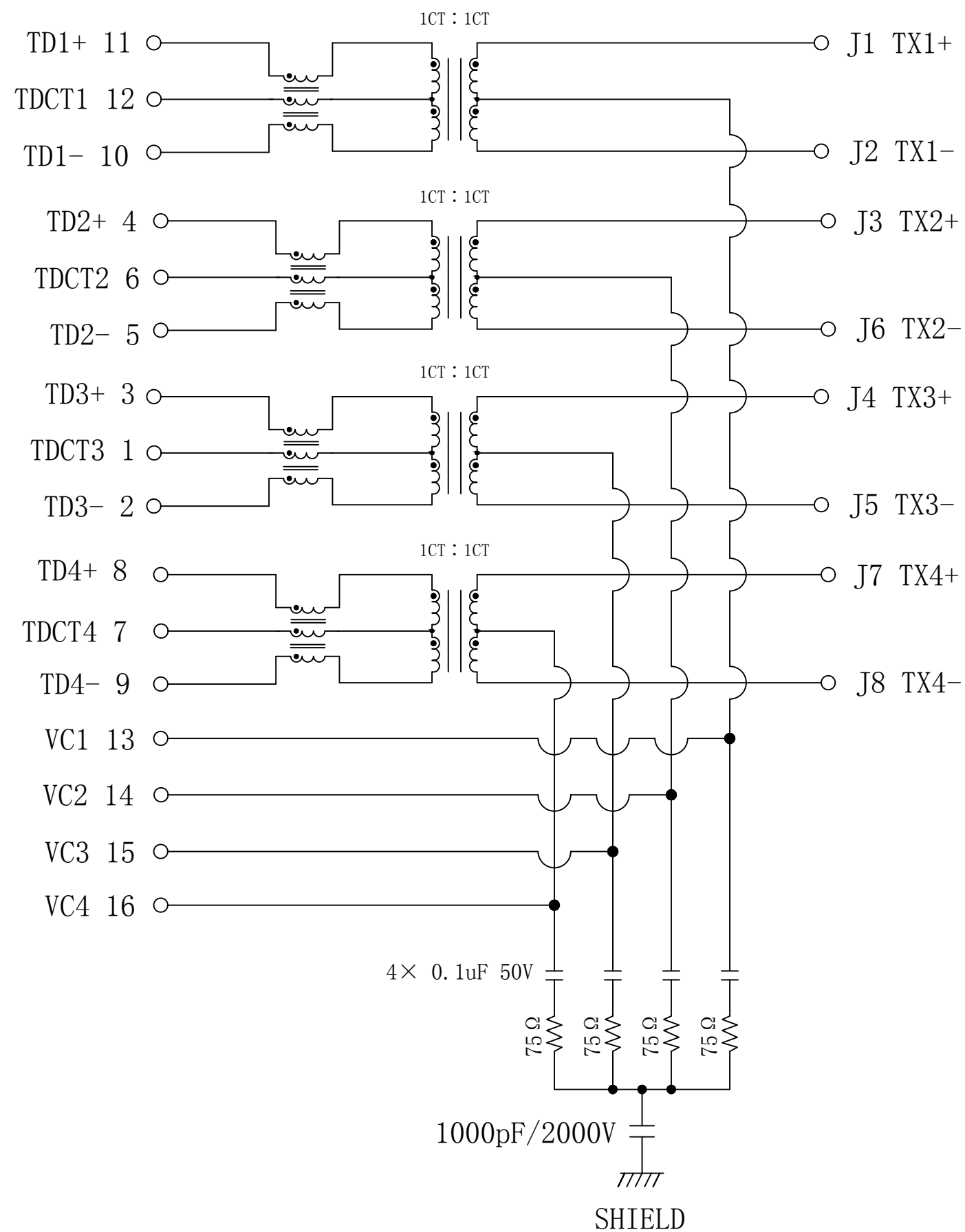


Schematic:

| 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: 160uH Min @100KHz , 0.1V
- Insertion Loss (dB Max):

| | |
|------------------|------------------|
| 1-125MHz: -1.0 | 125-200MHz: -2.0 |
| 200-250MHz: -2.5 | |
- Return Loss (dB Min):

| | |
|-----------------|----------------|
| 1-30MHz: -18 | 30-100MHz: -14 |
| 100-200MHz: -11 | 200-250MHz: -9 |
- Cross Talk:

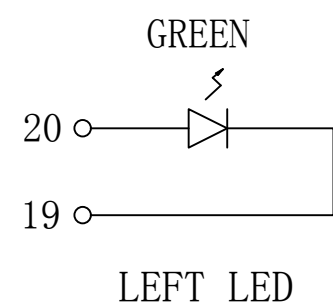
| |
|----------------------|
| 1-250MHz: -25dB Min. |
|----------------------|
- Common Mode Rejection (dB Min):

| | |
|---------------|-----------------|
| 1-100MHz: -30 | 100-250MHz: -20 |
|---------------|-----------------|
- Common Mode to Differential Mode Rejection (dB Min):

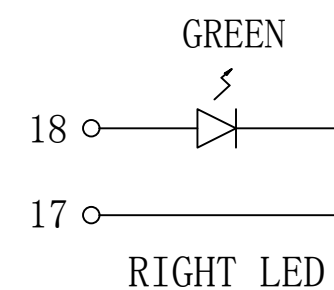
| | |
|---------------|------------------|
| 1-100MHz: -30 | 100-250MHz: -25. |
|---------------|------------------|
- Balance DC Line current:

| |
|--------------------------------|
| 1000mA MAX, @57VDC Continuous; |
|--------------------------------|
- Isolation PHY SIDE To Line SIDE : 1500Vrms
- Operating Temperature Range: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$.

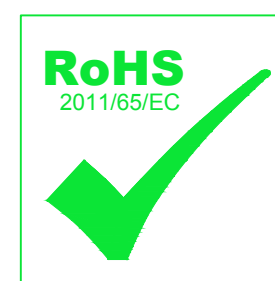
| Emitting Color | λ_p (nm) | V _F @I _F =20mA | I _R @V _R =5V |
|----------------|------------------|--------------------------------------|------------------------------------|
| GREEN | 565 | 1.8~2.6V | 10 μ A max |
| YELLOW | 585 | 1.8~2.6V | 10 μ A max |



| LED POLARITY | | COLOR |
|--------------|--------|-------|
| PIN 19 | PIN 20 | |
| - | + | GREEN |



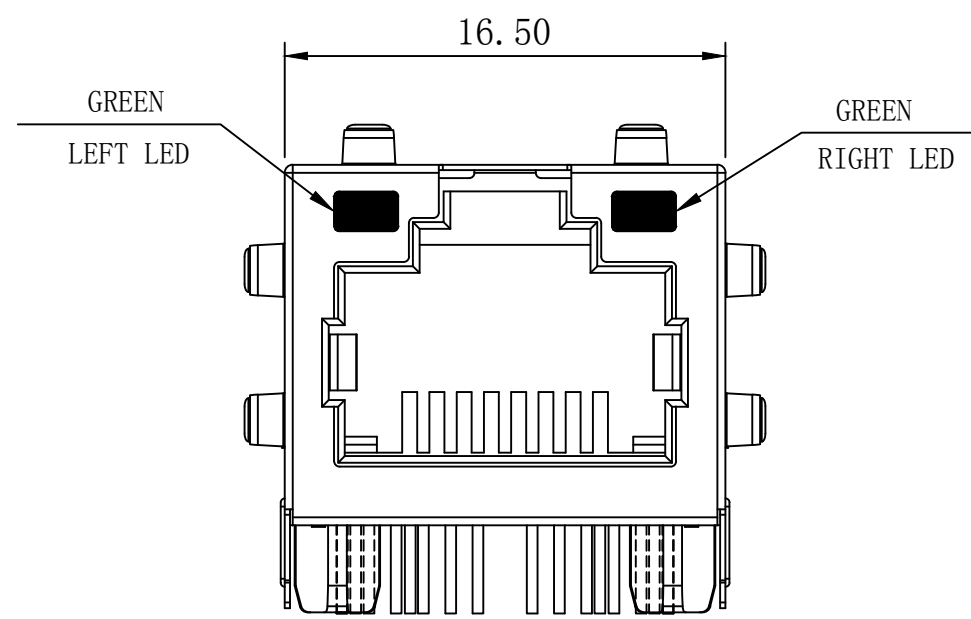
| LED POLARITY | | COLOR |
|--------------|--------|-------|
| PIN 17 | PIN 18 | |
| - | + | GREEN |



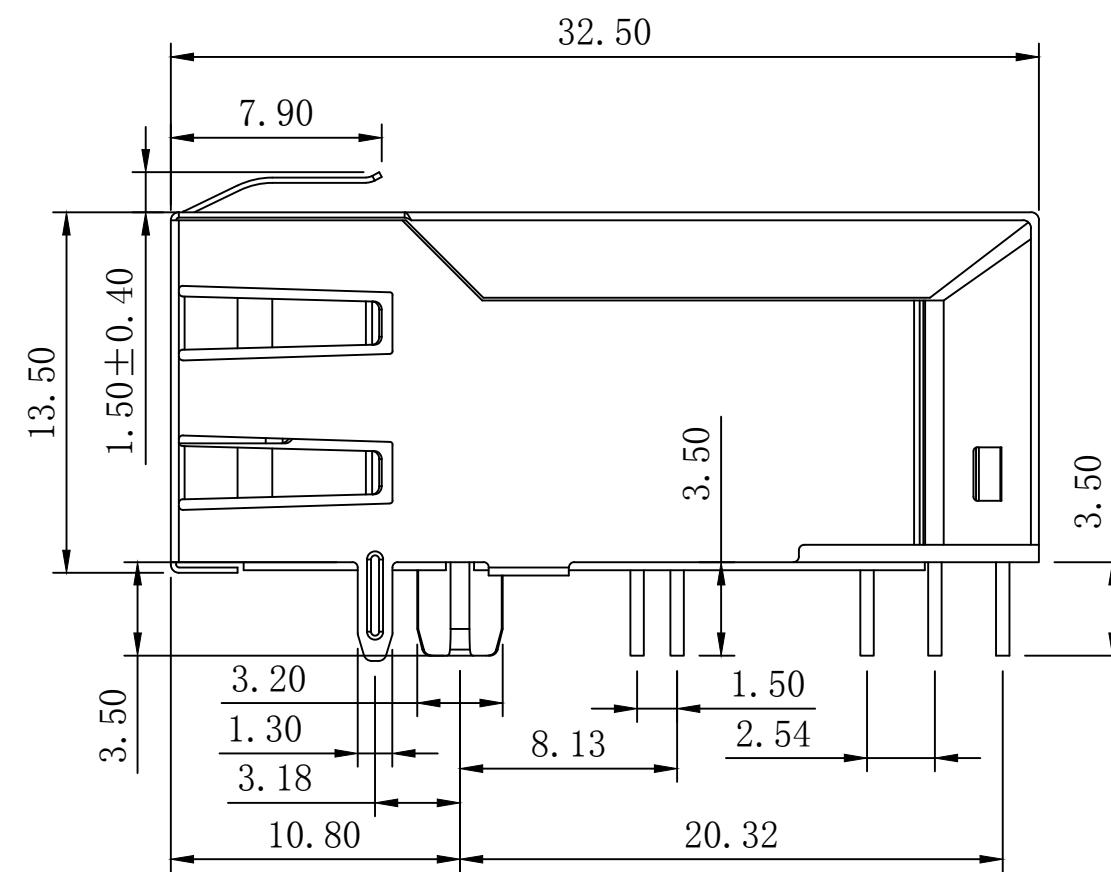
| | | |
|------------------------|-------------|---|
| X:X ± 0.30 | APPD: TOM | LINK-PP INT'L TECHNOLOGY CO., LIMITED |
| X:XX ± 0.25 | CHKD: JAMES | |
| X:XXX ± 0.05 | DR: LEO | TITLE: RJ45 Connector with 5G Base-T Integrated Magnetics For PoE++ Application |
| ANGLES $\pm 1^{\circ}$ | UNIT: mm | PART NO.: LPJQP96282-8AWN |
| | SCALE: 2/1 | SHEET: 1/2 |
| | REV: A6 | DWG NO.: LP23031972 |

Mechanical :

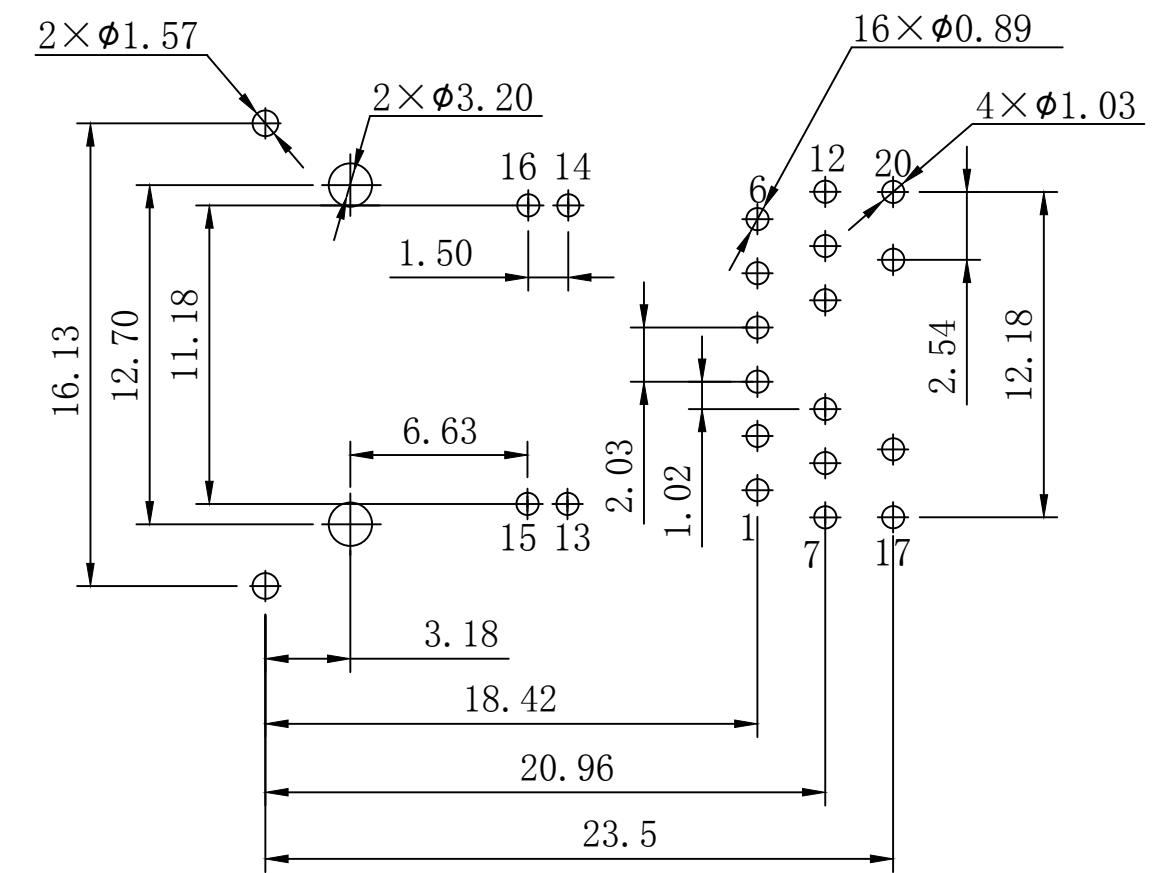
| REV. | ECN NO. | DESCRIPTION | DATE | APPD |
|------|---------|-------------|------------|------|
| A6 | REL | | 2023-03-19 | |



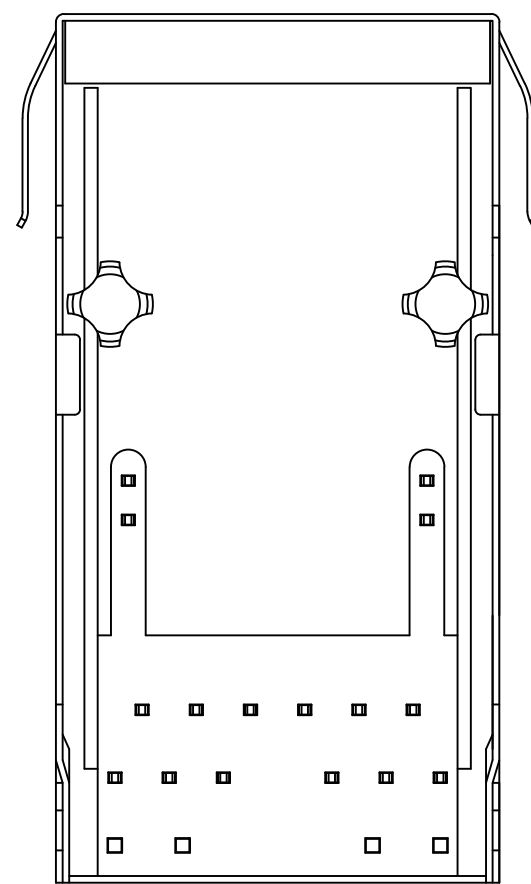
Front Side View



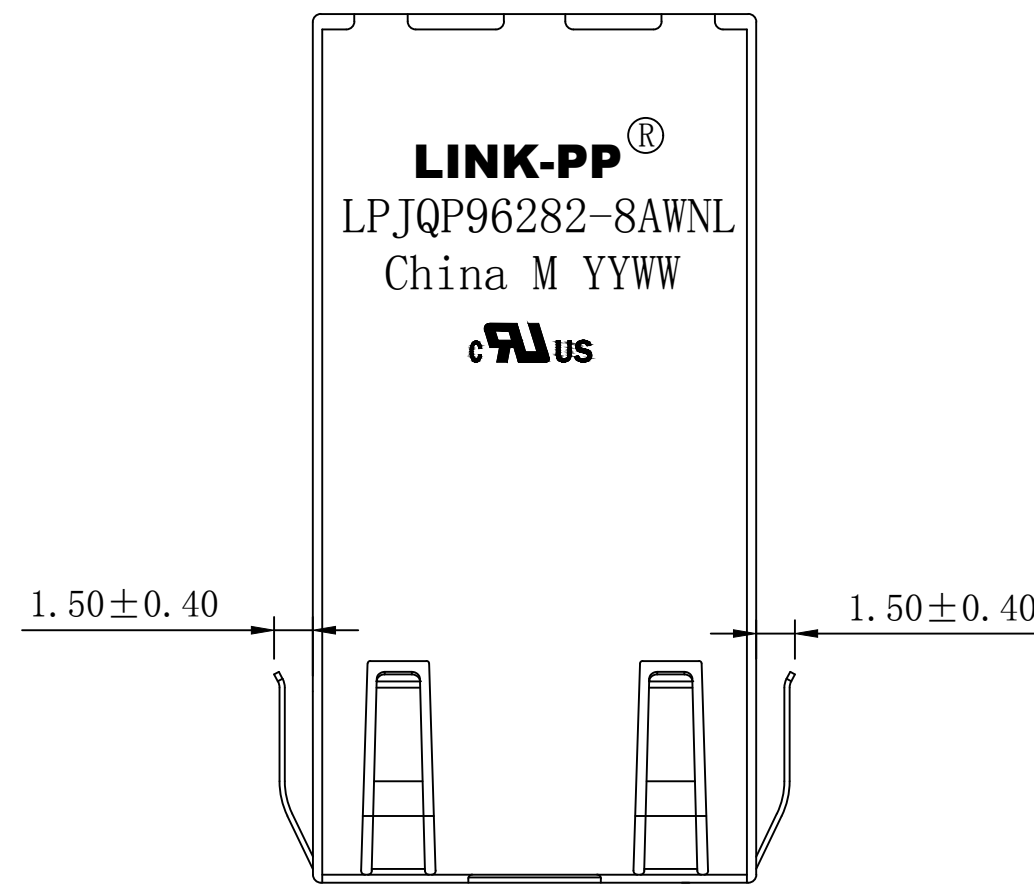
Left Side View



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 802.3bt 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 5G Base-T Integrated Magnetics For PoE++ Application |
| ANGLES ±1° | UNIT: mm | PART NO.: LPJQP96282-8AWN |
| | SCALE: 2/1 SHEET: 2/2 | REV: A6 DWG NO.: LP23031972 |