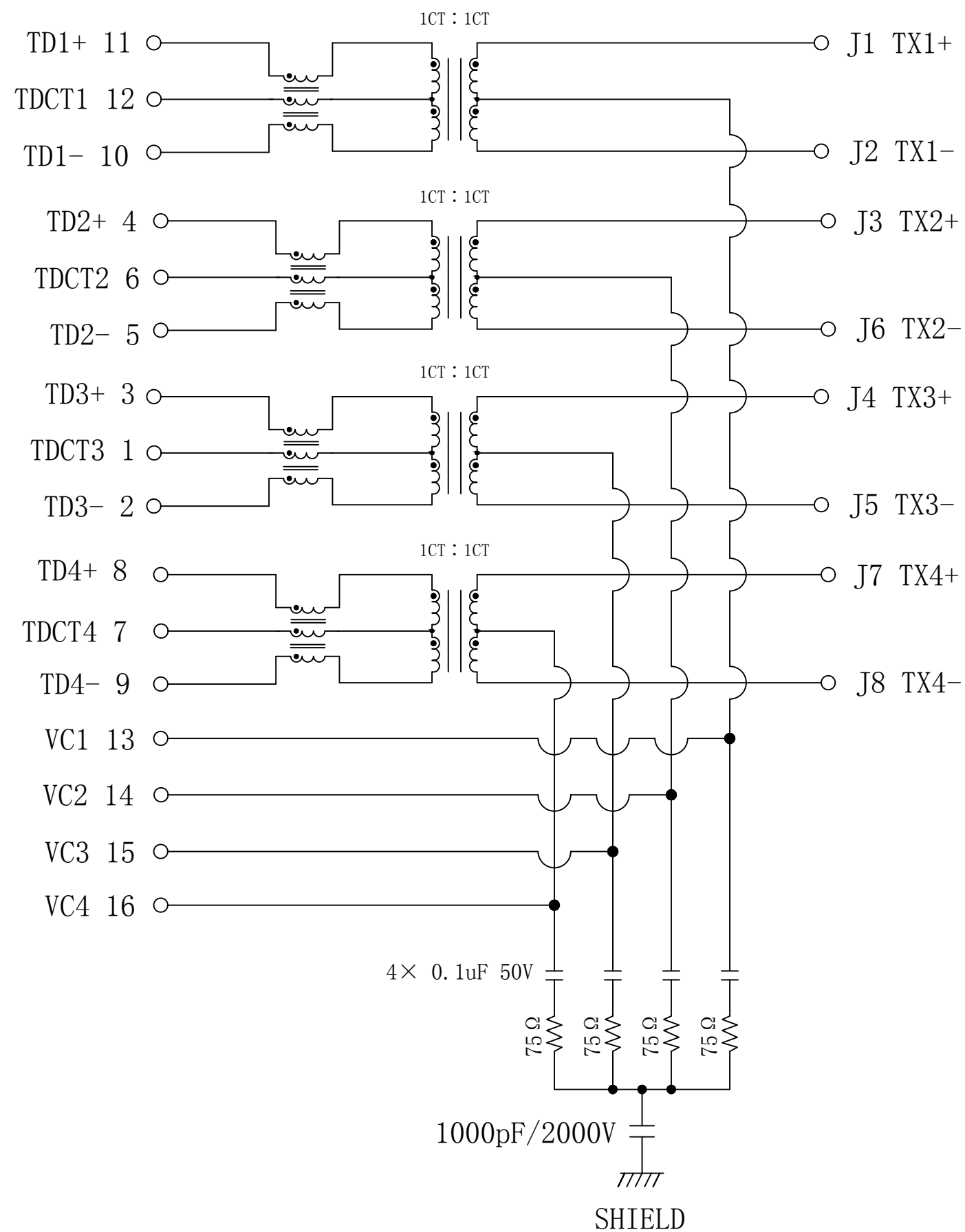


Schematic:

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

PC BOARD CONNECTIONS

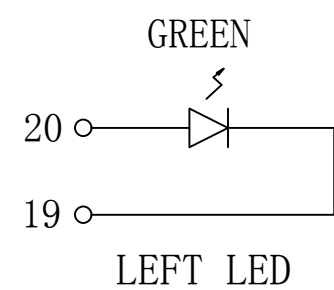


RJ45 CONNECTOR

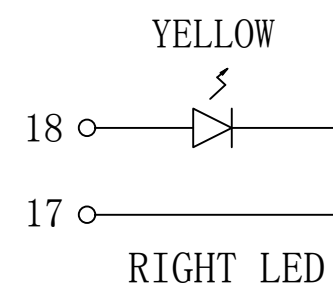
ELECTRICAL SPECIFICATIONS @25°C

- Turn Ratio($\pm 2\%$):
Pri:Sec = 1CT:1CT
- Inductance OCL:
120uH Min @100KHz 0.1V 8mA
- Insertion Loss:
-1.5dB Max @1-250MHz
-3.0dB Max @250-500MHz
- Return Loss:
-18dB Min @1-40MHz
-14dB Min @40-100MHz
-11dB Min @100-250MHz
-8dB Min @250-500MHz
- Cross talk:
-30dB Min @1-100MHz
-20dB Min @100-500MHz
- Common Mode Rejection Ratio:
-28dB Min @1-100MHz
-22dB Min @100-250MHz
-20dB Min @250-500MHz
- Balance DC Line current:
720mA Max @57VDC Continuous.
- Isolation PHY SIDE To Line SIDE : 1500Vrms
- Operating Temperature Range: -40°C to +85°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 |



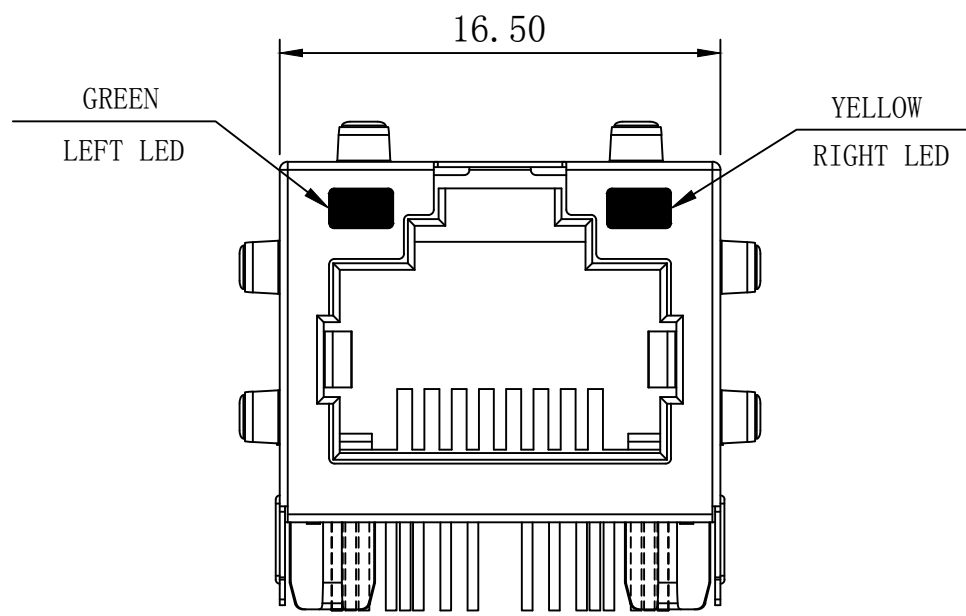
| LED POLARITY | | COLOR |
|--------------|--------|--------|
| PIN 17 | PIN 18 | |
| - | + | YELLOW |



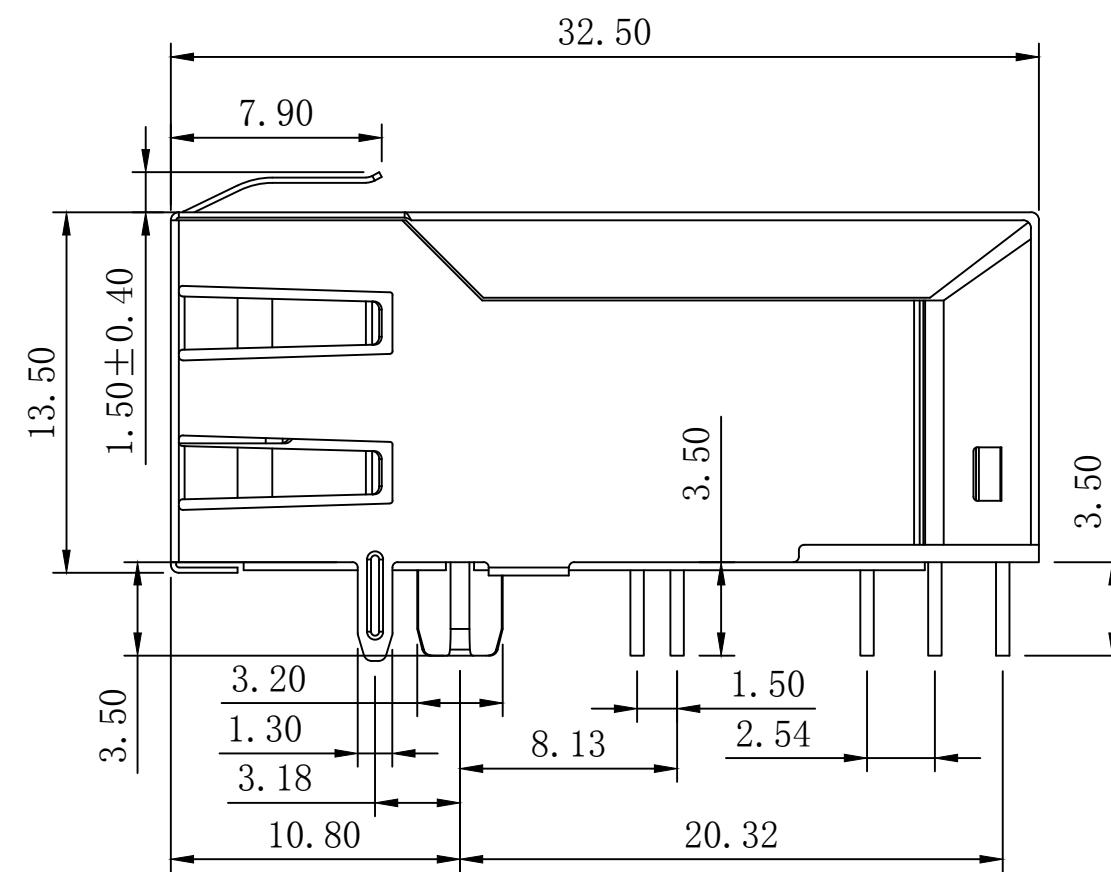
| | | | |
|----------------------|------------|-------------|---|
| X:X | ± 0.30 | APPD: TOM | LINK-PP INT'L TECHNOLOGY CO., LIMITED |
| X:XX | ± 0.25 | CHKD: JAMES | |
| X:XXX | ± 0.05 | DR: LEO | |
| ANGLES $\pm 1^\circ$ | | UNIT: mm | TITLE: RJ45 Connector with 10G Base-T Integrated Magnetics For PoE+ Application |
| | | | PART NO.: LPJM96282AHNL |
| SCALE: 2/1 | | SHEET: 1/2 | REV: A6 |
| | | | DWG NO.: LP23031946 |

Mechanical :

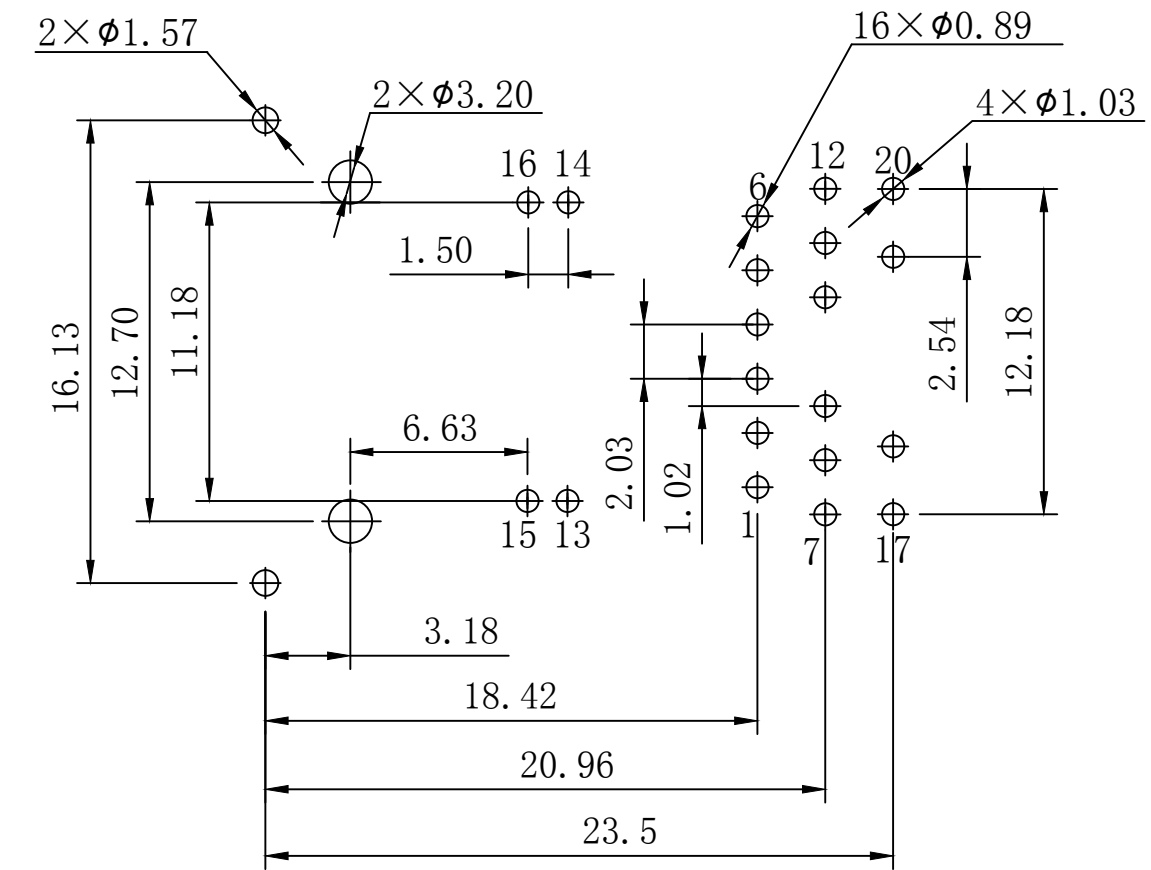
| REV. | ECN NO. | DESCRIPTION | DATE | APPD |
|------|---------|-------------|------------|------|
| A6 | REL | | 2023-03-19 | |



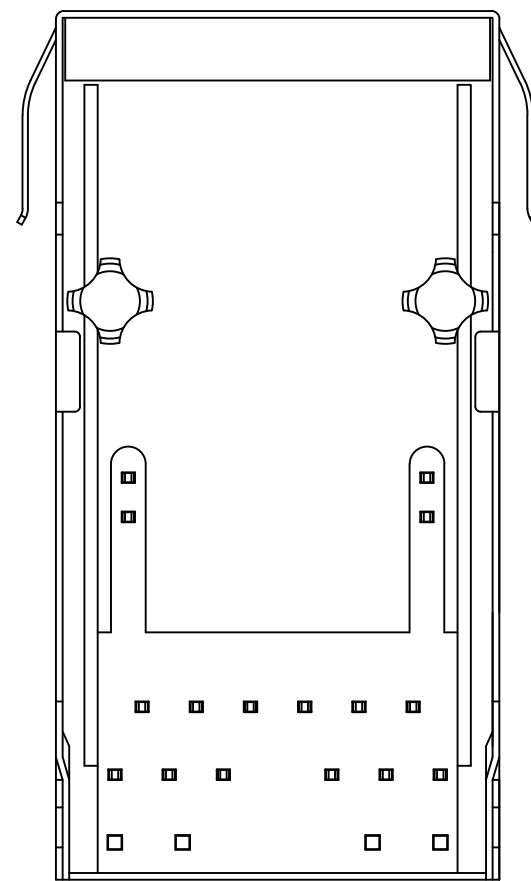
Front Side View



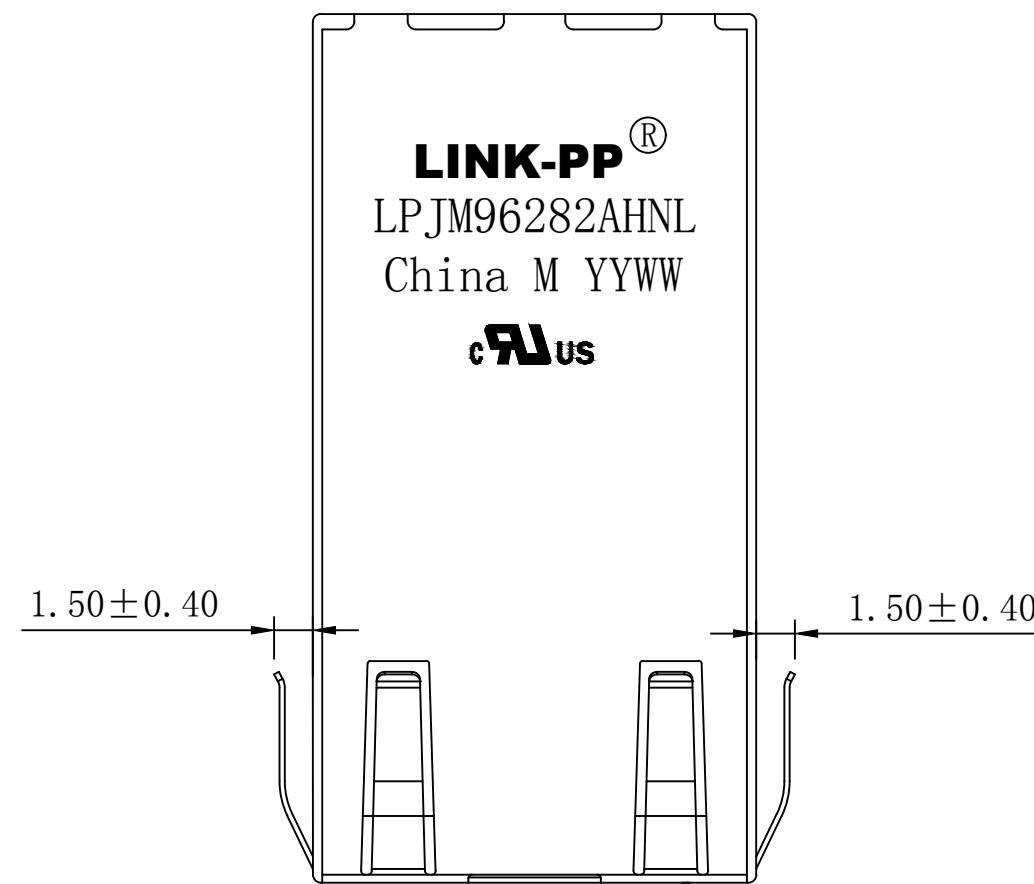
Left Side View



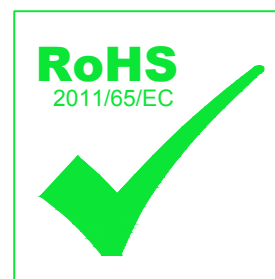
Suggested PCB Layout (Top View)



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 with up to 140W
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 10G Base-T Integrated Magnetics For PoE+ Application |
| ANGLES ±1° | UNIT: mm | PART NO.: LPJM96282AHNL |
| | SCALE: 2/1 | SHEET: 2/2 |
| | REV: A6 | DWG NO.: LP23031946 |