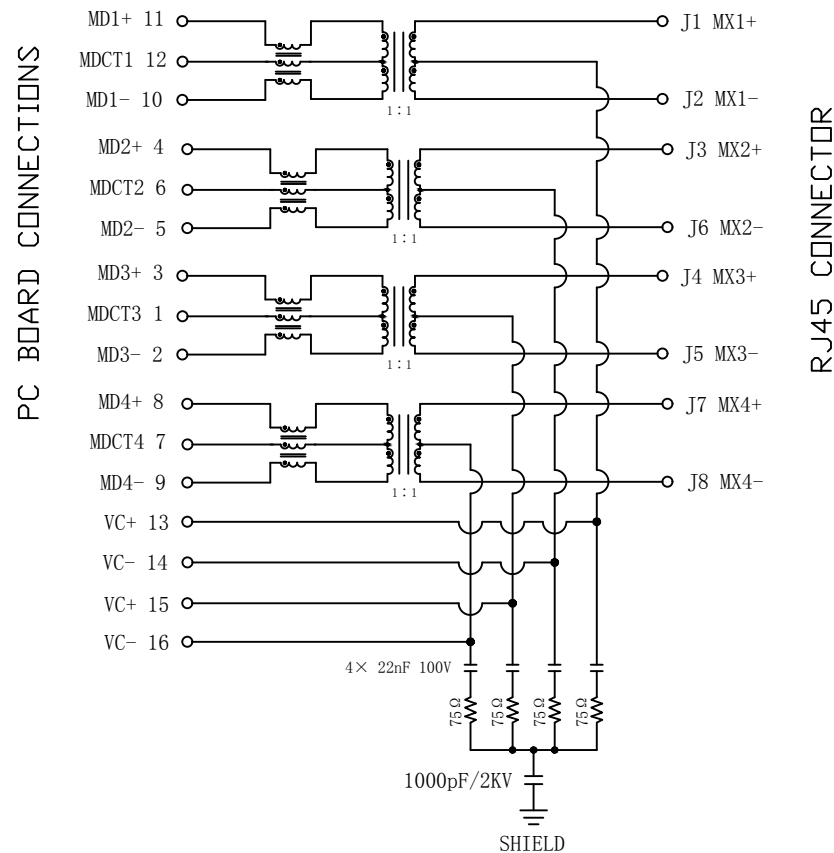


Schematic:

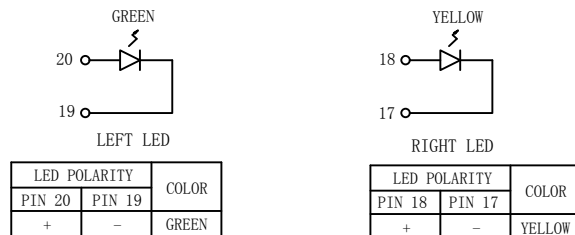
REV.	ECN NO.	DESCRIPTION	DATE	APPD
A6	REL		2023-03-20	



Electrical Specifications @25°C

- Turns Ratio($\pm 2\%$):
Pri:Sec = 1CT:1CT
- Inductance:
350uH Min @100KHz, 0.1V, 14mA DC Bias, $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$.
120uH Min @100KHz, 0.1V, 23mA DC Bias, $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$.
- Insertion Loss(dB Max):
0.1~1MHz:-1.1 1~65MHz:-0.8
65~100MHz:-1.0 100~125MHz:-1.2
- Return Loss:
0.5~40MHz:-18dB Min
40~100MHz:-12+20log(f/80MHz)dB Min
- Crosstalk:
1~100MHz:-30dB Min
- Common Mode Rejection:
1~100MHz:-30dB Min
- Balanced DC Line Current:
1.0A Max @57VDC CONTINUOUS
1.2A Max @57VDC For 200 Miliseconds
- Isolation PHY SIDE To Line SIDE : 1500Vrms
- Operating Temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$.

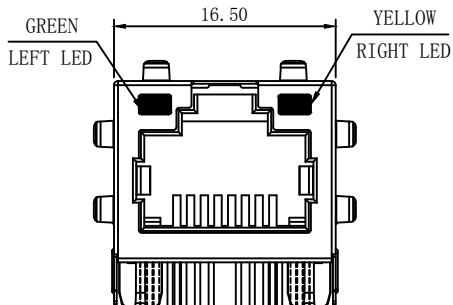
Emitting Color	$\lambda_p(\text{nm})$	$V_F @ I_F = 20\text{mA}$	$I_R @ V_R = 5\text{V}$
GREEN	565	1.8~2.6V	10 μA max
YELLOW	585	1.8~2.6V	10 μA max



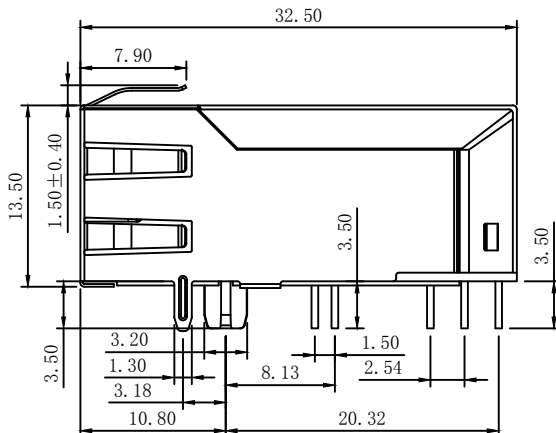
X:X	± 0.30	APPD: TOM	LINK-PP INT'L TECHNOLOGY CO., LIMITED	
X:XX	± 0.25	CHKD: JAMES		
X:XXX	± 0.05	DR: LEO	TITLE: RJ45 Connector with 1000 Base-T Integrated Magnetics For PoE++ Application	
ANGLES	$\pm 1^{\circ}$	UNIT: mm	PART NO.: LPJK6078AHNL	
	SCALE: 2/1	SHEET: 1/2	REV: A6	DWG NO.: LP23032002

Mechanical :

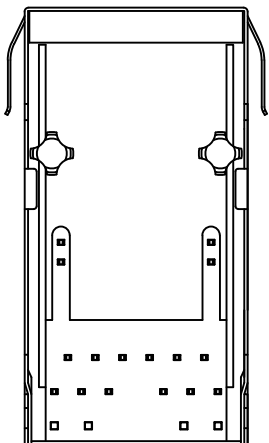
REV.	ECN NO.	DESCRIPTION	DATE	APPD
A6	REL		2023-03-20	



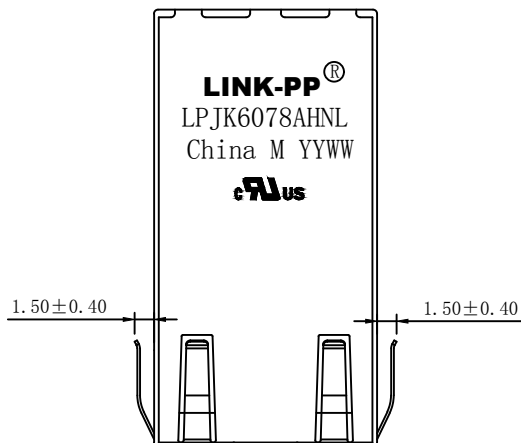
Front Side View



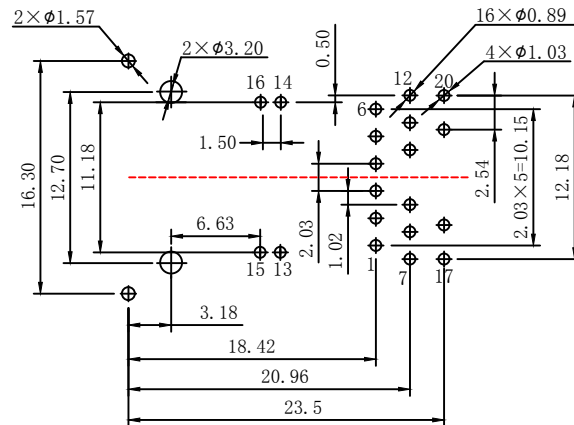
Left Side View



Bottom Side View



Top Side View



Suggested PCB Layout (Top View)

NOTES:

1. Designed to support application, such as SOHO(ADSL modems), LAN-on-Motherboard (LOM), hub and Switches.
2. Meets IEEE 802.3af 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℃, 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 1000 Base-T Integrated Magnetics For PoE++ Application		
ANGLES ±1°		UNIT: mm		PART NO. : LPJK6078AHNL		
	SCALE: 2/1	SHEET: 2/2	REV: A6	DWG NO. : LP23032002		