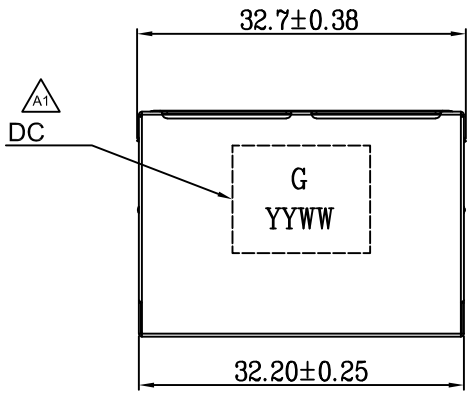
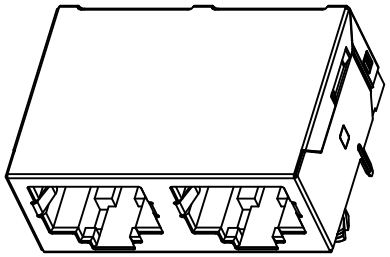
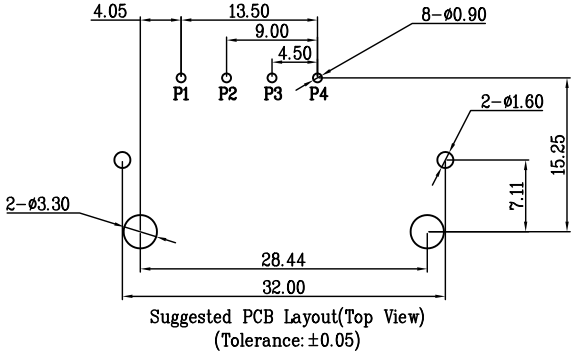
GP Component

REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
A0			Initial	2021/11/16	Vince
A1			Modify code	2022/11/17	Vince

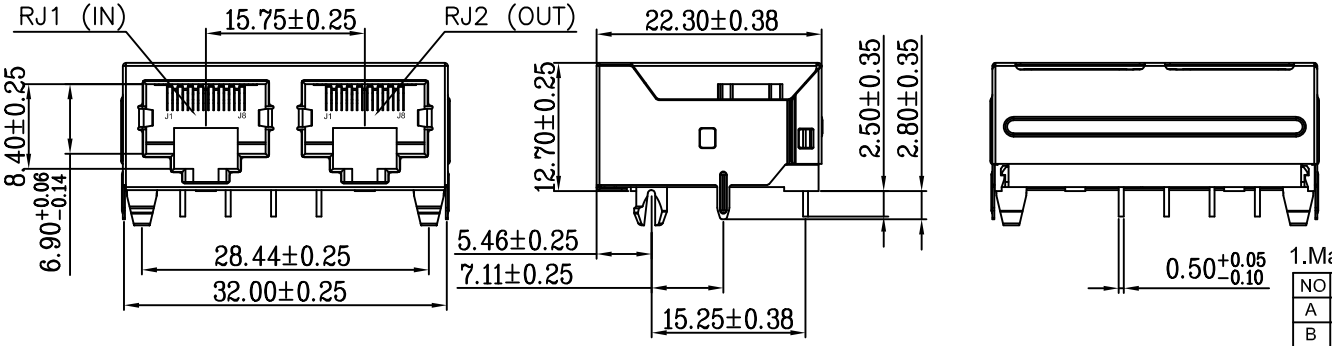
1. MECHANICAL DIMENSIONS :







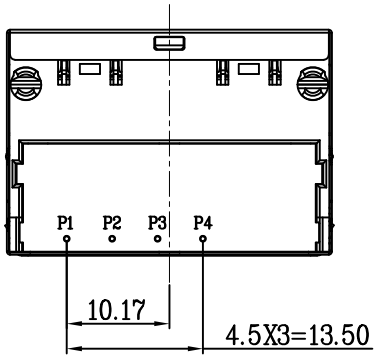
Suggested PCB Layout(Top View)
(Tolerance: ±0.05)

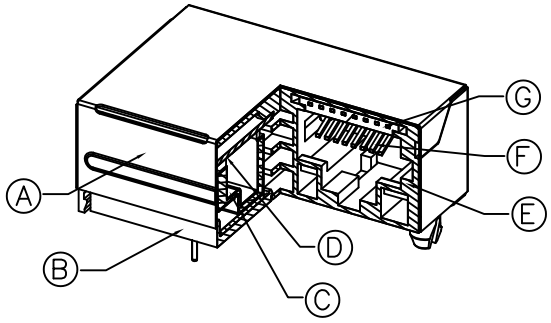


MATRIX PART NO:

MRJ 10G-12 T 1490 T RS

- Matrix-RJ45
- F:10/100 G:10/100/1G/10G N:Pure Connector
- 11:1X1 ; 21:2X1 12:1X2 ; 22:2X2 14:1X4 ; 24:2X4 16:1X6 ; 26:2X6 18:1X8 ; 28:2X8 1U:RJ+USB
- S:SMD T:THT
- Series Number
- Industrial Temperature
- RS:ROHS HF:Halogen Free





1.Material:

NO	DESCRIPTION	QTY	MATERIAL	PLATING & COLOR
A	METAL SHIELDING	1	C2680 T=0.20MM	NICKEL 30u" MIN.
B	COVER	1	PA46 UL94V-0	BLACK
C	MAG BASE	1	10G MAG BASE	BLACK
D	PCB	1	FR/4	GREEN
E	HOUSING	1	PA46 UL94V-0	BLACK
F	RJ TERMINAL	16	C5210-H T=0.30MM	AU 30u"MIN ON CONTACT AREA, TIN PLATED ON SOLDER AREA 80u" MIN, OVERALL NICKEL PLATING 30u" MIN.
G	INSE MOLDING	1	PA46 UL94V-0	BLACK

Matrix Electronics Co.,Ltd

TOLERANCE: X ±0.38, X.X ±0.25, X.XX ±0.13, ANGLE: ±3°	DESIGN BY : Vince Chen	DATE : 2022/11/17	PART NAME: RJ45 CONN W/O LED, 10G Base FILTER
	CHECKED BY: Hanson Huang	DATE : 2022/11/17	PART NO. MRJ10G-12T1490TRS
	APPROVED BY1: Richard Hsieh	DATE : 2022/11/17	MOLD NO. NA
UNIT: mm [inch]	APPROVED BY2: Richard Hsieh	DATE : 2022/11/17	DRAW NO.
SCALE:1:1 SIZE:A4			SHEET NO. 1 OF 3

GP Component

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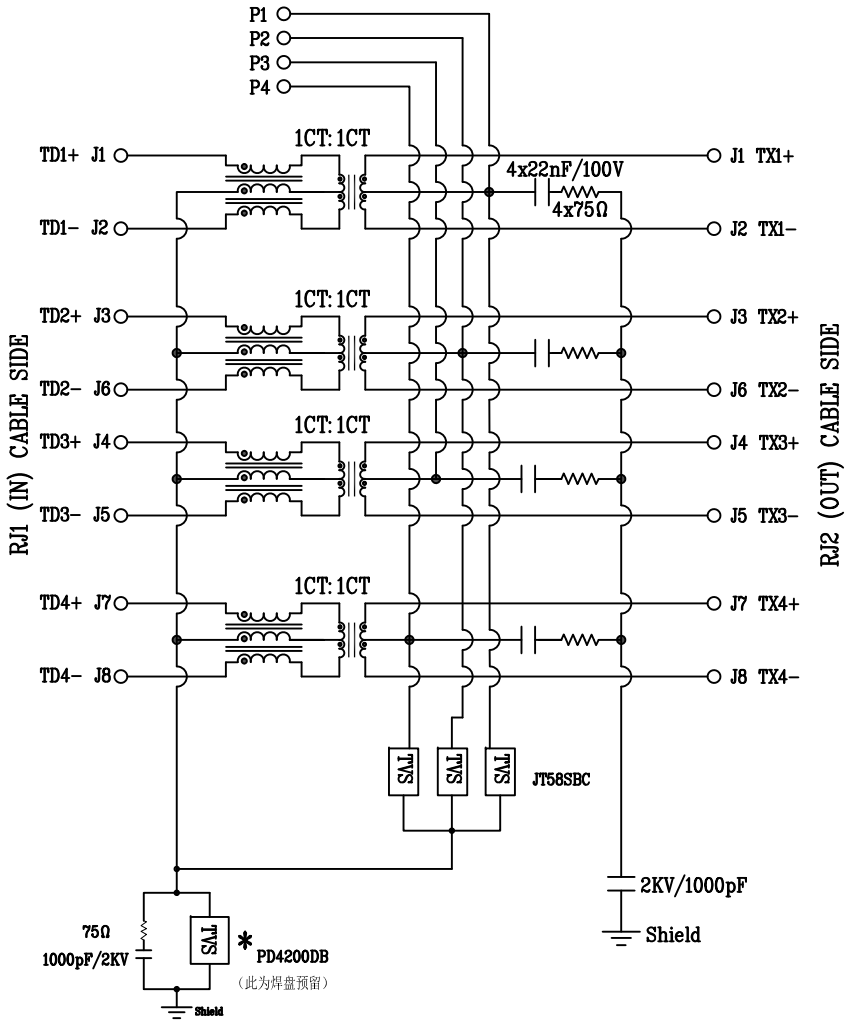
2. SCHEMATIC:



⚠A1 Printing:

G
YYWW

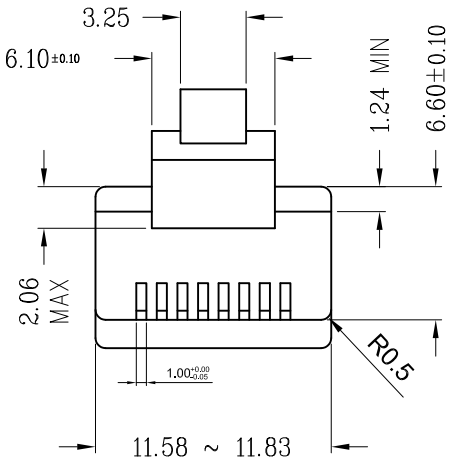
2. Environmental requirements:
 2.1 Lead-free process,compliant RoHS.
3. Electrical Specification @25°C:
 3.1 Inductance(OCL): @100kHZ,100mV,15mA DC BIAS.
  Input(TD1+,TD1-),(TD2+,TD2-),(TD3+,TD3-),(TD4+,TD4-):100uH min.
  Output(TX1+,TX1-),(TX2+,TX2-),(TX3+,TX3-),(TX4+,TX4-):100uH min.
 3.2 Insertion loss : @1-100MHZ -0.6dB max.
  @100-200MHZ -1.0dB max.
  @200-300MHZ -1.5dB max.
  @300-400MHZ -2.0dB max.
  @400-500MHZ -3.0dB max.
 3.3 Return loss : @1-100MHZ -20dB min.
  @100-200MHZ -17dB min.
  @200-300MHZ -14dB min.
  @300-400MHZ -10dB min.
  @400-500MHZ -8dB min.
 3.4 Common to Common Mode Rejection:
  @1-100MHZ -22dB min.
  @100-300MHZ -21dB min.
  @300-500MHZ -20dB min.
 3.5 Cross Talk: @1-500MHZ -25dB min.
 3.6 DC current:1.0A MAX @57VDC continuous.
4. Operating and Storage Temperature:
 4.1 Operating Temperature : -40°C to +110°C.
 4.2 Storage Temperature : -40°C to +110°C.
5. Wave soldering peak temperature:260°C.
*6. Reserved solution for TVS surge protection.

Matrix Electronics Co.,Ltd

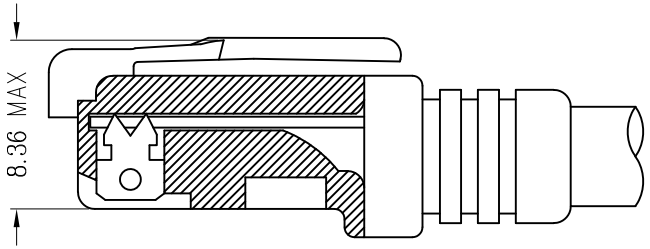
TOLERANCE: X ±1 / X.X ±0.38 / X.XX ±0.25 / X.XXX ±0.13 / ANGLE:±3°	DESIGN BY : Vince Chen	DATE : 2022/11/17	PART NAME: RJ45 CONN W/O LED, 10G Base FILTER
	CHECKED BY: Hanson Huang	DATE : 2022/11/17	PART NO. MRJ10G-12T1490TRS
UNIT: mm [inch]	APPROVED BY1: Richard Hsieh	DATE : 2022/11/17	MOLD NO. NA
	APPROVED BY2: Richard Hsieh	DATE : 2022/11/17	DRAW NO.
SCALE:1:1 SIZE:A4			SHEET NO. 2 OF 3

GP Component

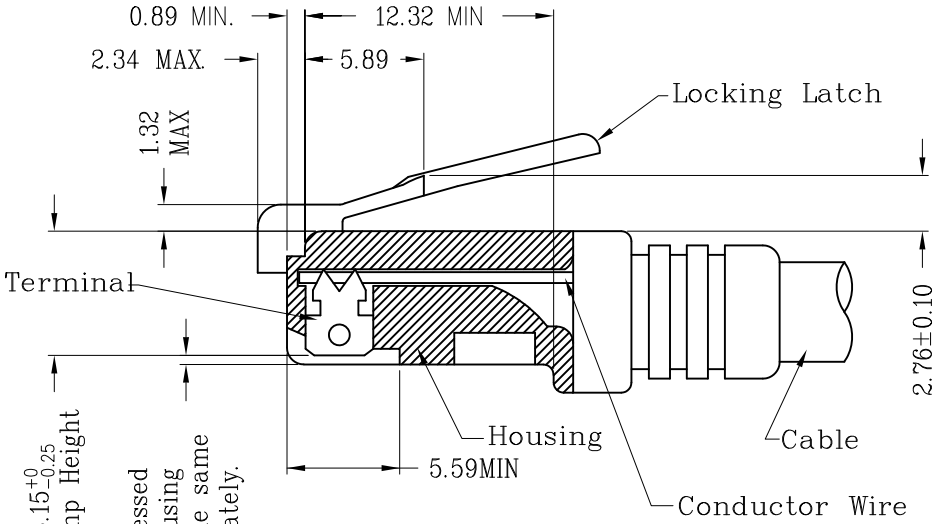
REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
A0			Initial	2021/11/16	Vince
A1			Modify code	2022/11/17	Vince



* 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)(ii)



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

STANDARD MODULAR PLUG ASSEMBLY

Matrix Electronics Co.,Ltd

TOLERANCE: X ±0.38, XX ±0.25, XXX ±0.13, ANGLE: ±3°	DESIGN BY : Vince Chen	DATE : 2022/11/17	PART NAME: RJ45 CONN W/O LED, 10G Base FILTER
	CHECKED BY: Hanson Huang	DATE : 2022/11/17	PART NO. MRJ10G-12T1490TRS
UNIT: mm [inch]	APPROVED BY1: Richard Hsieh	DATE : 2022/11/17	MOLD NO. NA
SCALE:1:1 SIZE:A4	APPROVED BY2: Richard Hsieh	DATE : 2022/11/17	DRAW NO.
			SHEET NO. 3 OF 3