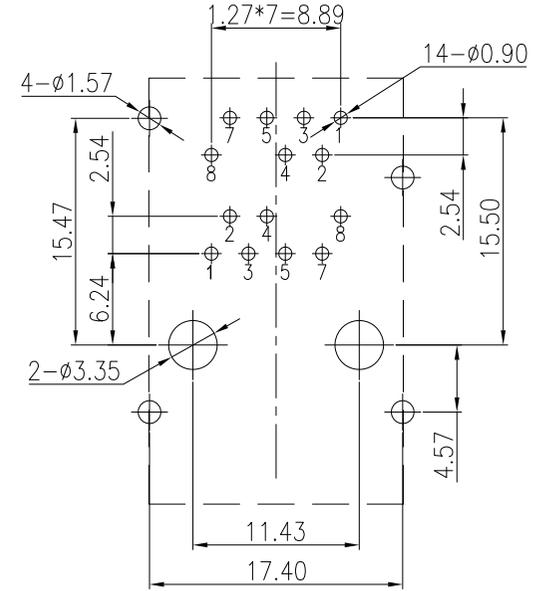
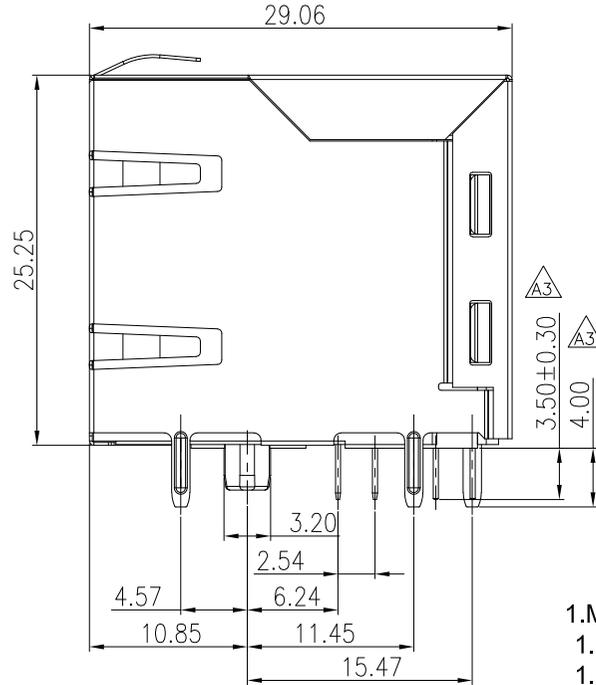
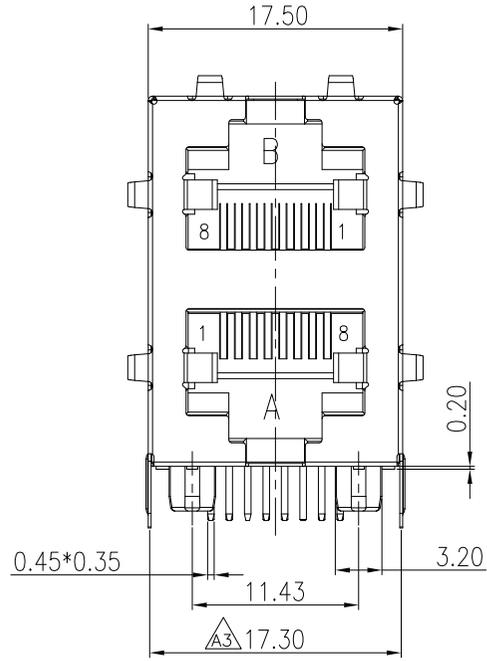


GP Component

1. Mechanical:



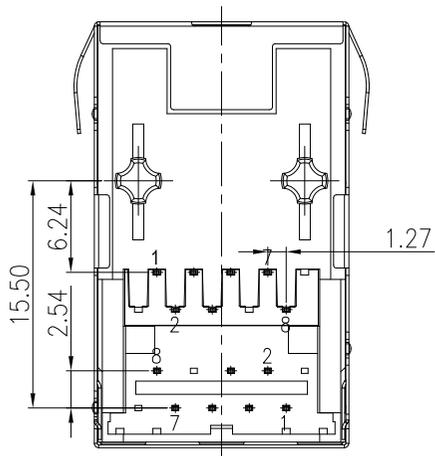
Suggested PCB Layout(Top View)
(Tolerance:±0.05)

1.Material:

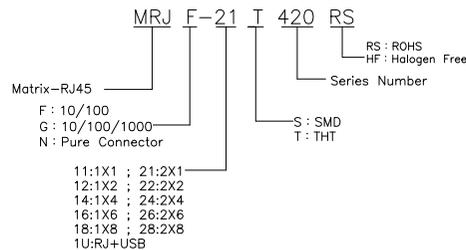
- 1.1 Housing: PBT UL94V-0 Black.
- 1.2 Insert core:PBT UL94V-0 Black.
- 1.3 Contact :Phosphor Bronze,Gold plated on contact area 6u",Tin plated on solder area 80u" min, overall nickel plating 30u" min.
- 1.4 Input Terminal : Brass,Tin plated on solder area 80u" min, Ni underplated overall 30u" min.
- 1.5 Metal shielding:Copper alloy with Nickel plated.

2.Environmental requirements:

- 2.1 Lead-free process,compliant RoHS.



MATRIX PART NO:



REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
A0			Initial	2015/12/09	Phebe Su
A1			Add DIM	2015/12/17	Phebe Su
A2			Change	2018/10/25	Phebe Su
A3			Modify Shell & Plastic Structure	2025/04/28	Vince

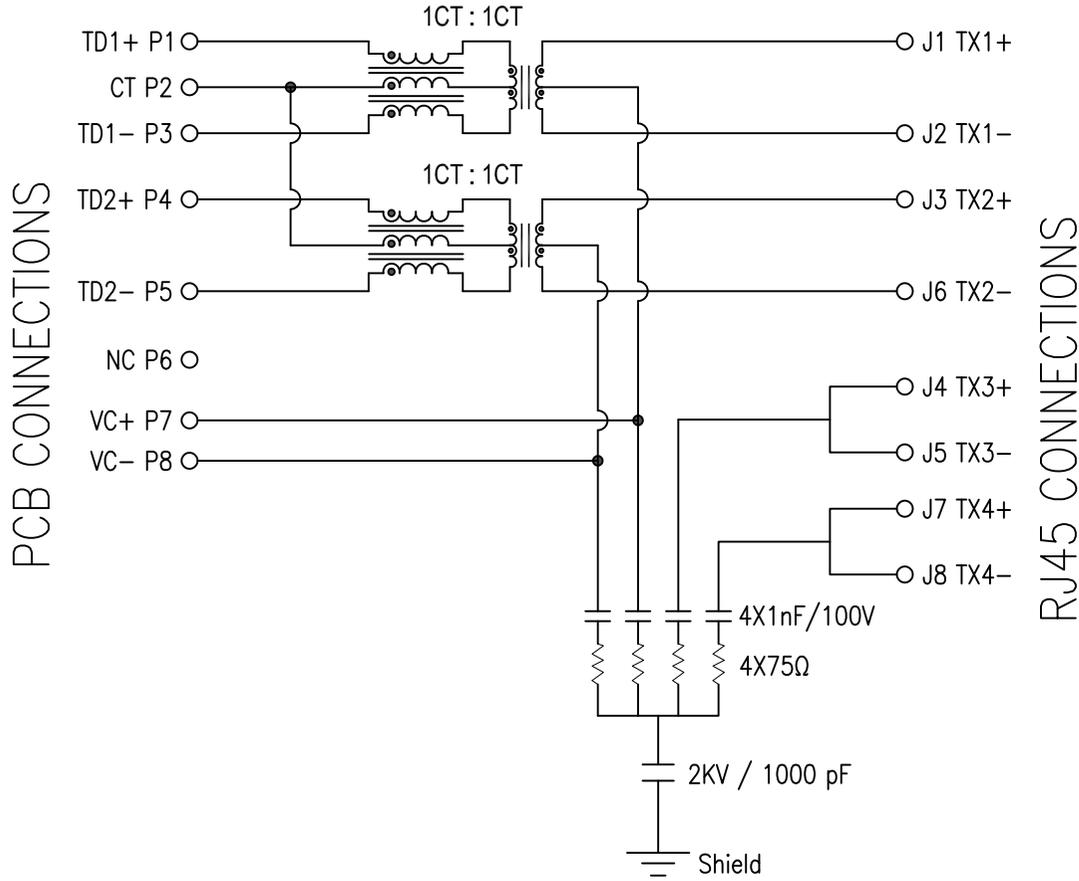


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TOLERANCE: X:X ±0.38 X:XX ±0.25 X:XXX ±0.13 X.* ±1.5X.X* ±1.5*	DESIGN BY : Vince Chen	DATE : 2025/04/28	PART NAME: RJ45 2X1 CONN,W/O LED 10/100,FILTER	
UNIT: mm [inch] SCALE:1:1 SIZE:A4	CHECKED BY: Hanson Huang	DATE : 2025/04/28	PART NO.	MRJF-21T420RS
	APPROVED BY1: Richard Hsieh	DATE : 2025/04/28	MOLD NO.	NA
	APPROVED BY2: Richard Hsieh	DATE : 2025/04/28	DRAW NO.	
			SHEET NO.	1 OF 4

GP Component

2. SCHEMATIC:



REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
A0			Initial	2015/12/09	Phebe Su
A1			Add DIM	2015/12/17	Phebe Su
A2			Change	2018/10/25	Phebe Su
A3			Modify Shell & Plastic Structure	2025/04/28	Vince

3. Electrical Specification @25°C:

- 3.1 Inductance: 350uH Min With 8mA DC bias.
- 3.2 Hi-Pot Test: Input to Output 2250VDC/1mA.
- 3.3 Insertion loss : 1-100MHZ -1dB max.
- 3.4 Return loss : 1-30MHZ -18dB min.
30-60MHZ -16dB min.
60-80MHZ -12dB min.
80-100MHZ -10dB min.
- 3.5 Common Mode Rejection:1-100MHZ -30dB min.
- 3.6 Cross Talk:1-100MHZ -30dB min.
- 4. Operating and Storage Temperature:
 - 4.1 Operating Temperature : 0°C to +70°C.
 - 4.2 Storage Temperature : -40°C to +85°C.
- 5. Wave soldering peak temperature:260°C.



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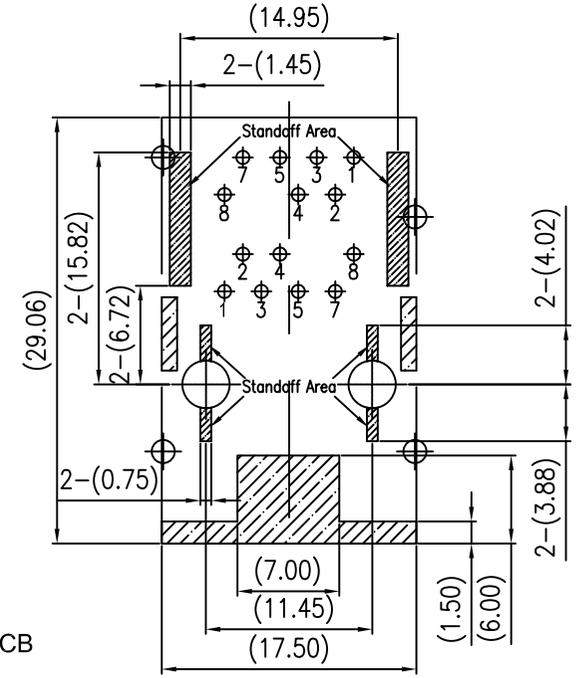
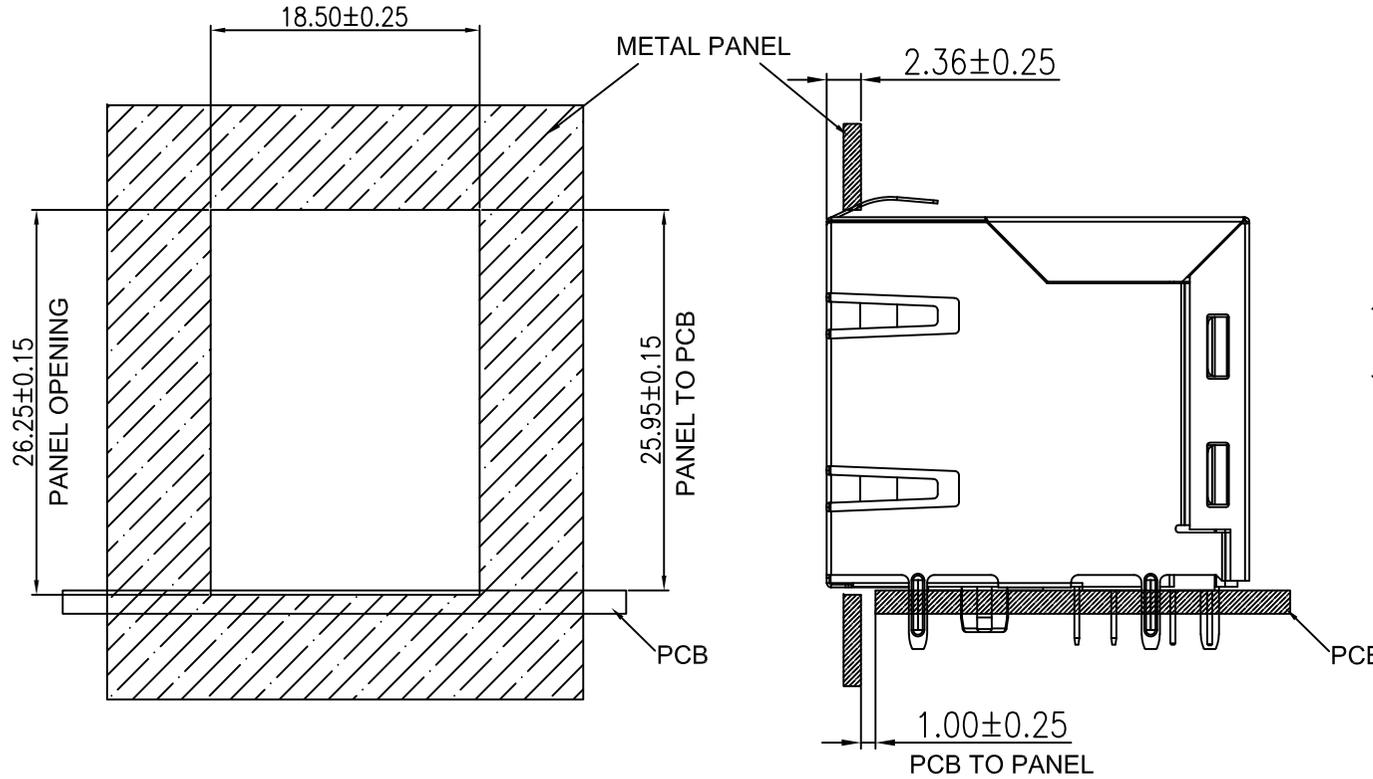
TOLERANCE: X:X ±0.38 X:XX ±0.25 X:XXX ±0.13 X.* ±1.5X.X* ±1.5*	DESIGN BY : Vince Chen	DATE : 2025/04/28	PART NAME: RJ45 2X1 CONN.W/O LED 10/100.FILTER	
 UNIT: mm [inch] SCALE:1:1 SIZE:A4	CHECKED BY: Hanson Huang	DATE : 2025/04/28	PART NO.	MRJF-21T420RS
	APPROVED BY1: Richard Hsieh	DATE : 2025/04/28	MOLD NO.	NA
	APPROVED BY2: Richard Hsieh	DATE : 2025/04/28	DRAW NO.	
			SHEET NO.	2 OF 3

GP Component

REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
A0			Initial	2015/12/09	Phebe Su
A1			Add DIM	2015/12/17	Phebe Su
A2			Change	2018/10/25	Phebe Su
A3			Modify Shell & Plastic Structure	2025/04/28	Vince

Recommended Panel cutout:

KEEP-OUT AREA (Top View):

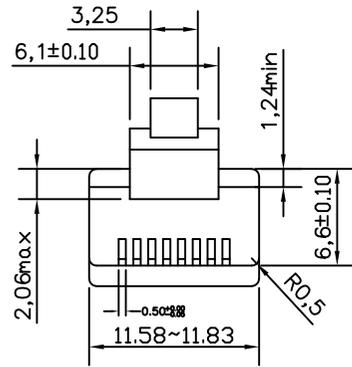


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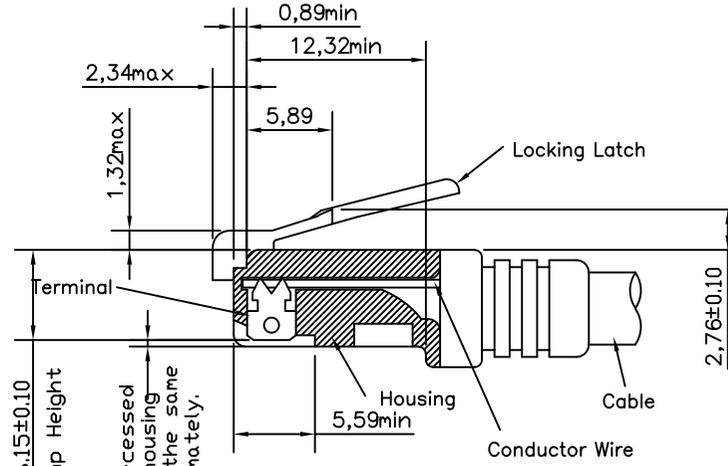
TOLERANCE:		DESIGN BY :	DATE :	PART NAME:	
X:X	±0.38	Vince Chen	2025/04/28	RJ45 2X1 CONN.W/O LED	
X:XX	±0.25	CHECKED BY:	DATE :	10/100.FILTER	
X:XXX	±0.13	Hanson Huang	2025/04/28	PART NO.	MRJF-21T420RS
X:* ±1.5X.X* ±1.5*		APPROVED BY1:	DATE :	MOLD NO.	NA
 UNIT: mm [inch] SCALE:1:1 SIZE:A4		Richard Hsieh	2025/04/28	DRAW NO.	
		APPROVED BY2:	DATE :	SHEET NO. 3 OF 4	
		Richard Hsieh	2025/04/28		

GP Component

REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
A0			Initial	2015/12/09	Phebe Su
A1			Add DIM	2015/12/17	Phebe Su
A2			Change	2018/10/25	Phebe Su
A3			Modify Shell & Plastic Structure	2025/04/28	Vince



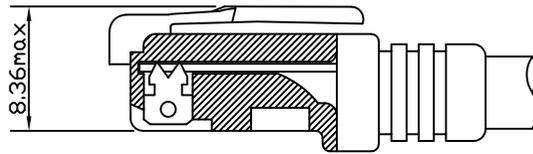
- * There must be no damage to housing or locking latch. There must be no nicks or cuts in cable.
- * Durability : 750 cycles generally



FOLLOW SPECIFICATION : FCC, PART 68,
SUBPART F FIGURE 68.500 (C)(2)(I)
AND IEC 603-7 FIGURE 23 & 24

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

STANDARD MODULAR PLUG ASSEMBLY



FOLLOW SPECIFICATION : FCC, PART 68, SUBPART F
FIGURE 68.500 (C)(2)(II)



Matrix Electronics Co.,Ltd

TOLERANCE: X:X ±0.38 X:XX ±0.25 X:XXX ±0.13 X.* ±1.5X.X* ±1.5*	DESIGN BY : Vince Chen	DATE : 2025/04/28	PART NAME: RJ45 2X1 CONN.W/O LED 10/100.FILTER	
 UNIT: mm [inch] SCALE:1:1 SIZE:A4	CHECKED BY: Hanson Huang	DATE : 2025/04/28	PART NO.	MRJF-21T420RS
	APPROVED BY1: Richard Hsieh	DATE : 2025/04/28	MOLD NO.	NA
	APPROVED BY2: Richard Hsieh	DATE : 2025/04/28	DRAW NO.	
			SHEET NO.	4 OF 4