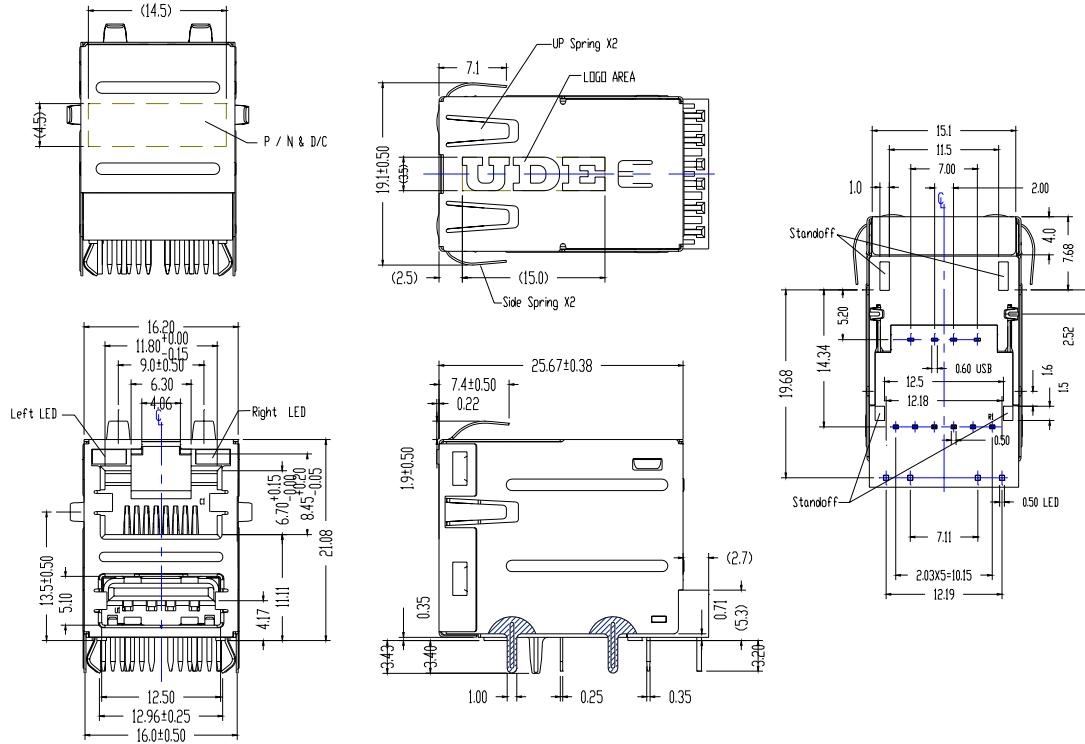
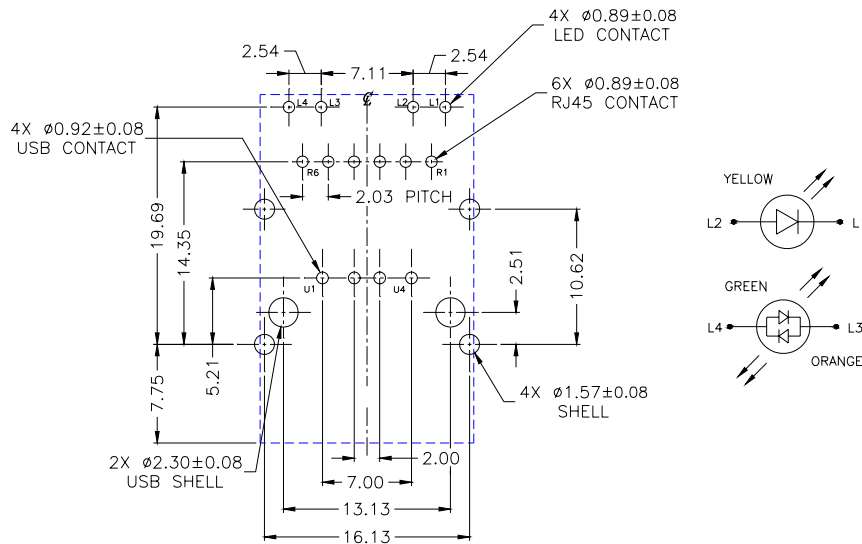


1 MECHANIC DIMENSIONS  
1.1 Dimensions



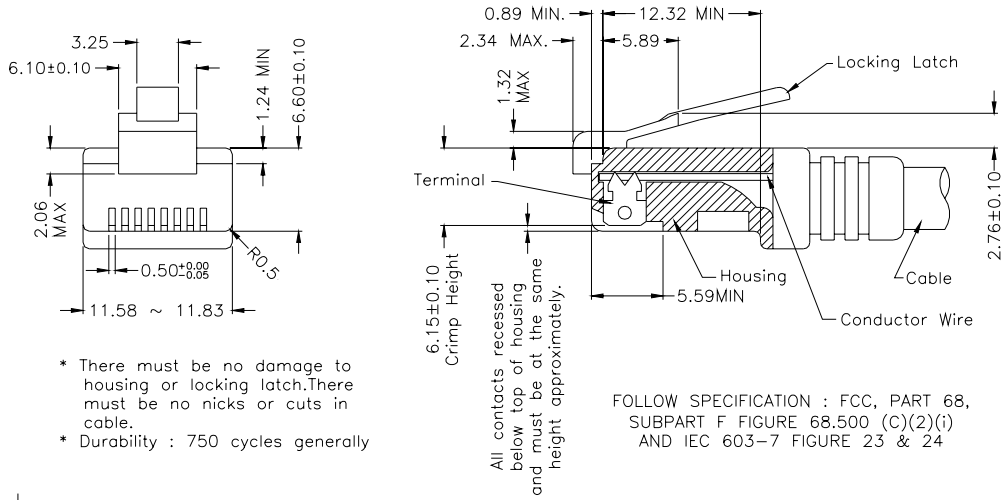
General Tolerance : .X : ±0.25  
.XX : ±0.13

1.2 PCB Layout



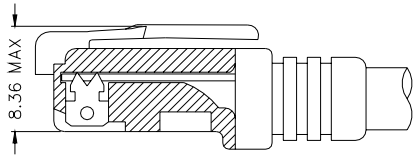
RECOMMENDED PCB LAYOUT  
COMPONENT SIDE  
PCB THICKNESS : 1.60mm  
ALL DIMENSION TOLERANCE ARE ±0.05  
UNLESS OTHERWISE SPECIFIED

### 1.3 RJ PLUG SPECIFICATION



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

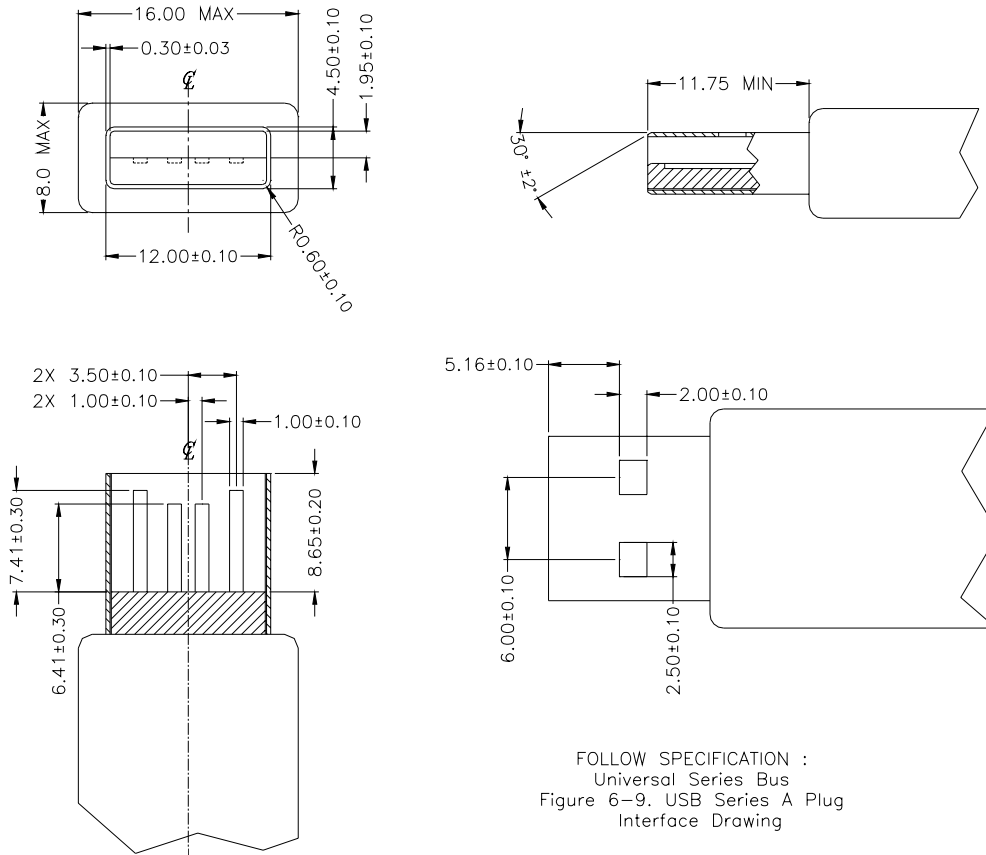
FOLLOW SPECIFICATION : FCC, PART 68,  
SUBPART F FIGURE 68.500 (C)(2)(i)  
AND IEC 603-7 FIGURE 23 & 24



STANDARD MODULAR PLUG ASSEMBLY

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

### 1.4 USB PLUG SPECIFICATION



## 2 REQUIREMENTS

SPEC NO. :		R E V . :	ECN NO. :		PAGE :	2 / 8
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## 2.4 Materials

### 2.4.1 Terminal Parts :

2.4.1.1 RJ Output Terminal : Phosphor Bronze , Thickness=0.30mm

Finish : ( a ) Contact Area : Gold flash

( b ) Solder tail Area : 100 $\mu$  " min. matted Tin

( c ) Underplating : 50~100 $\mu$  " Nickel over all

2.4.1.2 USB Terminal : Phosphor Bronze , Thickness=0.25mm

Finish : ( a ) Contact Area : Gold flash

( b ) Solder tail Area : 100 $\mu$  " min. matted Tin

( c ) Underplating : 50~100 $\mu$  " Nickel over all

2.4.1.3 RJ Input Terminal : Brass , Thickness=0.35mm

Finish : 100 $\mu$  " min. Tin over 50~100 $\mu$  " min. Nickel

2.4.1.4 Case Terminal : Brass , Thickness=0.35mm

Finish : 100 $\mu$  " min. Matted Tin over 50~100 $\mu$  " min. Nickel

### 2.4.2 Plastic Parts :

2.4.2.1 Housing : Thermoplastic , PBT , Black

UL FILE No. : E130155

Grade : 1410

Flame Class : UL94 V-0

2.4.2.2 Spacer : Thermoplastic , PBT

UL FILE No. : E130155

Grade : 1410

Flame Class : UL94 V-0

2.4.2.3 Case : Thermoplastic , PBT

UL FILE No. : E130155

Grade : 1410

Flame Class : UL94 V-0

### 2.4.3 Shell Parts :

2.4.3.1 Front Shell : Stainless, Thickness=0.20mm

2.4.3.2 Back Shell : Stainless, Thickness=0.20mm

Grounding Leg : Pre-soldering

2.4.3.3 Grounding Leg of USB : Brass , Thickness=0.25mm

Finish : 100 $\mu$  " min. Tin over 50~100 $\mu$  " min. Nickel

### 2.4.4 LED Lamp

2.4.4.1 Lens Color : color diffused, white diffused

2.4.4.2 Emitted Color : Green , Yellow, Orange

2.4.4.3 Wave Length : Green 568nm ; Yellow 585nm ; Orange 610nm

2.4.4.4 Power Dissipation: 100mW Max

SPEC NO. :		R E V . :	ECN NO. :		PAGE :	3 / 8
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2.4.4.5 Forward Current : 30mA Max

2.4.4.6 Forward Voltage: 2.2 V Typical

2.4.4.7 Reverse current: 100 uA Max @ 5 V

2.5 Operating and Storage Temperature

2.5.1 Operating Temperature : 0 TO +70

2.5.2 Storage Temperature : -40 TO +85

2.6 RJ45 specifications:

2.6.1 Insulation Resistance: 500M ohm Min

2.6.2 Dielectric Withstanding Voltage: 1000VAC Min

2.7 USB specifications:

2.7.1 Contact Current Rating: 1.5 A Max

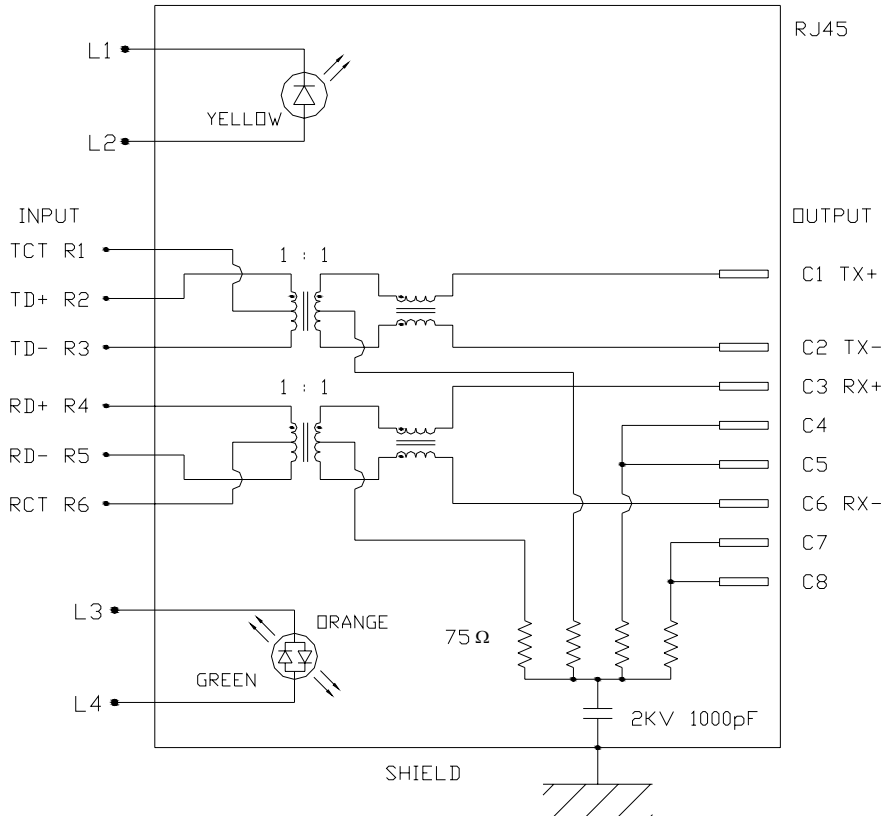
2.7.2 Contact Resistance: 30m ohm Max

2.7.3 Insulation Resistance: 1000M ohm Min

2.7.4 Dielectric Withstanding Voltage: 500VAC Min

### 3 ELECTRICAL CHARACTERISTICS

#### 3.1 RJ45 Schematic



#### 3.2 Transmitter filter & Receiver filter

Type : Balance low pass 100 impedance

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

Return loss : 1~30 MHz -18dB MIN. load 100  
 30~60 MHz -16dB MIN. load 100  
 60~80 MHz -12dB MIN. load 100

#### 3.3 Common Mode Rejection

@ 1~100 MHz -30dB MIN.

#### 3.4 Cross Talk

@ 1~100 MHz -30dB MIN

#### 3.5 INDUCTANCE @ 100KHz, 0.1V, 8mA DC BIAS

Input(R2-R3), Input(R4-R5) : 350μH MIN.

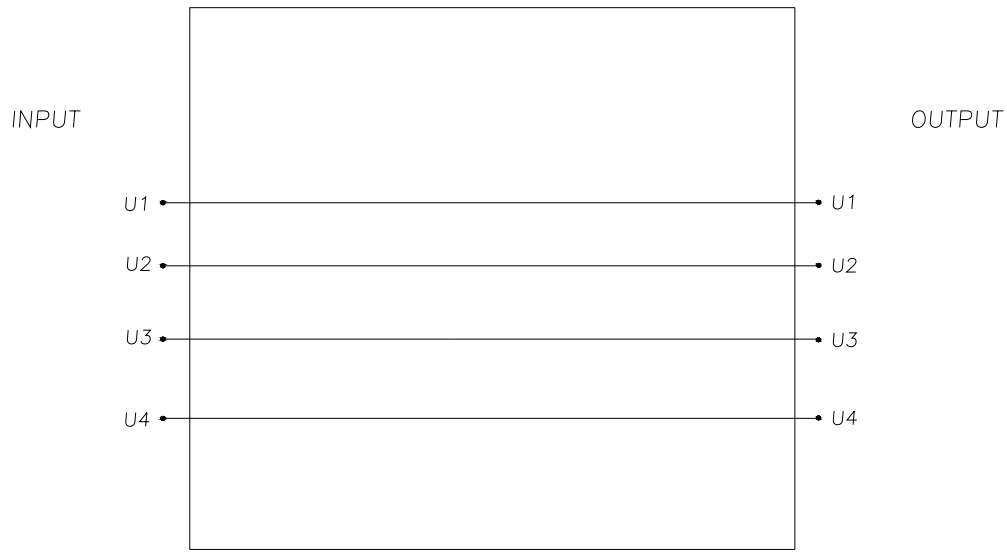
#### 3.6 HiPot TEST

Input(R2-R3) to Output(C1-C2) : 1500VAC, 60sec

Input(R4-R5) to Output(C3-C6) : 1500VAC, 60sec

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3.7 USB Schematic



U1:V<sub>BUS</sub>  
U2:D<sup>-</sup>  
U3:D<sup>+</sup>  
U4:GND

4. ORDER INFORMATION

R U 3 - 2 X X X XXX X  
A B C D E

A : LED Code

	left LED		right LED	
	-L3/+L4	+L3/-L4	-L1/+L2	+L1/-L2
0 :	w/o	w/o	w/o	w/o
1 :	Green		Yellow	
2 :		Green		Yellow
3 :	Green		Green	Yellow
4 :	Yellow		Green	
5 :		Green	Yellow	Green
6 :	Green	Orange	Yellow	
7 :	Yellow		Green	Orange
8 :	Yellow		Orange	Green

B : Spring & Logo Code

		Spring			
		w/o	All	Top	Side
Logo	w/o	K	L	M	N
	w	0	1	2	3

C : Material code

Materials			
	HSG	CASE	SPACER
A	PBT	PBT	PBT
G	HTN	HTN	HTN

D : Schematic type

1D1 : 1D1 Circuit

E : Plating Code

RJ terminal contact area

1: gold flash

Dipping temperature profile

(Note)The measuring point for the specified temperature shall be on the soldered part of the leads

