 1CT:1CT  $\pm 5\%$
- OCL: 200uH Min @100KHz , 0.1V
- Insertion Loss (dB Max):  
1-100MHz: -1.0      100-125MHz: -1.5
- Return Loss(dB Min):  
1-30MHz: -16      30-100MHz: -12  
100-150MHz: -10
- Cross Talk:  
1-125MHz: -25dB Min.
- Common Mode Rejection(dB Min):  
1-125MHz: -30
- Common Mode to Differential Mode Rejection(dB Min):  
1-100MHz: -30      100-125MHz: -25.
- Balance DC Line current:  
720mA Max @57VDC Continuous.
- Isolation PHY SIDE To Line SIDE : 1500Vrms
- Operating Temperature Range: 0°C ~ +70°C.

Emitting Color	$\lambda_p$ (nm)	V <sub>F</sub> @I <sub>F</sub> =20mA	I <sub>R</sub> @V <sub>R</sub> =5V
GREEN	565	1.8~2.6V	10 $\mu$ A max
YELLOW	585	1.8~2.6V	10 $\mu$ A max



LEFT LED

LED POLARITY		COLOR
PIN 19	PIN 20	
-	+	GREEN



RIGHT LED

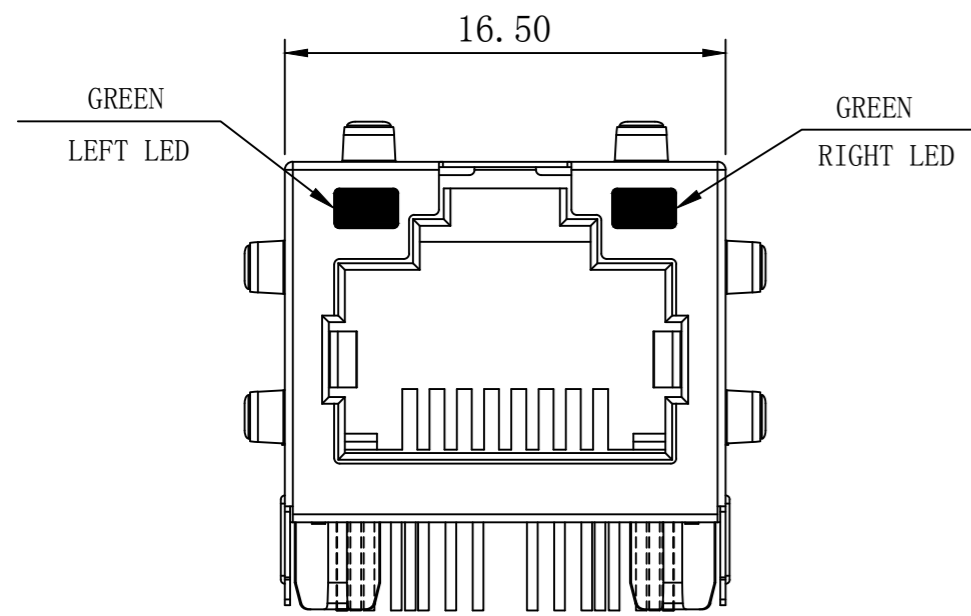
LED POLARITY		COLOR
PIN 17	PIN 18	
-	+	GREEN



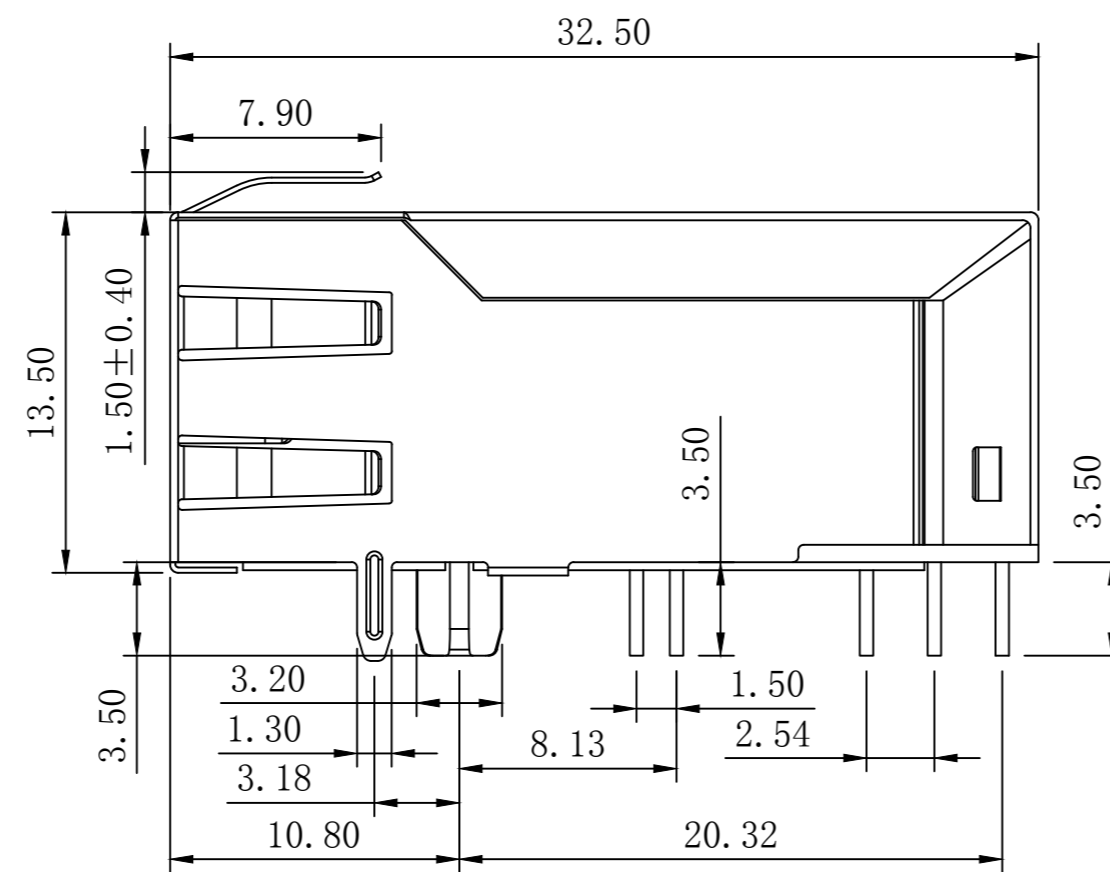
X:X $\pm 0.30$	APPD: TOM	LINK-PP INT'L TECHNOLOGY CO., LIMITED
X:XX $\pm 0.25$	CHKD: JAMES	
X:XXX $\pm 0.05$	DR: LEO	TITLE: RJ45 Connector with 2.5G Base-T Integrated Magnetics For PoE+ Application
ANGLES $\pm 1^\circ$	UNIT: mm	PART NO.: LPJT95282-8AWN
	SCALE: 2/1	SHEET: 1/2
	REV: A6	DWG NO.: LP23031952

# Mechanical :

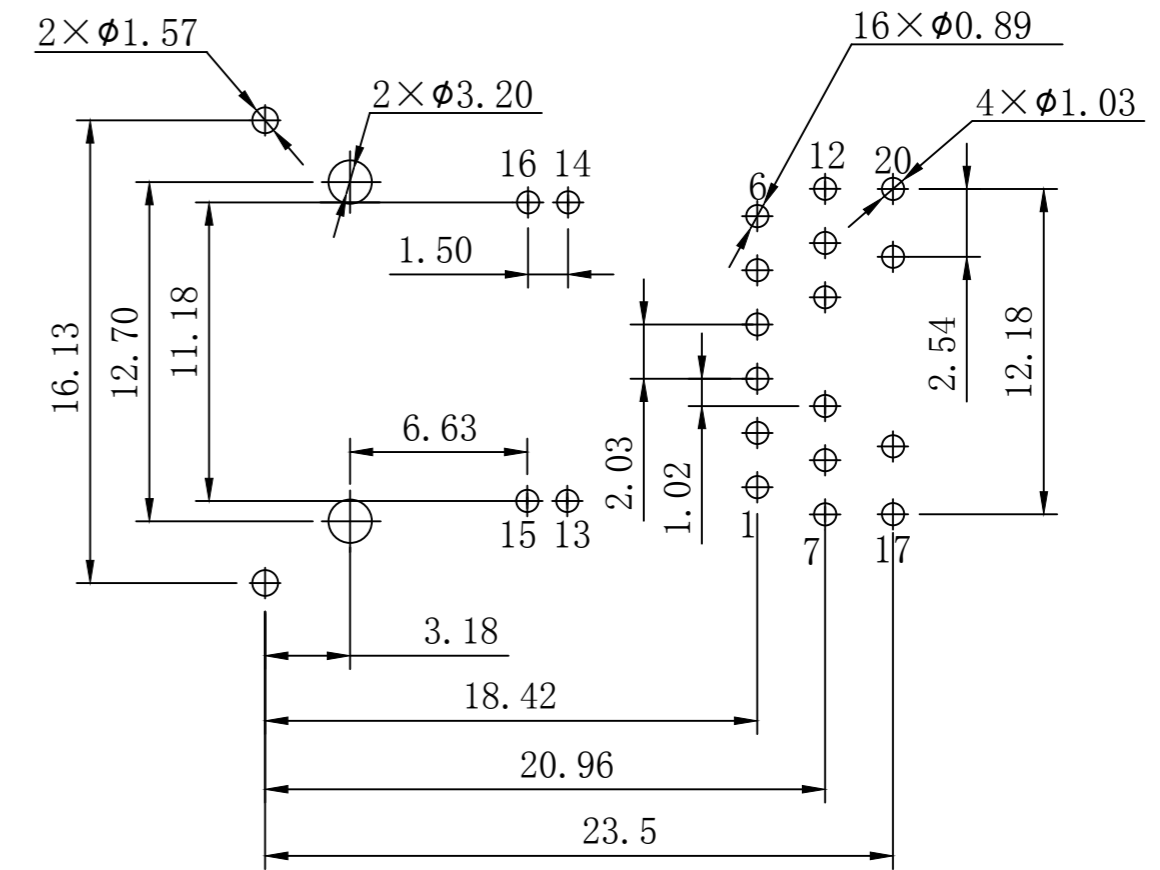
REV.	ECN NO.	DESCRIPTION	DATE	APPD
A6	REL		2023-03-19	



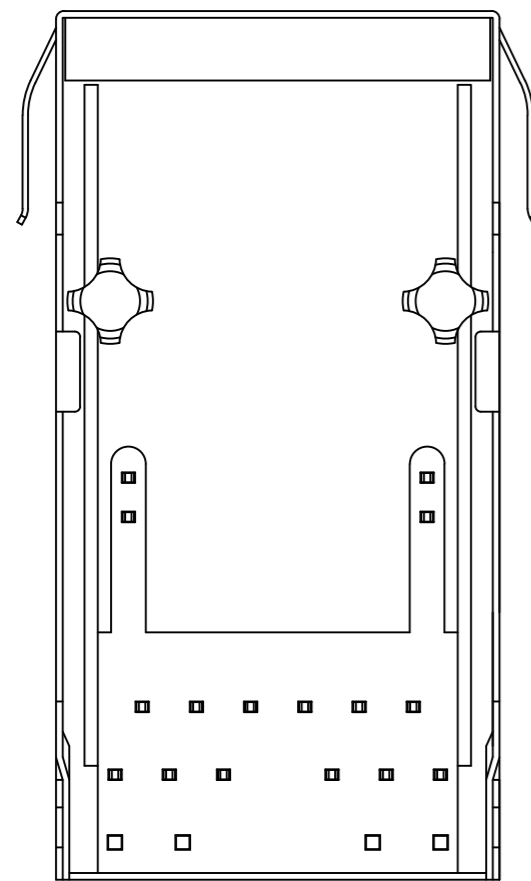
Front Side View



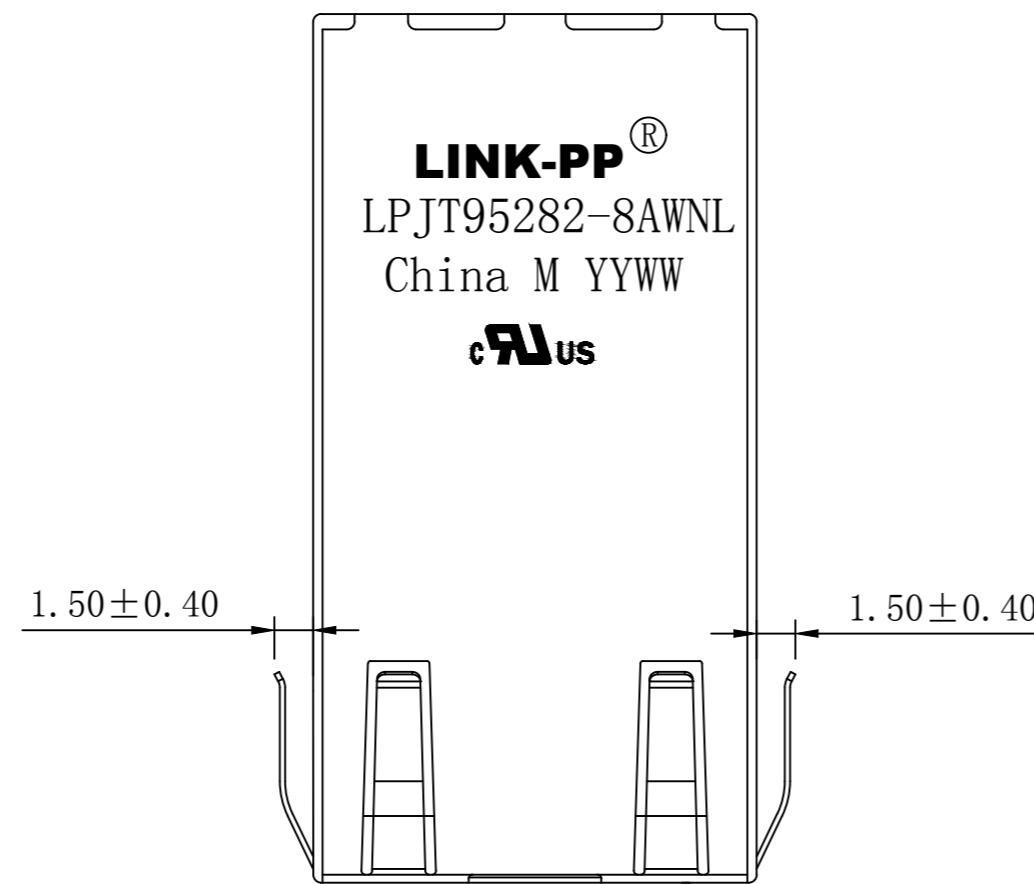
Left Side View



Suggested PCB Layout (Top View)



Bottom Side View



Top Side View



### NOTES:

1. Designed to support application, such as SOHO (ADSL modems), LAN-on-Motherboard (LOM), hub and Switches.
2. Meets IEEE 802.3at specification
3. Connector Materials:  
 Housing Material: Thermoplastic PBT+30%G.F UL94V-0  
 Contact Material: Phosphor Bronze C5210R-EH Thickness=0.35mm  
 Pins: Brass C2680R-H Thickness=0.35mm  
 Shield: SUS 304 1/2EH Thickness=0.2mm  
 Contact plating: Gold 6 micro-inches min. In contact area.
4. Wave solder tip temperature: 250°C, 5 Sec.
5. UL Certification: File Number E484635.

X:X ±0.30	APPD: TOM	LINK-PP INT'L TECHNOLOGY CO., LIMITED
X:XX ±0.25	CHKD: JAMES	
X:XXX ±0.05	DR: LEO	TITLE: RJ45 Connector with 2.5G Base-T Integrated Magnetics For PoE+ Application
ANGLES ±1°	UNIT: mm	PART NO.: LPJT95282-8AWN
	SCALE: 2/1	SHEET: 2/2
	REV: A6	DWG NO.: LP23031952