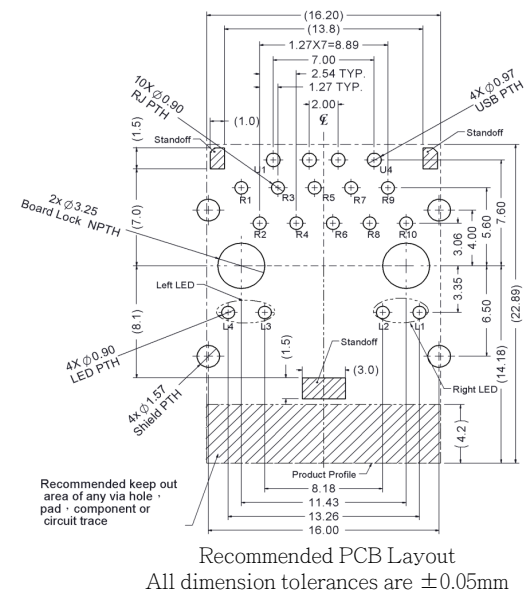
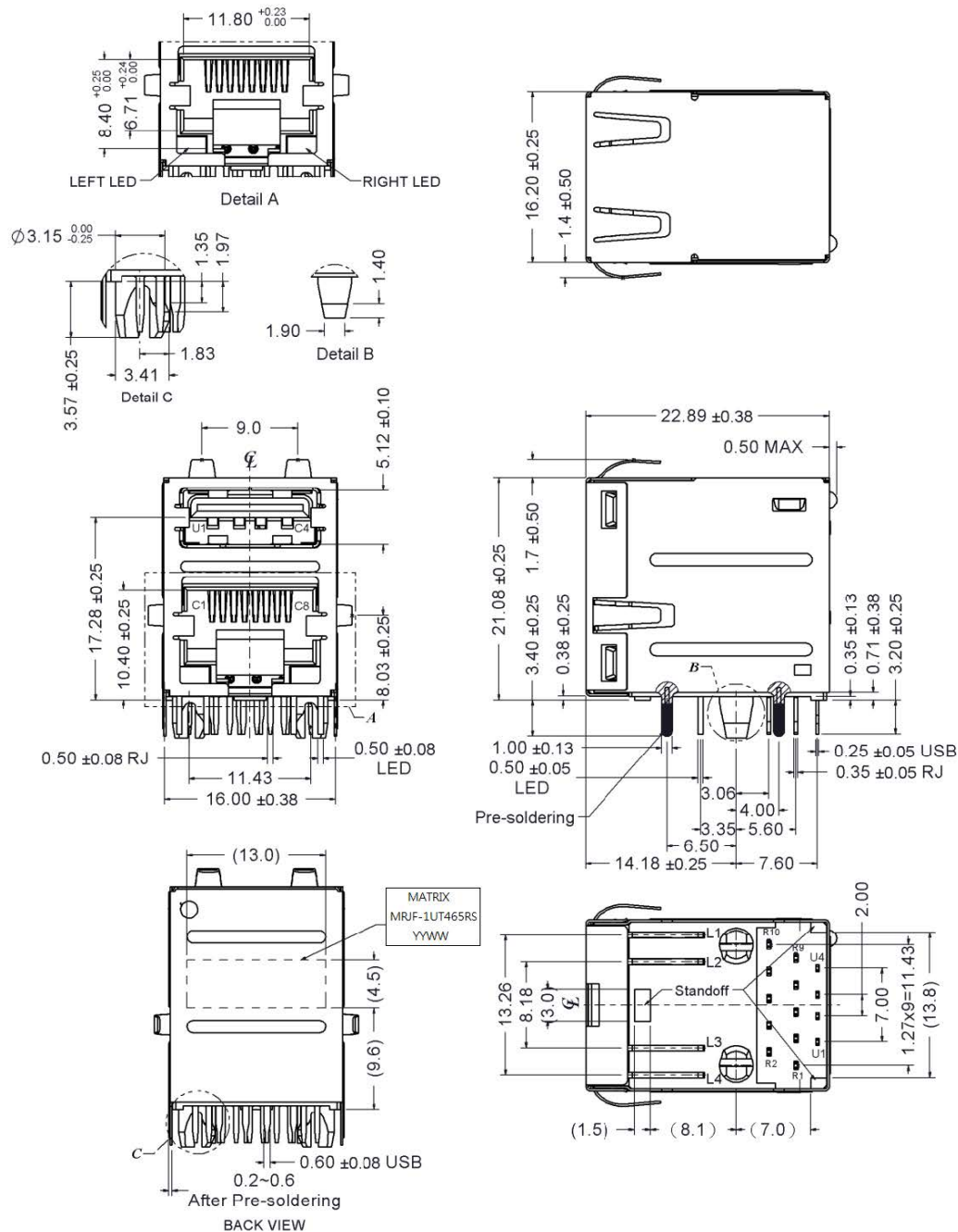


## GP Component

## 1.MECHANICAL:



## NOTES:

## 1.MATERIAL:

Terminal Parts (Underplating : 50 $\mu$ " min. Nickel overall)

1.1RJ Terminal : PH. Bronze, Thickness=0.30mm

Finish : Contact Area : Gold Flash

1.2USB Terminal : PH. Bronze, Thickness=0.25mm

Finish : Contact Area : Gold Flash

Solder Tail : 100 $\mu$ " min. Bright Tin

1.3Input Terminal : Brass, Thickness=0.35mm

Finish : 100 $\mu$ " min. Bright Tin

Plastic Parts &lt;UL94V-0&gt;

1.1RJ Housing : PA6T, Black


1.2USB Housing : PBT, Black

Shield Parts

1.1Front Shield : Stainless steel, Thickness=0.20mm, unplating

1.2Back Shield : Stainless steel, Thickness=0.20mm, Pre-soldering

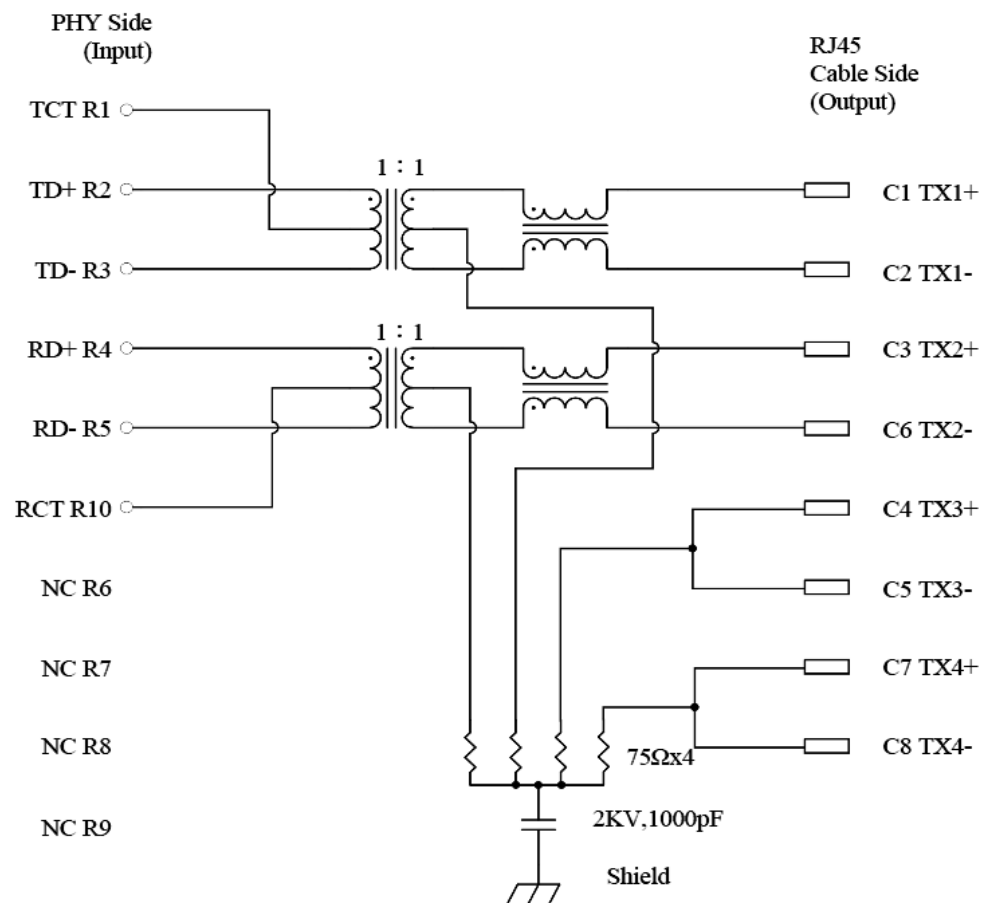
1.3USB Shield : Stainless steel, Thickness=0.25mm, unplating

NO	VARIETY	QTY	METERIAL	REMARK
 Matrix Electronics Co.,Ltd				
TOLERANCE: X:X X:XX $\pm 0.38$ X:XXX $\pm 0.25$ X:XXX $\pm 0.13$ ANGLE: $\pm 3^\circ$		DESIGN BY : Phebe Su	DATE : 2016/04/08	PART NAME: USB 2.0 OVER RJ45 TAB DOWN 10/100 MHZ FILTER
CHECKED BY: Joyce Cho		DATE : 2016/04/08	PART NO.	MRJF-1UT465RS
APPROVED BY1: Richard Hsieh		DATE : 2016/04/08	MOLD NO.	NA
APPROVED BY2: Richard Hsieh		DATE : 2016/04/08	DRAW NO.	
SCALE:1:1 SIZE:A4			SHEET NO.	1 OF 3

## GP Component

REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
A0			Initial	2016/04/08	Phebe Su

2. SCHEMATIC:



ORDER INFORMATION :

Diagram illustrating the naming convention for RJ45 connectors:

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

465 R S

RS : RDHS  
HF : Halogen Free

Series Number

S : SMD  
T : THT

### 3. ELECTRICAL CHARACTERISTICS :

### 3.1 Transmitter filter & Receiver filter

Type : Balance low pass 100Ω impedance

Insertion loss : 1~100 MHz -1.0dB max.

Return loss : 1~30 MHz -18dB min. load 100Ω

30~60MHz-16dB min. load 100Ω

60~80MHz-12dB min. load 100Ω

### 3.2 Common Mode Rejection

@ 1~100 MHz -30dB min.

### 3.3 Cross Talk

@ 1~100 MHz -30dB min.

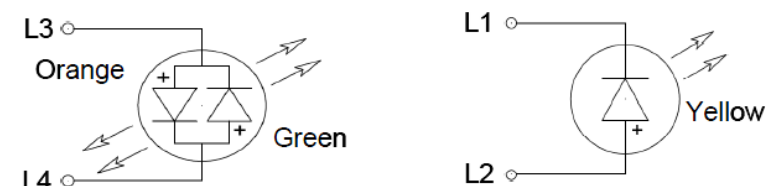
### 3.4 Inductance @100KHz, 0.1V, 8mA DC BIAS

Input(R2-R3), Input(R4-R5):350  $\mu$  H min.


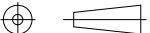
### 3.5 HiPot Test

Input(R2-R3) To Output(C1-C2):1500Vac 60s or 2250Vdc 60s

Input(R4-R5) To Output(C3-C6) 1500Vac 60s or 2250Vdc 60s

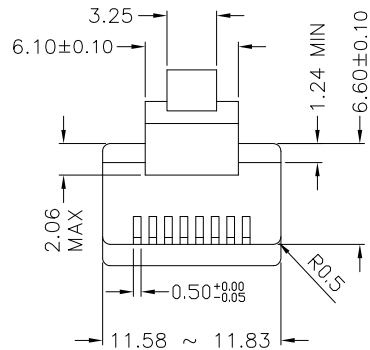


Emitting Color	$\lambda_p$ (nm)	Vf @If=20mA	Ir @Vr=5V
Green	565	1.7 ~2.6 V	10 $\mu$ A max.
Orange	610	1.7 ~2.6 V	10 $\mu$ A max.
Yellow	585	1.7 ~2.6 V	10 $\mu$ A max.

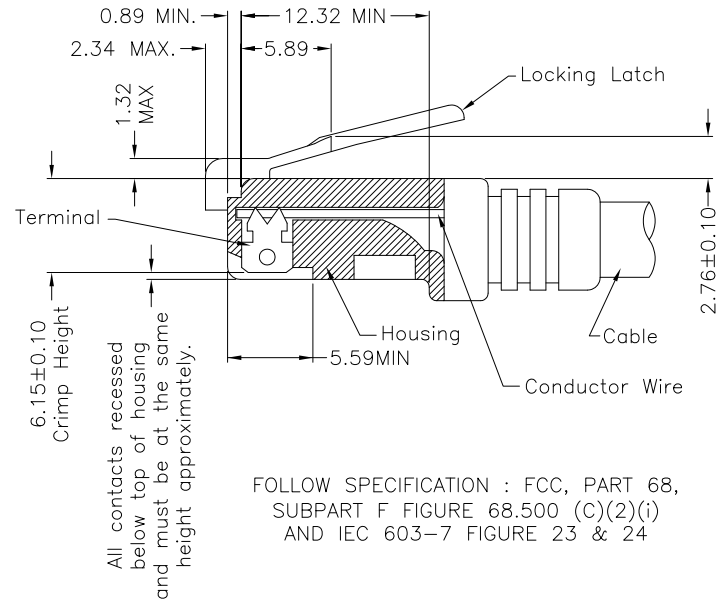
NO	VARIETY	QTY	MATERIAL	REMARK
 <div>Matrix Electronics Co.,Ltd</div>				
<b>TOLERANCE:</b> X.            ±0.38 X.X        ±0.25 X.XX      ±0.13 X.XXX     ±0.1 ANGLE: ±3°		<b>DESIGN BY :</b> Phebe Su	<b>DATE :</b> 2016/04/08	<b>PART NAME:</b> USB 2.0 OVER RJ45 TAB DOWN 10/100 MHZ FILTER
		<b>CHECKED BY:</b> Joyce Cho	<b>DATE :</b> 2016/04/08	<b>PART NO.</b> MRJF-1UT465RS
		<b>APPROVED BY1:</b> Richard Hsieh	<b>DATE :</b> 2016/04/08	<b>MOLD NO.</b> NA
<b>UNIT: mm [inch]</b>		<b>APPROVED BY2:</b> Richard Hsieh	<b>DATE :</b>	<b>DRAW NO.</b>
<b>SCALE:1:1</b>	<b>SIZE:A4</b>	Richard Hsieh	2016/04/08	<b>SHEET NO.</b> 2 OF 3

# GP Component

REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
A0			Initial	2016/04/08	Phebe Su

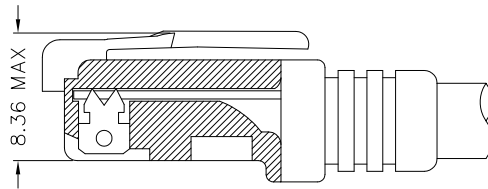


- \* There must be no damage to housing or locking latch. There must be no nicks or cuts in cable.
- \* Durability : 750 cycles generally




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)

NO	VARIETY	QTY	METERIAL	REMARK
<div>  Matrix Electronics Co.,Ltd </div>				
<b>TOLERANCE:</b> X:X X:XX ±0.38 X:XXX ±0.25 X:XXX ±0.13 ANGLE: ±3°		<b>DESIGN BY :</b> Phebe Su	<b>DATE :</b> 2016/04/08	<b>PART NAME:</b> USB 2.0 OVER RJ45 TAB DOWN 10/100 MHZ FILTER
<b>CHECKED BY:</b> Joyce Cho		<b>DATE :</b> 2016/04/08	<b>PART NO.</b>	MRJF-1UT465RS
<b>APPROVED BY1:</b> Richard Hsieh		<b>DATE :</b> 2016/04/08	<b>MOLD NO.</b>	NA
<b>APPROVED BY2:</b> Richard Hsieh		<b>DATE :</b> 2016/04/08	<b>DRAW NO.</b>	
<b>SHEET NO.</b>		3 OF 3		