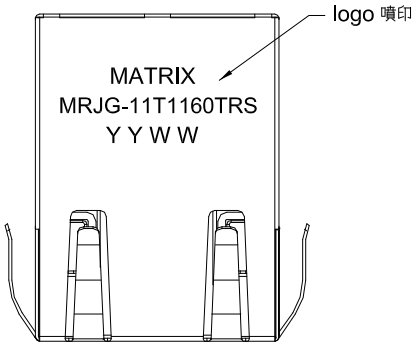
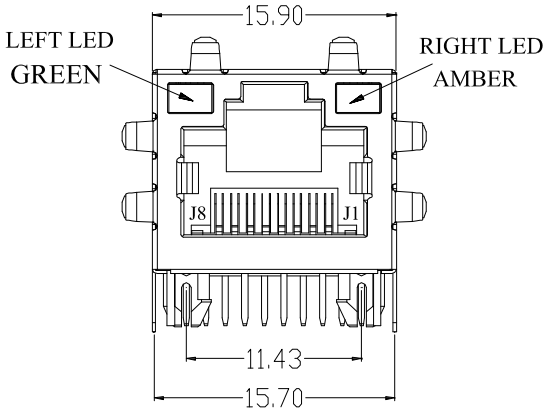
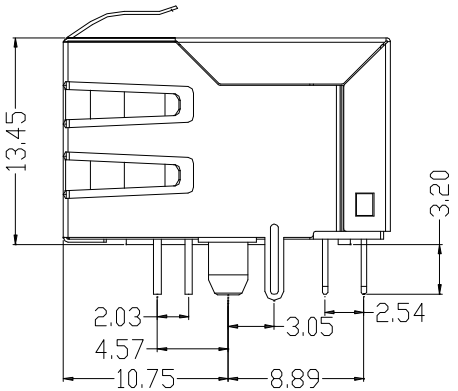
GP Component

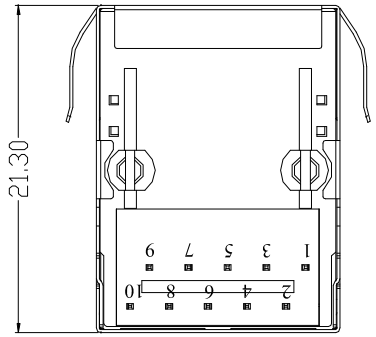
REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
A0			Initial	2019/03/26	Hanson

1. MECHANICAL DIMENSIONS :









NOTES:

. Housing: Thermoplastic PBT+30%GF UL94V0 rated

. Contact :Phosphor Bronze(C5191),Gold plated on contact area 6u"

. Input Terminal : Brass

. Operating temperature: -40 °C to +85 °C

. Storage temperature: -40 °C to +85 °C

. Lead-free process,compliant RoHS

ORDER INFORMATION :

M R J G -11 T 1160 T RS

- Matrix-RJ45
- F : 10/100
  G : 10/100/1000
  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

Matrix Electronics Co.,Ltd

TOLERANCE: X. ±0.38 X.X ±0.25 X.XXX ±0.13 ANGLE: ±3°	DESIGN BY : Hanson Huang	DATE : 2019/03/26	PART NAME: RJ45 CONN,W/LED,10P,8C 100/1000MBPS,FILTER	
	CHECKED BY: Sam Kuo	DATE : 2019/03/26	PART NO.	MRJG-11T1160TRS
UNIT: mm [inch]	APPROVED BY1: Richard Hsieh	DATE : 2019/03/26	MOLD NO.	NA
SCALE:1:1 SIZE:A4	APPROVED BY2: Richard Hsieh	DATE : 2019/03/26	DRAW NO.	
			SHEET NO.	1 OF 4

GP Component

REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
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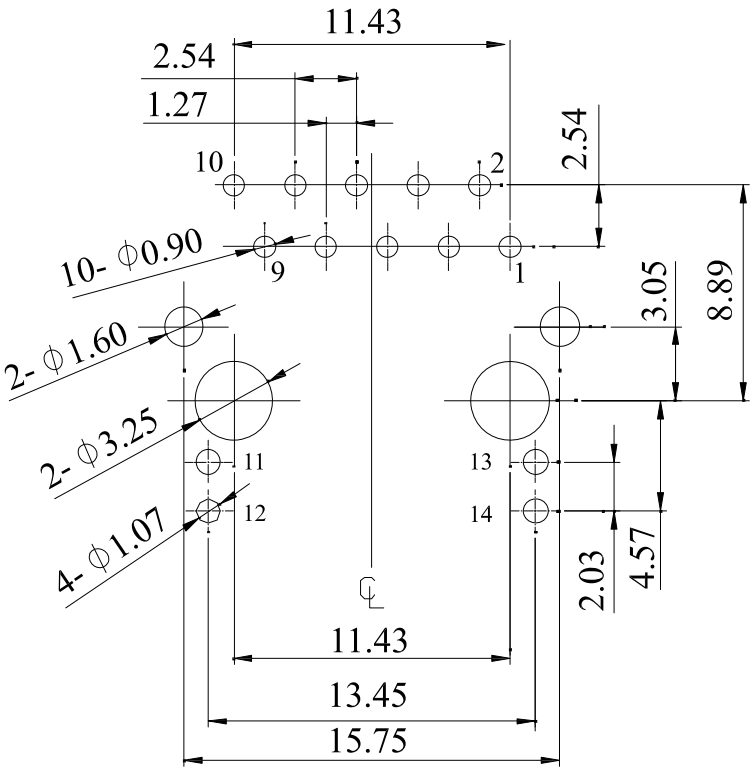
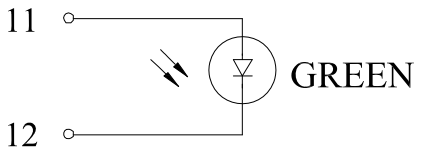
2. PCB LAYOUT :



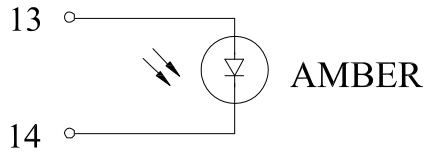
SUGGESTED PCB LA YOUT (TOP VIEW)

DIMENSIONAL TOLERANCE: .XX ±0.05[0.001]

3. LED CONFIGURATION :



LEFT LED



RIGHT LED

LED Specifications:

Standard LED Color	LED Wavelength	Forward (V Max)	Typical (V TYP)
Green	560-580 nm	2.5	2.1~2.2
AMBER	590-610 nm	2.5	2.1~2.2

1. LED intensity/wavelength measured with Photo research PR-650 colormeter
2. With a forward Current of 20mA,absolute maximum ratings (Ta=25°)

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	APPROVED BY2: Richard Hsieh	DATE : 2019/03/26	DRAW NO.	
SCALE:1:1 SIZE:A4			SHEET NO.	2 OF 4

GP Component

REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
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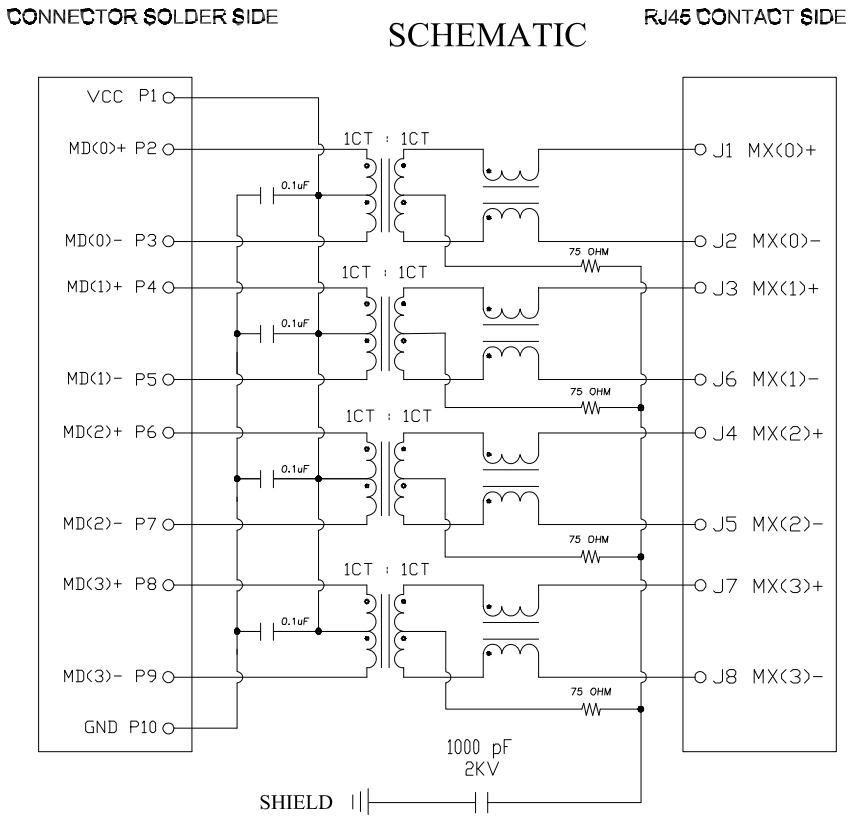
4. SCHEMATIC:



5. ELECTRICAL CHARACTERISTICS :

TEST NOTES:(25°±5°C)

1. TR:(100KHz,0.1V);
   PINS:(P2,P3):(J1,J2)=1:1±3%;(P4,P5):(J3,J6)=1:1±3%
   PINS:(P6,P7):(J4,J5)=1:1±3%;(P8,P9):(J7,J8)=1:1±3%
2. LX:(100KHz,100mV,8mA, DC Bias)
   PINS:(P2,P3),(P4,P5)=350uH MINIMUM
   PINS:(P6,P7),(P8,P9)=350uH MINIMUM
3. DCR:
   PINS:(J1,J2),(J3,J6)=1.2Ω MAXIMUM
   PINS:(J4,J5),(J7,J8)=1.2Ω MAXIMUM
4. HIPOT:
   PINS(P2,P3)TO(J1,J2),(P4,P5)TO(J3,J6)=1500VAC FOR 2 SECONDS
   PINS(P6,P7)TO(J4,J5),(P8,P9)TO(J7,J8)=1500VAC FOR 2 SECONDS
5. INSERTION LOSS:
   −1.0dB MAXIMUM AT 1MHz TO 100MHz;
6. RETURN LOSS:
   −18dB MINIMUM AT 1MHz TO 30MHz;
   −12dB MINIMUM AT 60MHz TO 80MHz
   −10dB MINIMUM AT 80MHz TO 100MHz
7. CROSS TALK:
   −30dB MINIMUM AT 1MHz TO 100MHz
8. COMMON TO COMMON MODE REJECTION:
   −30dB MINIMUM AT 1MHz TO 100MHz
   −20dB MINIMUM AT 150MHz

Matrix Electronics Co.,Ltd

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	CHECKED BY: Sam Kuo	DATE : 2019/03/26	PART NO.	MRJG−11T1160TRS
UNIT: mm [inch]	APPROVED BY1: Richard Hsieh	DATE : 2019/03/26	MOLD NO.	NA
	APPROVED BY2: Richard Hsieh	DATE : 2019/03/26	DRAW NO.	
SCALE:1:1 SIZE:A4			SHEET NO.	3 OF 4

GP Component

REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
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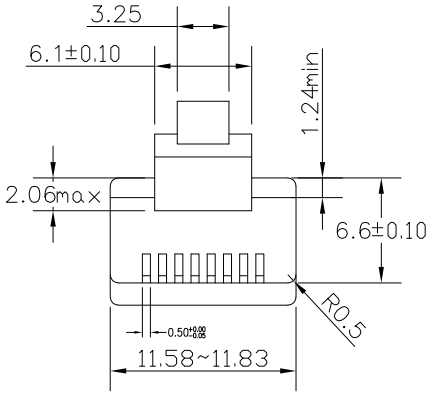
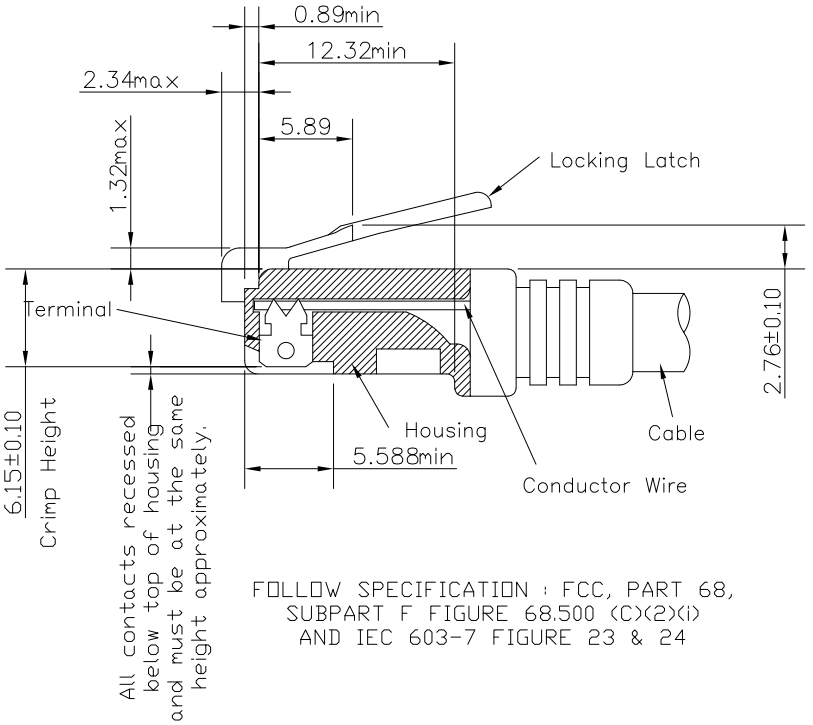
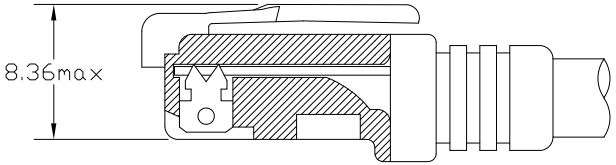


* There must be no damage to housing or locking latch.There must be no nicks or cuts in cable.
* Durability : 750 cycles generally



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)

Matrix Electronics Co.,Ltd

TOLERANCE: X. ±1 / X.X ±0.38 / X.XX ±0.25 / X.XXX ±0.13 / ANGLE: ±3°	DESIGN BY : Hanson Huang	DATE : 2019/03/26	PART NAME: RJ45 CONN,W/LED,10P,8C 100/1000MBPS,FILTER	
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			SHEET NO.	4 OF 4