

# APPROVAL SHEET

To : \_\_\_\_\_

Spec No. : \_\_\_\_\_ Date : \_\_\_\_\_

UDE P/N                      Customer P/N  
RD1-106BAG1A                      \_\_\_\_\_

Description : **RJ45 1x1 w/ Transformer 10/100Base-T w/o LED**  
\_\_\_\_\_

GP : **Green Product**  
\_\_\_\_\_

	Approved	Checked	Prepared
Name Date			

# U D E

湧德電子股份有限公司

*U.D. Electronic Corp.*

No. 62 , 2 sec , Nan Shan Road , Lu-Chu Hsiang , Taoyuan Hsien , Taiwan

台灣省桃園縣蘆竹鄉南山路二段 62 號

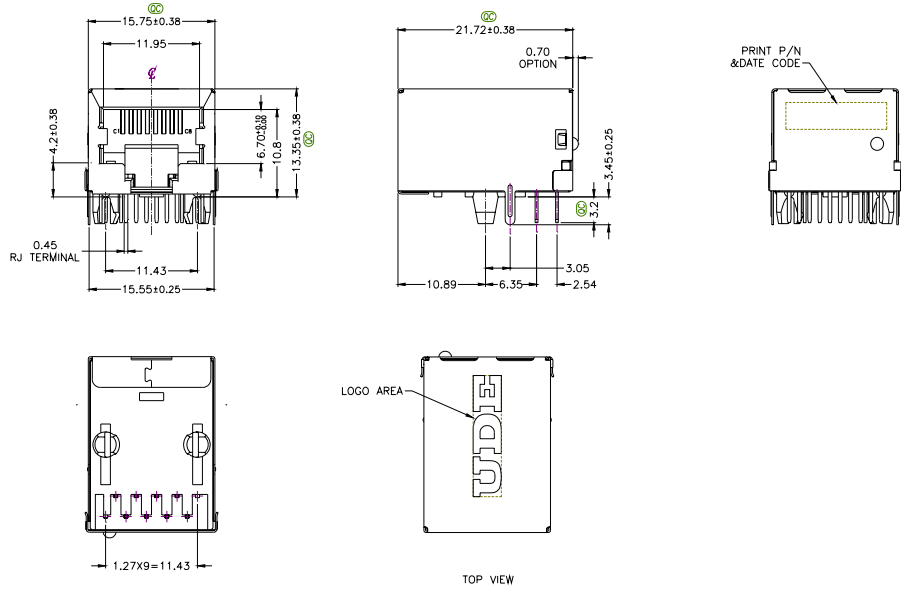
TEL : +886-3-3220737

FAX : +886-3-2125143

Rev : **XA**

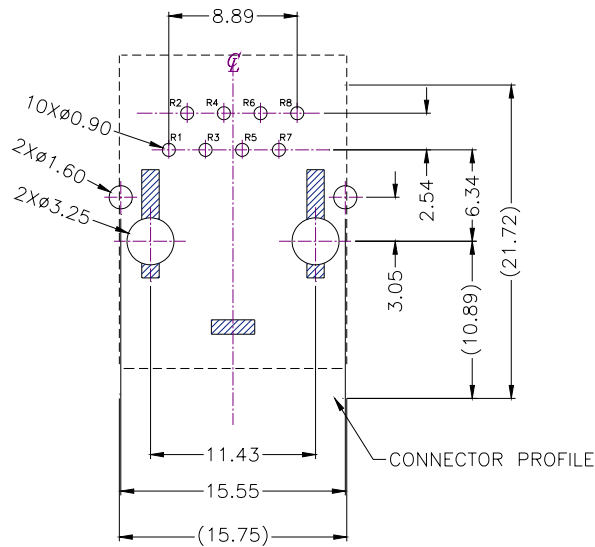
Update Date : **2005/8/19**

1. MECHANIC DIMENSIONS  
Dimensions

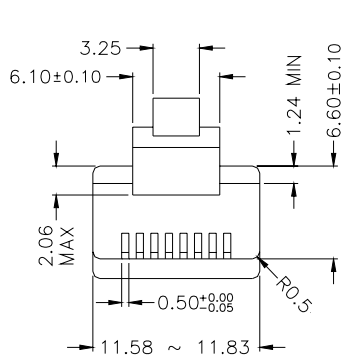


General Tolerance : .X    :±0.25  
                          .XX   :±0.13

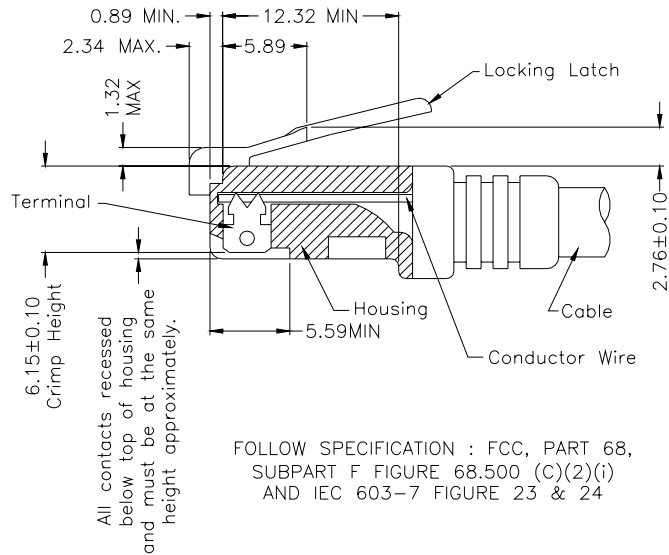
1.1. PCB Layout



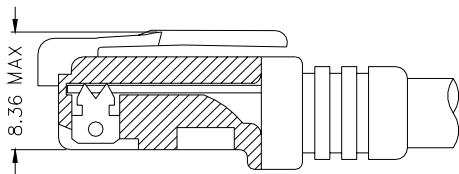
## 1.2 RJ PLUG SPECIFICATION



- \* 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



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

STANDARD MODULAR PLUG ASSEMBLY

## 2. REQUIREMENTS

### 2.1. Design and Construction

Product shall be of design, construction and physical dimensions specified on applicable

### 2.2. Materials

#### 2.2.1. Terminal Parts :

2.2.1.1. RJ Terminal : Phosphor Bronze , Thickness=0.30mm

Finish : ( a ) Contact Area : Gold Flash

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

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

2.2.1.2. Input Terminal : Brass , Thickness=0.35mm

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

2.2.1.3. Link Terminal : Brass , Thickness=0.25mm

SPEC NO. :		REV. : XA	ECN NO. :		PAGE :	2 / 6
------------	--	-----------	-----------	--	--------	-------

Finish : 100μ” min. Tin over 50~100μ” min. Nickel

2.2.2. Plastic Parts :

2.2.2.1. Housing : Thermoplastic , PA46 , Black

UL FILE No. : E47960

Manufacturer : DSM Engineering Plastics

Grade : TE250F6

Flame Class : UL94 V-0

2.2.2.2. Coil Case : Thermoplastic , PA46 , Black

UL FILE No. : E47960

Manufacturer : DSM Engineering Plastics

Grade : TE250F6

Flame Class : UL94 V-0

2.2.3. Shell Parts :

2.2.3.1. Front Shell : Stainless, Thickness=0.20mm

2.2.3.2. Back Shell : Stainless, Thickness=0.20mm

Grounding Leg : Pre-soldering

2.3. Operating and Storage Temperature

2.3.1. Operating Temperature : 0 TO +70

2.3.2. Storage Temperature : -40 TO +85

2.4. RJ45 specifications:

2.4.1. Insulation Resistance: 500MΩMin

2.4.2. Dielectric Withstanding Voltage: 1000VAC Min

2.5. Performance and Test Description

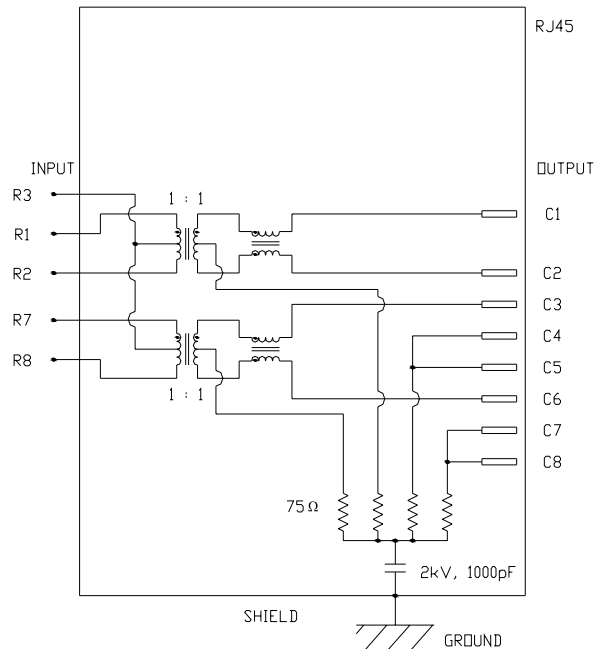
Product is designed to meet electrical, mechanical and environmental performance requirements specified in below table. All tests are performed at ambient environmental conditions per MIL-STD-1344A and EIA-364 unless otherwise specified.

2.6. Packaging and Packing

All parts shall be packaged and packed to protect against physical damage, corrosion and deterioration during shipment and storage.

### 3. ELECTRICAL CHARACTERISTICS

#### 3.1. Schematic



#### 3.2. 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

30~60 MHz -16dB MIN. load 100Ω

60~80 MHz -12dB MIN. load 100Ω

#### 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(R1-R2), Input(R7-R8) : 350μH MIN.

#### 3.6. HiPot TEST

Input(R1-R2) to Output(C1-C2) : 1500VAC, 60sec

Input(R7-R8) to Output(C3-C6) : 1500VAC, 60sec

4. ORDER INFORMATION

R D 1 - 1 X X X XXX X  
A B C D

A: LED Code

W/O LED : 0		RIGHT LED				
		YELLOW	GREEN	ORANGE	G/O	G/Y
LEFT LED	YELLOW	/	4	/	7	/
	GREEN	1	/	/	/	3
	ORANGE	/	/	/	/	/
	G/O	6	/	/	/	/
	G/Y	/	/	/	/	/

B : Spring & Logo Code

		SPRING				
		W/ ALL DIM A=1.0	W/O ALL	TOP ONLY DIM A=1.0	W/ ALL DIM A=2.0	TOP ONLY DIM A=2.0
LOGO	W/O	0	1	2	3	4
	W/	5	6	7	8	9

C : GP code

SIDE LEG	BOARD LOCK OR POST		GREEN PRODUCT	
	BOARD LOCK	POST	BOARD LOCK	POST
REAR SIDE LEG	1	4	B	F
FRONT SIDE LEG	2	5	C	G

D : Schematic type

AG1 : AG1 Circuit

E : Plating Code

RJ terminal contact area

A: Au Flush

Dipping temperature profile

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

