

A. MECHANICAL(UNIT:mm)

RJ45 MECHANICAL NOTES:

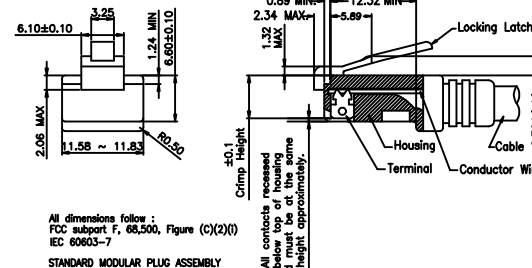
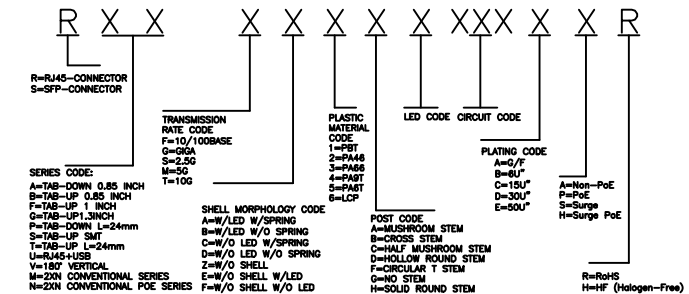
REV	ECN NO	DESCRIPTION	DATE
A	/	New Drawing	2025/4/10

- 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.
 - DURABILITY : 750 CYCLES GENERALLY
- 4.PART CAN BE RECOMMENED 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:

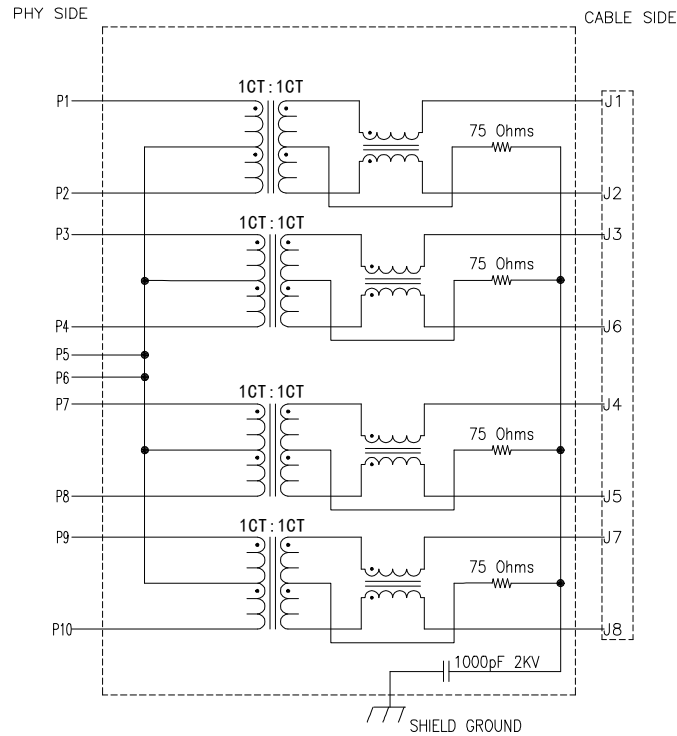
- 7.1 HOUSING: HIGH TEMPERATURE THERMOPLASTIC PA46.
 - FLAMMABILITY RATING ,UL 94V-0; COLOR:BLACK.
- 7.2 SHELL: BRASS C2680H, THICKNESS=0.20mm.PLATING NICKEL 30u"Min;
- 7.3 RJ TERMINAL: THERMOPLASTIC PBT,COLOR:BLACK;
 - UL 94V-0;
 - PIN:THICKNESS=0.30mm.PHOS-BRONZE C5210EH.
 - PLATING: 50u" MIN NICKEL UNDERPLATING ALL AREA.
 - 100u" MIN TIN ON SOLDER TAIL.
 - 30u" GOLD ON CONTACT AREA.
- 7.4 INPUT TERMINAL: PHY PIN:THICKNESS=0.30mm. BRASS C2680H.
 - LED PIN:THICKNESS=0.45mm. BRASS C2680H.
 - PLATING: 50u" MIN NICKEL UNDERPLATING ALL AREA.
 - 100u" MIN TIN ON SOLDER TAIL.

8.CODING PRINCIPLES

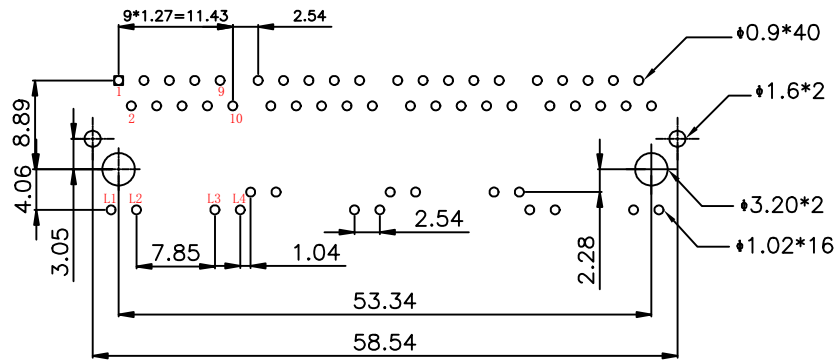


X. ± 0.40	APPD: LH.WANG	 思科飞尔技术(深圳)有限公司 SISCOFER TECHNOLOGY (SHENZHEN) CO.LTD
.X ± 0.30	CHKD: LOUIS	
.XX ± 0.25	DR: LIANG	PART NO: RA4-SB2B2002DAR
.XXX ± 0.20		TITLE: TAB DOWN 1X4Port 2.5G BASE-T RJ45 JACK Magnetics
X* ± 3' .X* ± 2'		
UNITS: mm		
	SHEET: 1 OF 2	REV: DWG NO: REMARK:
	SCALE: 1:1	A RA4-0072 XXX-XXXX

B.SCHEMATICS



C:PIN ASSIGNMENT FOR PCB LAYOUT



SUGGESTED PCB PAD LAYOUT
COMPONENT SIDE VIEW

REV	ECN NO	DESCRIPTION	DATE
A	/	New Drawing	2025/4/10

D. ELECTRICAL SPECIFICATIONS @25℃

TRANSMITTER FILTER & RECEIVER FILTER

TYPE : BALANCE LOW PASS 100Ω IMPEDANCE

INSERTION LOSS : 125~200MHz -2.0dB MAX.

RETURN LOSS : 1~30MHz -18DB MIN. LOAD 100Ω
-16+10log(f/40) dB Min @ 40< f ≤250 MHz,

COMMON MODE REJECTION
@1~250 MHz -30dB MIN.

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

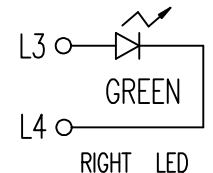
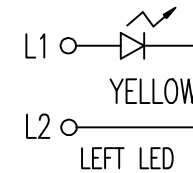
INDUCTANCE (OCL) @ 100KHz, 0.1V, 8mA DC BIAS 180 uH MIN.

DCR:1.0 OHM MAX

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	10μA max
YELLOW	590	1.7 ~2.6 V	10μA max

X. ± 0.40	APPD: LH.WANG	 思科飞尔技术（深圳）有限公司 SISCOFER TECHNOLOGY (SHENZHEN) CO.LTD				
.X ± 0.30	CHKD: LOUIS		PART NO: RA4—SB2B2002DAR			
.XX ± 0.25						
.XXX ± 0.20	DR: LIANG		TITLE: TAB DOWN 1X4Port 2.5G BASE-T RJ45 JACK Magnetics			
X* ± 3' X* ± 2'	UNITS: mm					
	SHEET: 2 OF 2	REV:	DWG NO:	REMARK:		
	SCALE: 1:1	A	RA4-0072	XXX-XXXX		