

## A. MECHANICAL(UNIT:mm)

## RJ45 MECHANICAL NOTES:

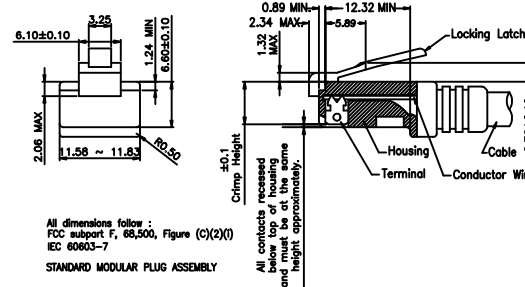
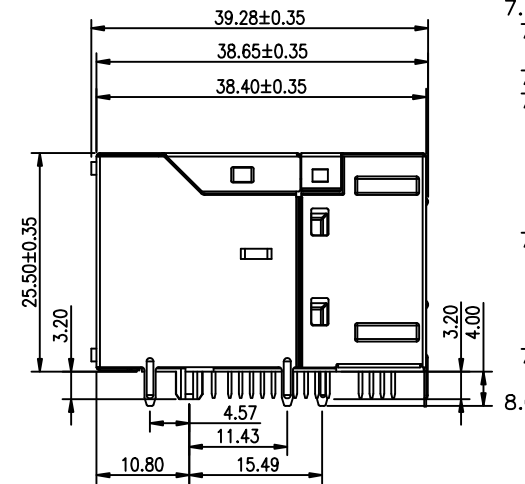
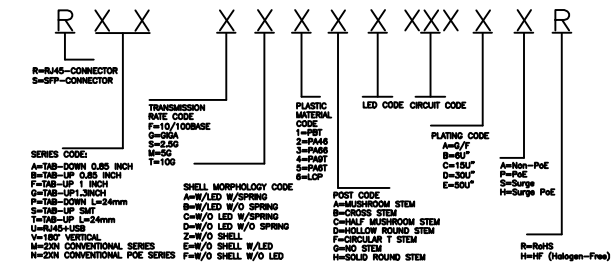
| REV | ECN NO | DESCRIPTION | DATE     |
|-----|--------|-------------|----------|
| A   | /      | New Drawing | 2025/6/5 |
|     |        |             |          |
|     |        |             |          |

- 1.THE PRODUCT IS ROHS COMPLIANT.
- 2.ALL DIMENSIONS FOLLOW :
  - FCC SUBPART F, 68,500, FIGURE (C)(2)(I) & (C)(2)(II) & (C)(3)(I) IEC 60603-7
  - ALL PLUGS MUST BE MEETING THE REQUIREMENTS OF PLUG GO & NO-GO GAUGE.
- 3.GAUGE FOLLOW : FCC SUBPART F, 68,500, FIGURE (C)(4)(I) & (C)(5)(I)
  - THERE MUST BE NO DAMAGE TO HOUSING AND LOCKING LATCH.
  - THERE MUST BE NO NICKS AND CUTS IN CABLE.
- 4.PART CAN BE RECOMMENDED FOR REFLOW SOLDERING PROCESS.
  - PEAK REFLOW SOLDERING TEMPERATURE IS 260°C MAX,10SECONDS MAX.
- 5.OPERATING TEMPERATURE:-40 TO +85°C;
- 6.STORAGE TEMPERATURE: -40 TO +85°C

## 7.MATERIAL:

- 7.1 HOUSING: HIGH TEMPERATURE THERMOPLASTIC LCP,  
FLAMMABILITY RATING ,UL 94V-0; COLOR:BLACK.
- 7.2 SHELL: BRASS C2680H, THICKNESS=0.20mm.PLATING NICKEL 30u"Min;
- 7.3 RJ TERMINAL: HIGH TEMPERATURE THERMOPLASTIC LCP,COLOR:BLACK;  
UL 94V-0;  
PIN:THICKNESS=0.30mm.PHOS-BRONZE C5210EH.  
PLATING: 50u" MIN NICKEL UNDERPLATING ALL AREA.  
100u" MIN TIN ON SOLDER TAIL.  
50u" GOLD ON CONTACT AREA.
- 7.4 INPUT TERMINAL: HIGH TEMPERATURE THERMOPLASTIC LCP COLOR:BLACK;  
PHY PIN:THICKNESS=0.30mm. BRASS C2680EH.  
LED PIN:THICKNESS=0.45mm. BRASS C2680EH.  
PLATING: 50u" MIN NICKEL UNDERPLATING ALL AREA.  
100u" MIN TIN ON SOLDER TAIL.
- 7.5 LIGHT PIPE : PC, TRANSPARENT

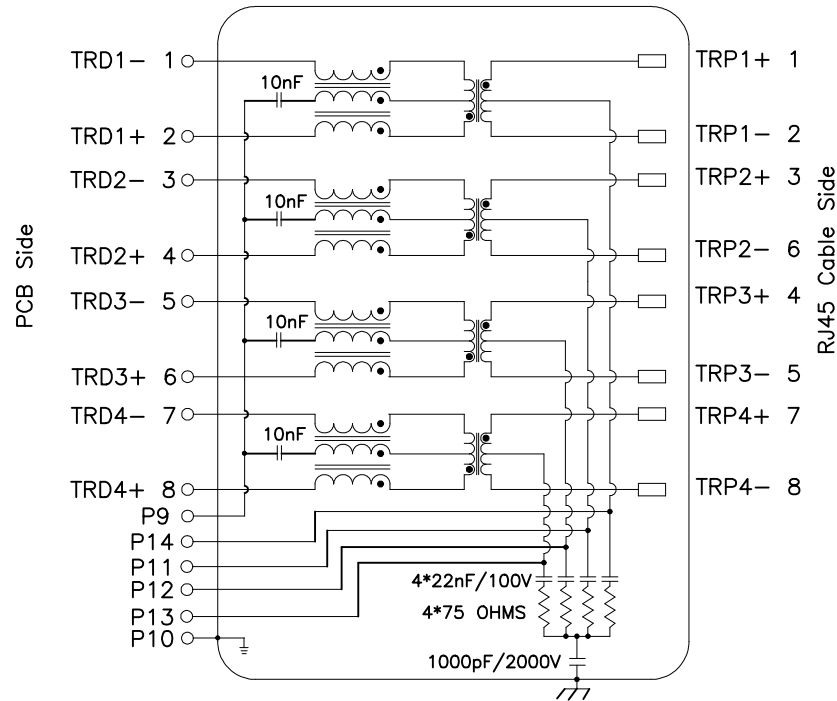
## 8.CODING PRINCIPLES



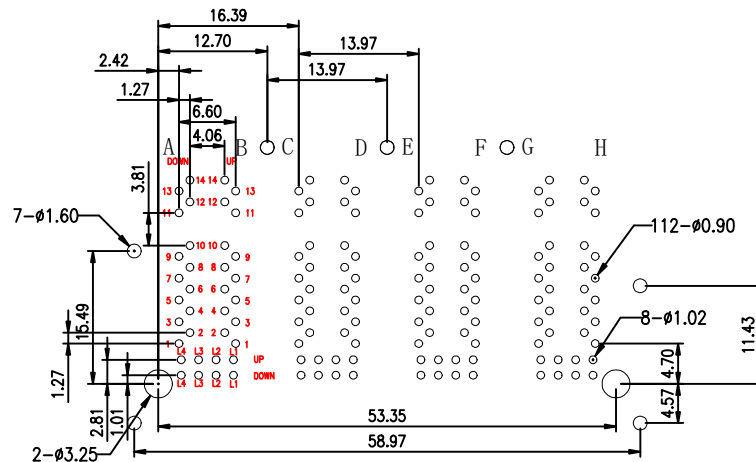
All dimensions follow :  
FCC subpart F, 68,500, Figure (C)(2)(I)  
IEC 60603-7  
STANDARD MODULAR PLUG ASSEMBLY

|                  |             |                                                                                                                                               |                  |
|------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| X. ± 0.40        | APPD: JASON |  思科飞尔技术（深圳）有限公司<br>SISCOFER TECHNOLOGY (SHENZHEN) CO.LTD |                  |
| .X ± 0.30        | CHKD: LOUIS |                                                                                                                                               |                  |
| .XX ± 0.25       | DR: LIANG   | PART NO: RN4-GB6BYOGDEPR                                                                                                                      |                  |
| .XXX ± 0.20      |             | TITLE: 2X4Port 10/100/1000M BASE POE+ RJ45 JACK Magnetics                                                                                     |                  |
| X' ± 3' .X' ± 2' |             |                                                                                                                                               |                  |
| UNITS: mm        |             |                                                                                                                                               |                  |
| SHEET: 1 OF 2    |             | REV: A                                                                                                                                        | DWG NO: RN4-0012 |
| SCALE: 1:1       |             | REMARK: XXX-XXXX                                                                                                                              | RoHS Compliant   |

## B.SCHEMATICS



## C:PIN ASSIGNMENT FOR PCB LAYOUT



SUGGESTED PCB PAD LAYOUT  
COMPONENT SIDE VIEW

## D. ELECTRICAL SPECIFICATIONS @25℃

## TRANSMITTER FILTER &amp; RECEIVER FILTER

TYPE : BALANCE LOW PASS 100Ω IMPEDANCE

INSERTION LOSS : 1~120MHz -1.2dB MAX.

RETURN LOSS : 1~30MHz -18dB MIN. LOAD 100Ω  
30~60MHz -16dB MIN. LOAD 100Ω  
60~80MHz -12dB MIN. LOAD 100Ω  
80~100MHz -10dB MIN. LOAD 100Ω

COMMON MODE REJECTION  
@1~100 MHz -30dB MIN.

CROSS TALK  
@ 1~100MHz -30dB MIN.

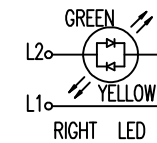
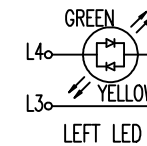
INDUCTANCE (OCL) @ 100KHz, 0.1V, 8mA DC BIAS 350 uH MIN.

DCR:1.2 OHM MAX

DC CURRENT/VOLTAGE RATING-POE:  
720MA MAX @57VDC(CONTINUOUS)

HIPOT TEST  
PHY SIDE(INPUT) TO CABLE SIDE(OUTPUT) : 1500Vrms 60S

## E:LED SPECIFICATION



| Emitting Color | λp (nm) | Vf @If=20mA | Ir @Vr=5V |
|----------------|---------|-------------|-----------|
| GREEN          | 570     | 1.7 ~2.6 V  | 10mA max  |
| YELLOW         | 590     | 1.7 ~2.6 V  | 10mA max  |

|                                                                                       |               |                                                                                                                                               |                  |                  |                                                                                       |
|---------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|---------------------------------------------------------------------------------------|
| X. ± 0.40                                                                             | APPD: JASON   |  思科飞尔技术（深圳）有限公司<br>SISCOFER TECHNOLOGY (SHENZHEN) CO.LTD |                  |                  |                                                                                       |
| .X ± 0.30                                                                             | CHKD: LOUIS   |                                                                                                                                               |                  |                  |                                                                                       |
| .XX ± 0.25                                                                            | DR: LIANG     | PART NO: RN4-GB6BYOGDEPR                                                                                                                      |                  |                  |                                                                                       |
| .XXX ± 0.20                                                                           |               | TITLE: 2X4Port 10/100/1000M BASE POE+ RJ45 JACK Magnetics                                                                                     |                  |                  |                                                                                       |
| X' ± 3' .X' ± 2'                                                                      |               |                                                                                                                                               |                  |                  |                                                                                       |
| UNITS: mm                                                                             |               |                                                                                                                                               |                  |                  |                                                                                       |
|  | SHEET: 2 OF 2 | REV: A                                                                                                                                        | DWG NO: RN4-0012 | REMARK: XXX-XXXX |  |
|                                                                                       | SCALE: 1:1    |                                                                                                                                               |                  |                  |                                                                                       |