

Schematic:

PC BOARD CONNECTIONS

1CT:1CT

TD+ P1

CT P2

TD- P3

1CT:1CT

RD+ P4

CT P5

RD- P6

75 Ω 1000pF/2KV

75 Ω 1000pF/2KV

GND P7

N/C P8

PW+ P9

PW- P10

J1 TX+

J2 TX-

J3 RX+

J6 RX-

J4

J5

J7

J8

RIGHT LED

GREEN

11

12

LEFT LED

YELLOW

13

14

Emitting Color	λp(nm)	VF@IF=20mA	IR @VR=5V
GREEN	565	1.8~2.6V	10 μA max
YELLOW	585	1.8~2.6V	10 μA max

RJ45 CONNECTOR

ELECTRICAL SPECIFICATIONS @25℃

1. Turn Ratio(±3%):

TX=1CT:1CTRX=1CT:1CT

2. Inductance OCL:

350uH MIN @100KHz 0.1V 8mA DC Bias

3. DCR: 0.9 Ω MAX

4. Insertion Loss:

-1.1dB MAX @0.1-100MHz

5. Return Loss:

-18dB MIN @0.5-30MHz

-15.5dB MIN @40MHz

-13.6dB MIN @50MHz

-12dB MIN @60-80MHz

6. Cross talk:

-40dB TYP @0.1-100MHz

7. Common Mode Rejection:

-50dB MIN @0.1-30MHz

-40dB MIN @30-60MHz

-35dB MIN @60-100MHz

8. Balance DC Line current:

350mA MAX, @57VDC Continuous;

8. Isolation PHY SIDE To Line SIDE : 1500Vrms

9. Operating Temperature Range: 0℃~70℃.

X:X

±0.30

X:XX

±0.25

X:XXX

±0.05

ANGLES

±1°

APPD:

TOM

CHKD:

JAMES

DR:

LEO

UNIT:

mm

SCALE:

2/1

SHEET:

1/2

REV:

A

DWG NO. :

LP17022512

LINK-PP INT'L TECHNOLOGY CO., LIMITED

TITLE:

RJ45 Connector with 10/100 Base-T Integrated Magnetics For PoE Application

PART NO. :

LPJ16258BDNL

RoHS

2011/65/EU

✓

LINK-PP

Website: <http://www.link-pp.com>

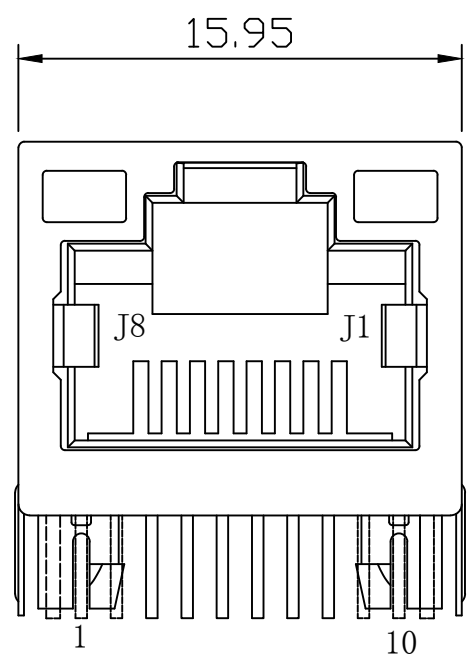
Email: info@link-pp.com

Tel: +86-0752-3322916

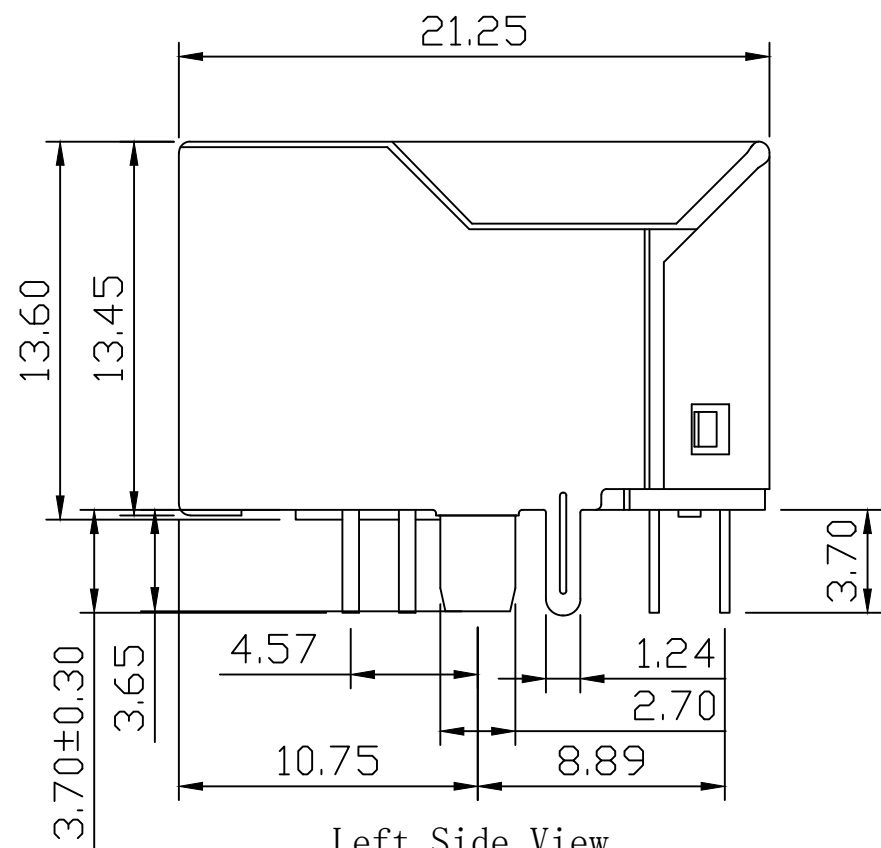
Fax: +86-0752-3161926

Mechanical:

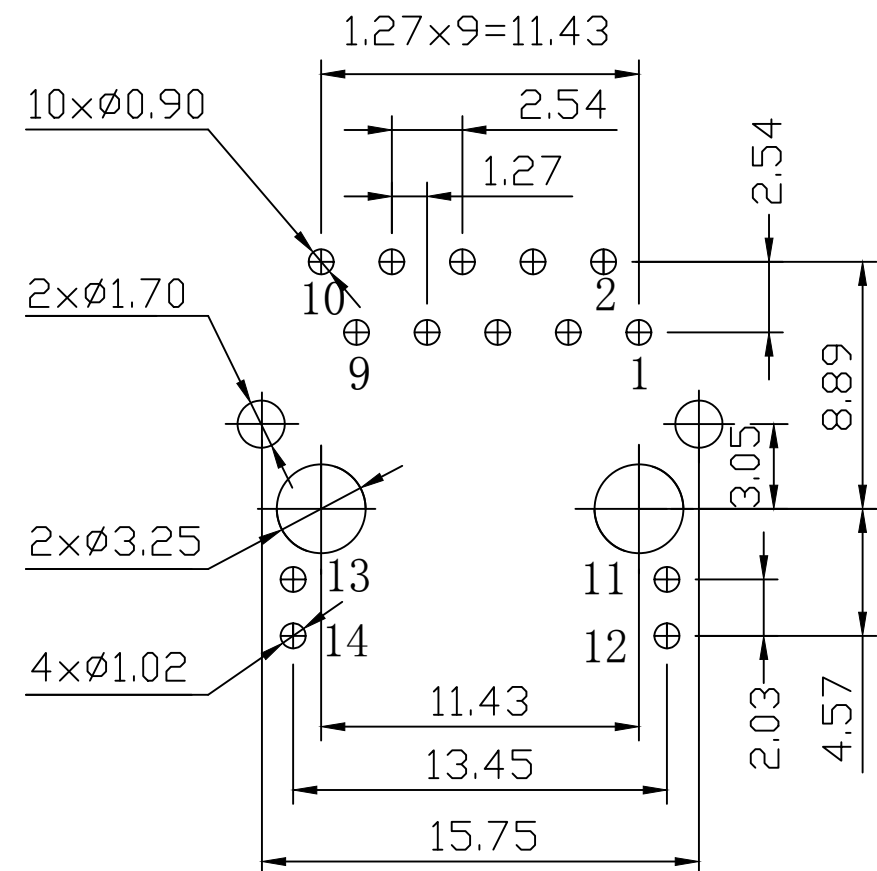
REV.	ECN NO.	DESCRIPTION	DATE	APPD
A	REL		2017-02-25	



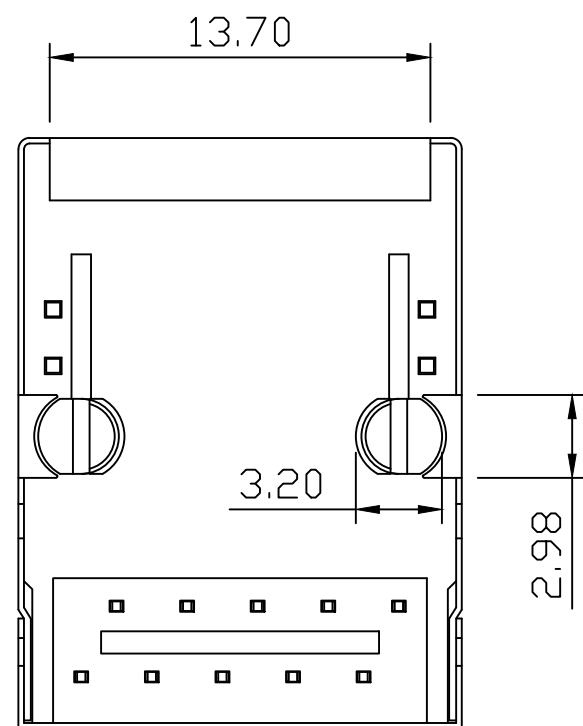
Front Side View



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 IEEE802.3af specification
3. Connector Materials:
Housing: Thermoplastic PBT+30%G.F UL94V-0
Contact: Phosphor Bronze C5210R-EH Thickness=0.35mm
Pins: Brass C2680R-H Thickness=0.35mm
Shield: SUS 304-1/2H 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 10/100 Base-T Integrated Magnetics For PoE Application	
ANGLES	±1°	UNIT:	mm	PART NO.: LPJ16258BDNL	
		SCALE:	2/1	SHEET:	2/2
		REV:	A	DWG NO.: LP17022512	

