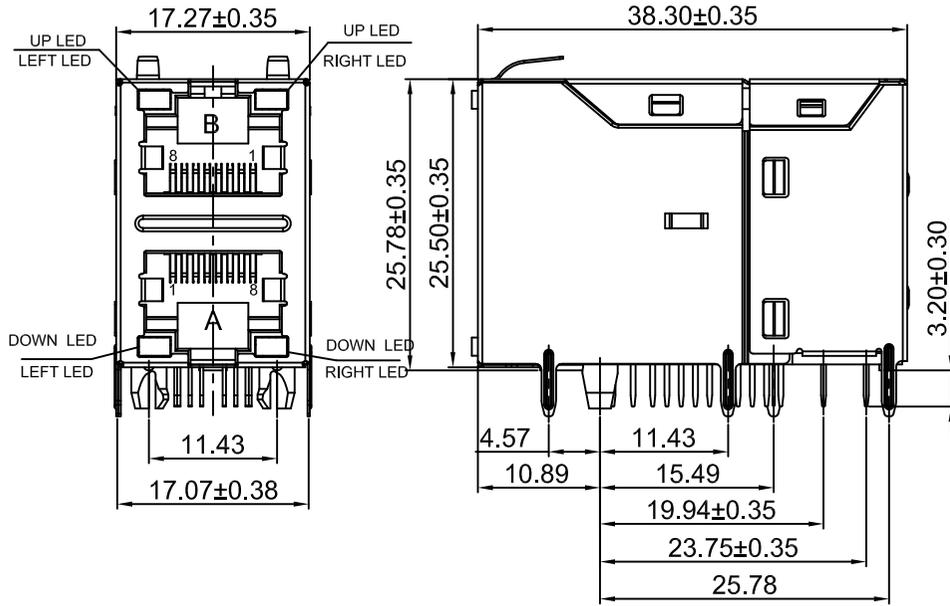


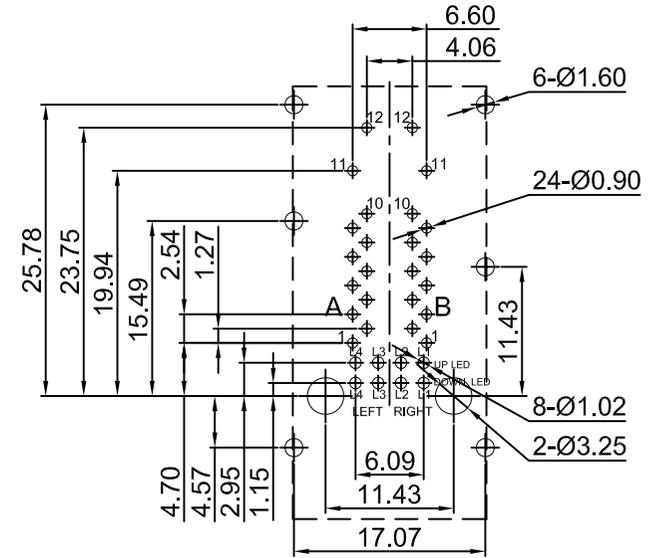
GP Component

REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
A0			Initial	2023/04/03	Vince

1. MECHANICAL DIMENSIONS :



2. PCB LAYOUT :



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

Printing:

MATRIX
MRJG-21T1816TRS
YYWW

MATRIX PART NO:
MRJ G-21 T 1816 T RS

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: PA46 UL94V-0 Black.
- 1.2 Insert core:PA46 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:

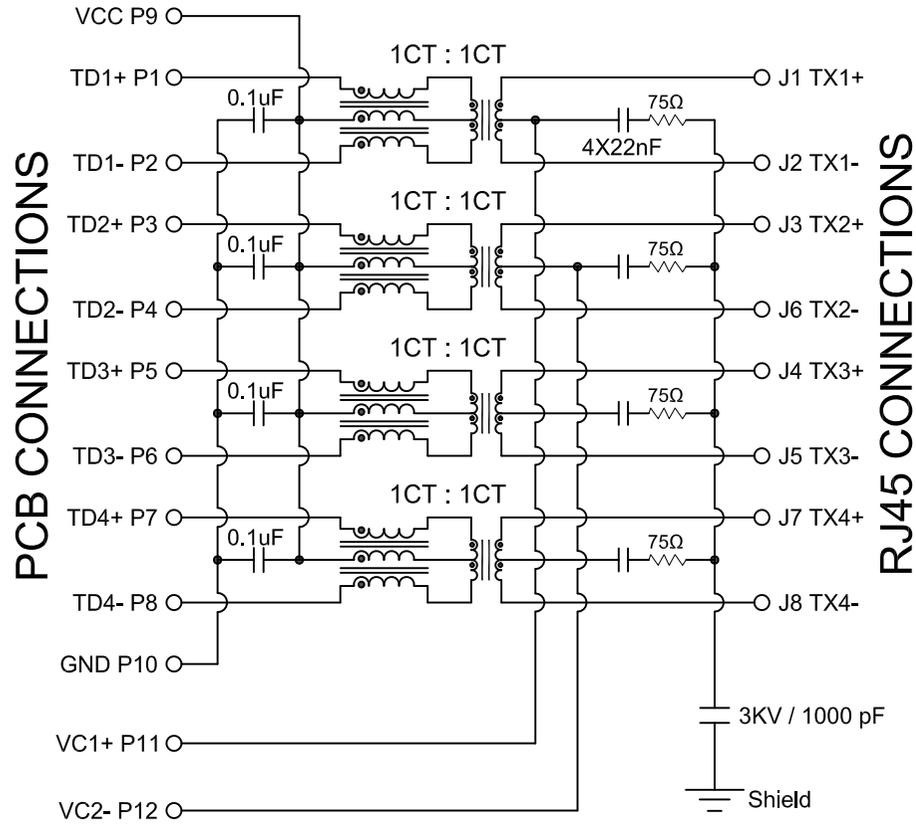
- 2.1 Lead-free process,compliant RoHS.

Matrix Electronics Co.,Ltd			
TOLERANCE: X.X ±0.38 X.XX ±0.25 X.XXX ±0.13 ANGLE: ±3°	DESIGN BY : Vince Chen	DATE : 2023/04/03	PART NAME: RJ45 2X1 CONN W/LED 10/100/1000, FILTER
 UNIT: mm [inch] SCALE:1:1 SIZE:A4	CHECKED BY: Hanson Huang	DATE : 2023/04/03	PART NO. MRJG-21T1816TRS
	APPROVED BY1: Richard Hsieh	DATE : 2023/04/03	MOLD NO. NA
	APPROVED BY2: Richard Hsieh	DATE : 2023/04/03	DRAW NO.
			SHEET NO. 1 OF 3

GP Component

REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
A0			Initial	2023/04/03	Vince

3. SCHEMATIC:



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

4. Electrical Specification @25°C:

- 4.1 Inductance: 350uH Min With 8mA DC bias.
- 4.2 Hi-Pot Test: Input to Output 2250VDC/1mA.
- 4.3 Insertion loss : 1-100MHZ -1dB max.
- 4.4 Return loss : 1-30MHZ -18dB min.
30-60MHZ -16dB min.
60-80MHZ -12dB min.
80-100MHZ -10dB min.
- 4.5 Common Mode Rejection:1-100MHZ -30dB min.
- 4.6 Cross Talk:1-100MHZ -30dB min.
- 5. Operating and Storage Temperature:
 - 5.1 Operating Temperature : -40°C to +85°C.
 - 5.2 Storage Temperature : -40°C to +85°C.
- 6. Wave soldering peak temperature:260°C.
- 7. DC current: Meeting IEEE802.3at Standards.
720mA MAX @57VDC Continuous.

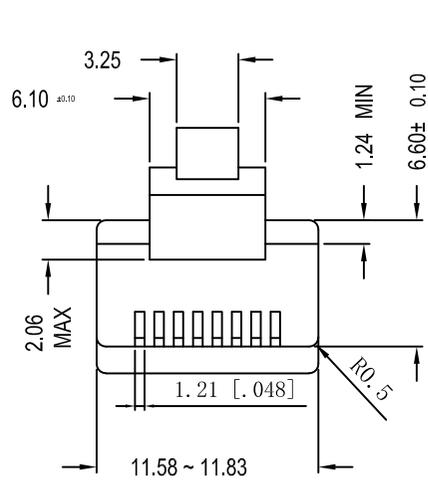


Matrix Electronics Co., Ltd

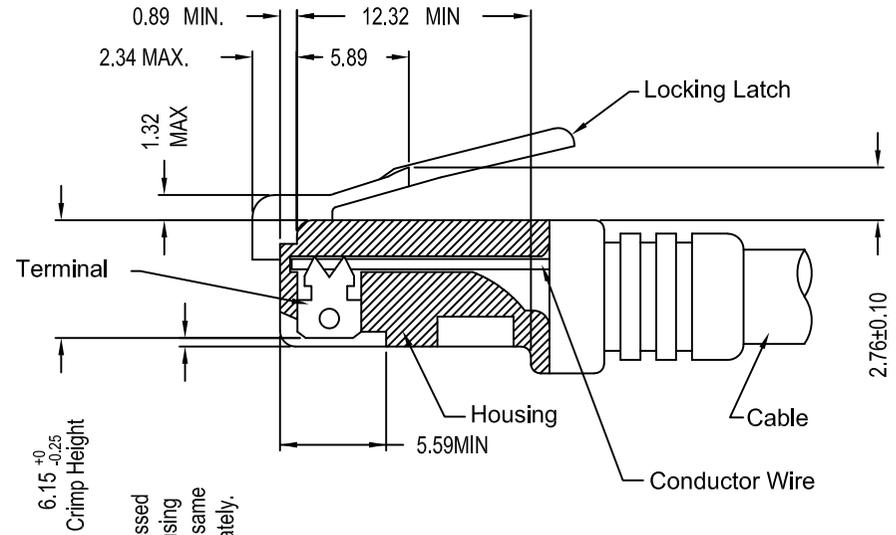
TOLERANCE: X.X ±0.38 X.XX ±0.25 X.XXX ±0.13 ANGLE: ±3°	DESIGN BY : Vince Chen	DATE : 2023/04/03	PART NAME: RJ45 2X1 CONN. W/LED 10/100/1000, FILTER	
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 UNIT: mm [inch] SCALE:1:1 SIZE:A4	APPROVED BY1: Richard Hsieh	DATE : 2023/04/03	MOLD NO.	NA
	APPROVED BY2: Richard Hsieh	DATE : 2023/04/03	DRAW NO.	
			SHEET NO.	2 OF 3

GP Component

REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
A0			Initial	2023/04/03	Vince



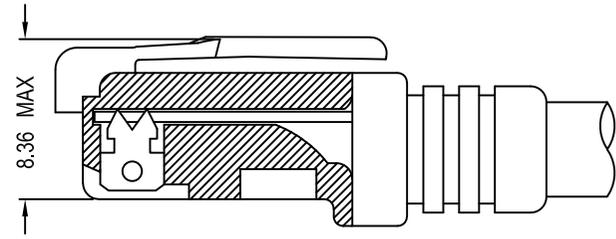
* There must be no damage to housing or locking latch. There must be no nicks or cuts in cable.
 * Durability : 750 cycles generally



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

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)

 Matrix Electronics Co., Ltd					
TOLERANCE: X.X ±0.38 X.XX ±0.25 X.XXX ±0.13 ANGLE: ±3°		DESIGN BY : Vince Chen	DATE : 2023/04/03	PART NAME: RJ45 2X1 CONN. W/LED 10/100/1000, FILTER	
		CHECKED BY: Hanson Huang	DATE : 2023/04/03	PART NO.	MRJG-21T1816TRS
		APPROVED BY1: Richard Hsieh	DATE : 2023/04/03	MOLD NO.	NA
		APPROVED BY2: Richard Hsieh	DATE : 2023/04/03	DRAW NO.	
UNIT: mm [inch] SCALE:1:1	SIZE:A4			SHEET NO.	3 OF 3