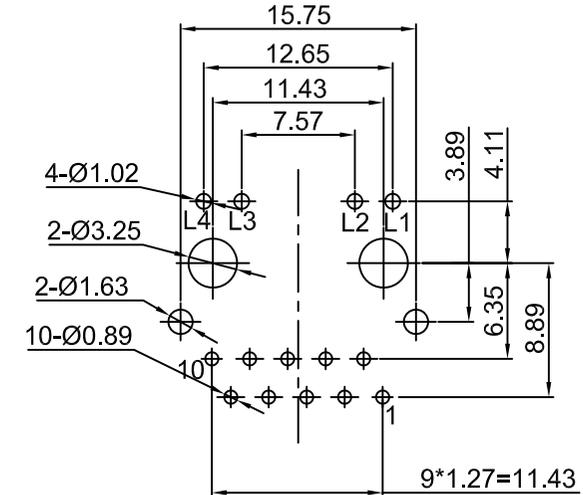
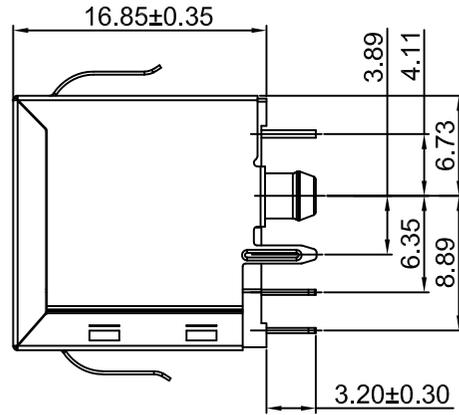
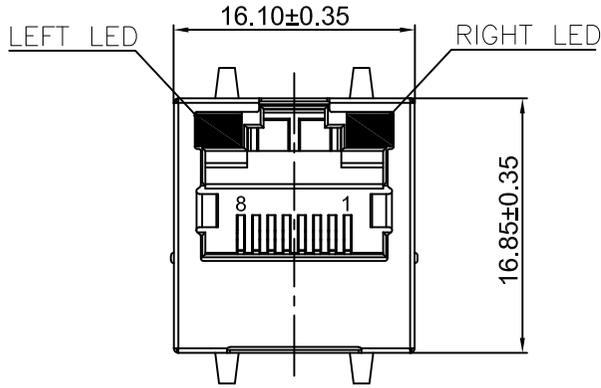


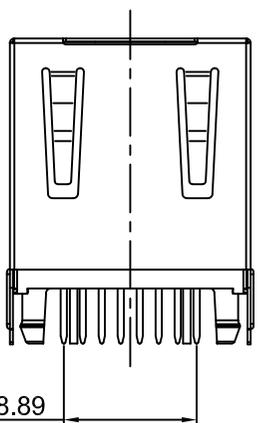
# GP Component

REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
A0			Initial	2024/01/03	Vince

## 1. MECHANICAL DIMENSIONS :



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



MATRIX PART NO:

M R J F - 1 1 T 1666 T R S

Matrix-RJ45

F : 10/100

G : 10/100/1000

N : Pure Connector

RS: ROHS

HF: Halogen Free

Industrial temperature

Series Number

S: SMD

T: THT

11:1X1 ; 21:2X1

12:1X2 ; 22:2X2

14:1X4 ; 24:2X4

16:1X6 ; 26:2X6

18:1X8 ; 28:2X8

1U:RJ+USB

### 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 30u",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.

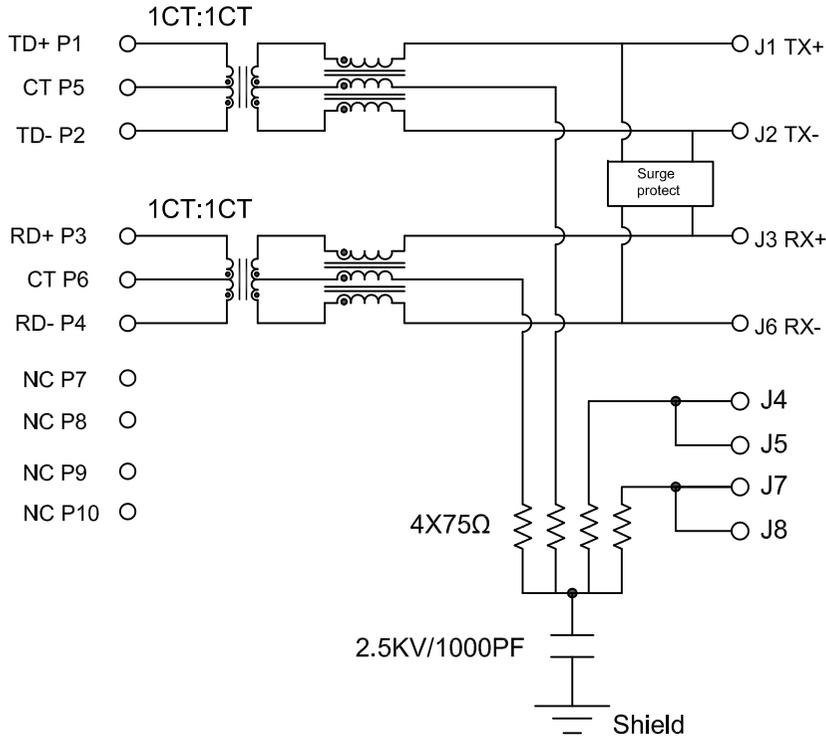
Matrix Electronics Co.,Ltd

<b>TOLERANCE:</b> X: X X.X      ±0.38 X.XX     ±0.25 X.XXX    ±0.13 ANGLE: ±3°	DESIGN BY :	DATE :	<b>PART NAME:</b>	
	Vince Chen	2024/01/03	RJ45, CONNECTORS, W/LED DIP VERTICAL SC, 10P, 100Mbps, FILTER	
 UNIT: mm [inch] SCALE:1:1    SIZE:A4	CHECKED BY:	DATE :	PART NO.	MRJF-11T1666TRS
	Hanson Huang	2024/01/03	MOLD NO.	NA
	APPROVED BY1:	DATE :	DRAW NO.	
Richard Hsieh	2024/01/03	SHEET NO.	1 OF 3	
APPROVED BY2:	DATE :			
Richard Hsieh	2024/01/03			

# GP Component

REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
A0			Initial	2024/01/03	Vince

## 2. SCHEMATIC:



RJ45 CONNECTIONS

## 3. ELECTRICAL CHARACTERISTICS (25±5°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 : -40°C to +85°C.
  - 4.2 Storage Temperature : -40°C to +85°C.
- 5. Wave soldering peak temperature: 260°C.
- 6. Surge protection: IEC61000-4-5 (Lightning)  
(10/700us) Line to Ground: 4KV Line to LINE: 3KV
- 7. ESD Protection  
IEC61000-4-2 (ESD) 15KV (air), 8KV (contact)

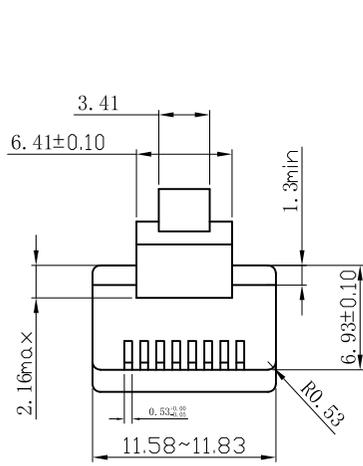


Emitting Color	$\lambda_p$ (nm)	$V_f@I_f=20mA$
GREEN	565	1.8-2.5V
YELLOW	585	1.8-2.5V
ORANGE	610	1.8-2.5V

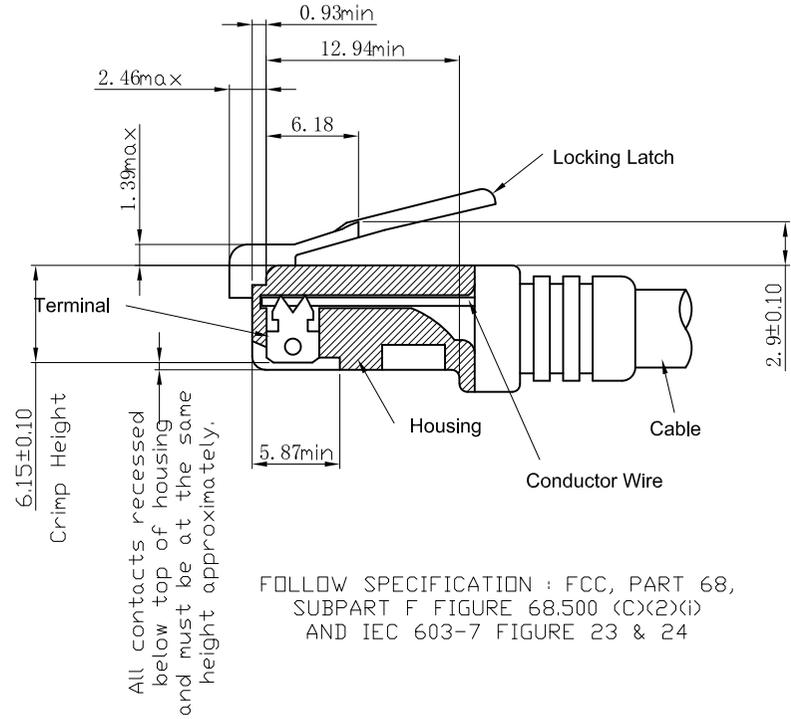
 Matrix Electronics Co., Ltd				
TOLERANCE: X:X ±0.38 X.XX ±0.25 X.XXX ±0.13 ANGLE: ±3°	DESIGN BY :	DATE :	PART NAME:	
	Vince Chen	2024/01/03	RJ45, CONNECTORS, W/LED DIP VERTICAL SC, 10P 100Mbps, FILTER	
 UNIT: mm [inch] SCALE: 1:1 SIZE: A4	CHECKED BY:	DATE :	PART NO.	MRJF-11T1666TRS
	Hanson Huang	2024/01/03	MOLD NO.	NA
APPROVED BY1:	DATE :	APPROVED BY2:	DATE :	DRAW NO.
Richard Hsieh	2024/01/03	Richard Hsieh	2024/01/03	SHEET NO.
			2 OF 3	

# GP Component

REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
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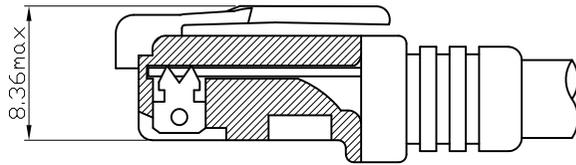


- \* There must be no damage to housing or locking latch. There must be no nicks or cuts in cable.
- \* Durability : 750 cycles generally



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

STANDARD MODULAR PLUG ASSEMBLY



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

 <b>Matrix Electronics Co., Ltd</b>			
<b>TOLERANCE:</b> X X.X ±0.38 X.XX ±0.25 X.XXX ±0.13 ANGLE: ±3°	<b>DESIGN BY :</b> Vince Chen	<b>DATE :</b> 2024/01/03	<b>PART NAME:</b> RJ45, CONNECTORS, W/LED DIP VERTICAL SC, 10P, 100Mbps, FILTER
	<b>CHECKED BY:</b> Hanson Huang	<b>DATE :</b> 2024/01/03	<b>PART NO.</b> MRJF-11T1666TRS
  <b>UNIT: mm [inch]</b>	<b>APPROVED BY1:</b> Richard Hsieh	<b>DATE :</b> 2024/01/03	<b>MOLD NO.</b> NA
	<b>SCALE:1:1</b> <b>SIZE:A4</b>	<b>APPROVED BY2:</b> Richard Hsieh	<b>DATE :</b> 2024/01/03