

A. MECHANICAL(UNIT:mm)

RJ45 MECHANICAL NOTES:

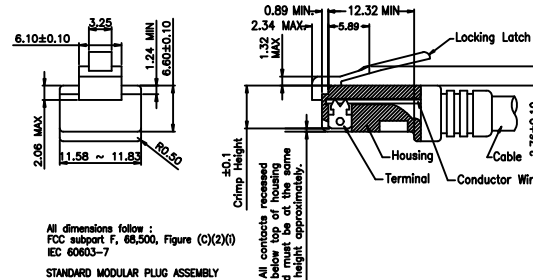
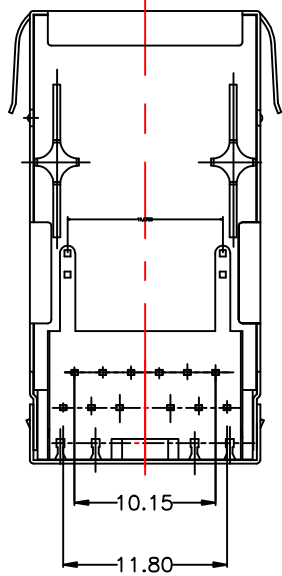
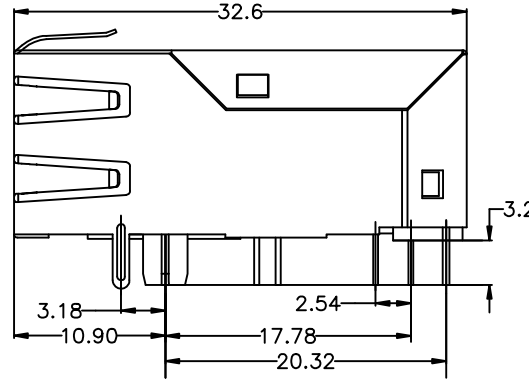
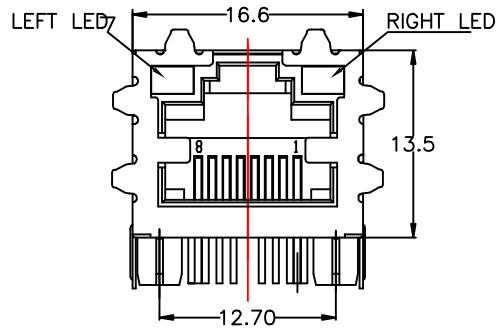
REV	ECN NO	DESCRIPTION	DATE
A	/	New Drawing	2025/3/13

- 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 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:

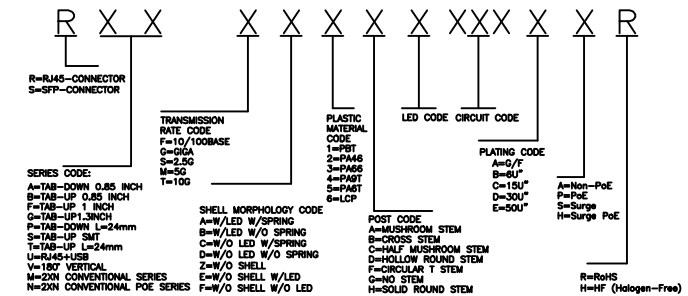
- 7.1 HOUSING: HIGH TEMPERATURE THERMOPLASTIC PA66.
 - FLAMMABILITY RATING ,UL 94V-0; COLOR:BLACK.
- 7.2 SHELL: BRASS C2680H, THICKNESS=0.20mm.PLATING NICKEL 30u"Min;
- 7.3 RJ TERMINAL: THERMOPLASTIC PBT,COLOR:BLACK;
 - RJ PIN:THICKNESS=0.30mm.PHOS-BRONZE C5210H.
 - PLATING: 50u" MIN NICKEL UNDERPLATING ALL AREA.
 - 100u" MIN TIN ON SOLDER TAIL.
 - 30u" GOLD ON CONTACT AREA.
 - THERMOPLASTIC PBT COLOR:BLACK;
 - PHY PIN:THICKNESS=0.30mm. BRASS C2680H.
 - PLATING: 50u" MIN NICKEL UNDERPLATING ALL AREA.
 - 100u" MIN TIN ON SOLDER TAIL.

8.CODING PRINCIPLES



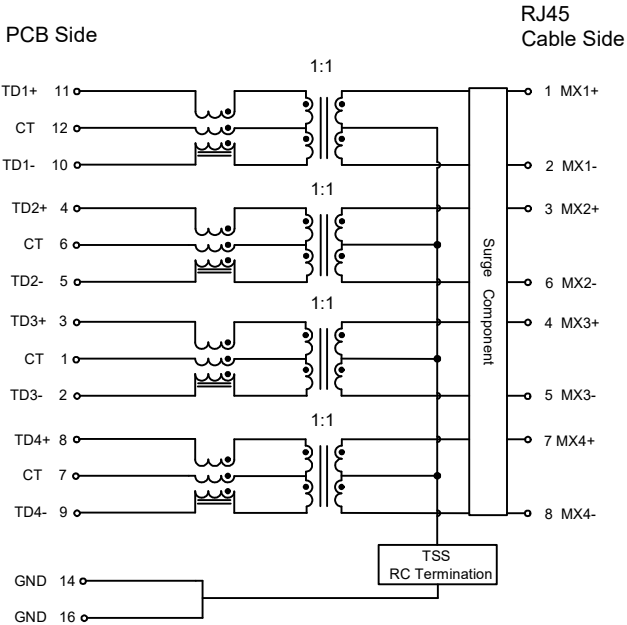
All dimensions follow :
FCC subpart F, 68,500, Figure (C)(2)(I)
IEC 60603-7
STANDARD MODULAR PLUG ASSEMBLY

All contacts recessed
below the housing
and must be at the same
height approximately.

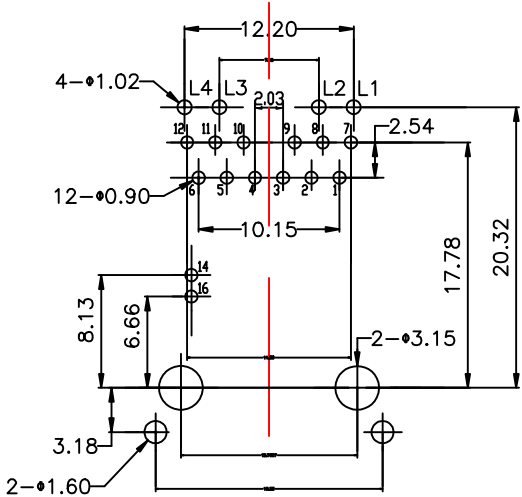


X. ± 0.40	APPD: LOUIS		思科飞尔技术（深圳）有限公司		
.X ± 0.30	CHKD: ZHOU		SISCOFER TECHNOLOGY (SHENZHEN) CO.LTD		
.XX ± 0.25			PART NO: RG1-GA3B20GLDSR		
.XXX± 0.20			TITLE: TAB UP 1X1Port 10/100/1000M BASE-T POE+ RJ45 JACK Magnetics		
X* ± 3' .X* ± 2'	DR: LIANG				
UNITS: mm					
	SHEET: 1 OF 2	REV:	DWG NO:	REMARK:	
	SCALE: 1:1	A	RG1-0129	XXX-XXXX	

B.SCHEMATICS



C:PIN ASSIGNMENT FOR PCB LAYOUT



SUGGESTED PCB PAD LAYOUT
COMPONENT SIDE VIEW

D. ELECTRICAL SPECIFICATIONS @25℃

TRANSMITTER FILTER & 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

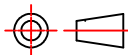
HIPOT TEST
PHY SIDE(INPUT) TO CABLE SIDE(OUTPUT) : 1500Vrms 60S

SURGE PROTECTION
IEC 61000-4-5
LINE TO LINE:2KV LINETO GND:3KA

E:LED SPECIFICATION



Emitting Color	λ_p (nm)	V_f @ $I_f=20mA$	I_r @ $V_r=5V$
GREEN	570	1.7 ~2.6 V	10mA max
YELLOW	590	1.7 ~2.6 V	10mA max

X. ± 0.40	APPD: LOUIS	 思科飞尔技术（深圳）有限公司 SISCOFER TECHNOLOGY (SHENZHEN) CO.LTD			
.X ± 0.30	CHKD: ZHOU				
.XX ± 0.25	DR: LIANG				
.XXX± 0.20					
X* ± 3'	.X* ± 2'	PART NO: RG1-GA1B50GBBPR			
UNITS: mm		TITLE: TAB UP 1X1Port 10/100/1000M BASE-T POE+ RJ45 JACK Magnetics			
	SHEET: 2 OF 2	REV: A	DWG NO: RG1-0129	REMARK: XXX-XXXX	
	SCALE: 1:1				