

## 10/100 BASE FILTER WITH DUAL USB 2.0 CONNECTOR

Model NO.: RJLU-023TA1

### Feature:

**RoHS Compliant**

Fully shielded magnetic protect data from internally generated digital noise

Reduces the overall length of the signal path for improved common mode performance

Implements full common mode termination scheme with used and unused twisted pairs

Meets IEEE802.3 Baseline Wander Compensation specification

Integrates high voltage capacitor to chassis ground

Supports all major transceivers with matched turns ration and complete integration of specified termination

Design for 100base-tx transmission over UTP-5 cable

Operating TEMP. range : -40 to +85

Storage TEMP. range : -55 to +125

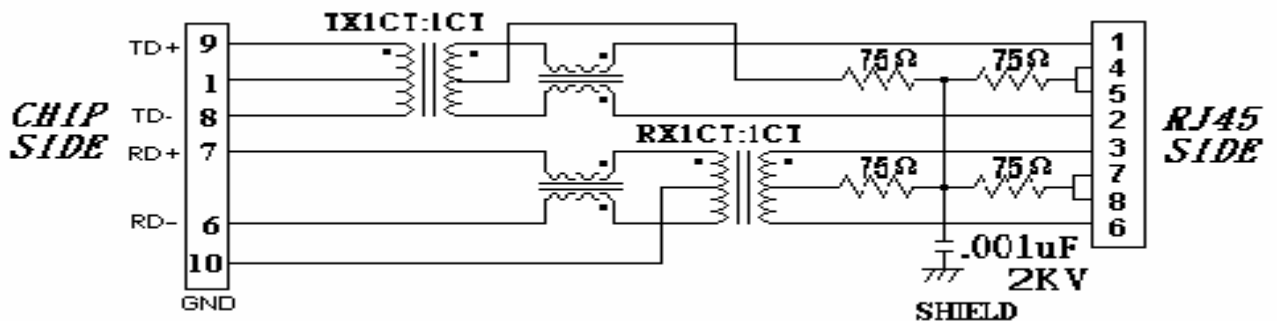
Primary OCL inductance : 350 $\mu$ H MIN. at 100KHz/100mV with 8mA DC bias

With the LED lamp

### Typical Performance Characteristics@ 25°C

Insertion Loss (dB MAX)	Return Loss (dB Min @100 $\pm$ 15 $\Omega$ )				Differential to Common Mode Rejection (dB MIN)	Cross talk (dB MIN)					CMRR (dB MIN)	Isolation Voltage (Vrms min)
	MHz	MHz				MHz	MHz					
1~100	1~30	40	50	60~80	1~100	20	40	60	80	100	1~100	1500
-1.0	-16	-14	-12	-10	-33	-47	-40	-37	-35	-33	-30	

### Schematic : Design on MDI Interface Circuitry



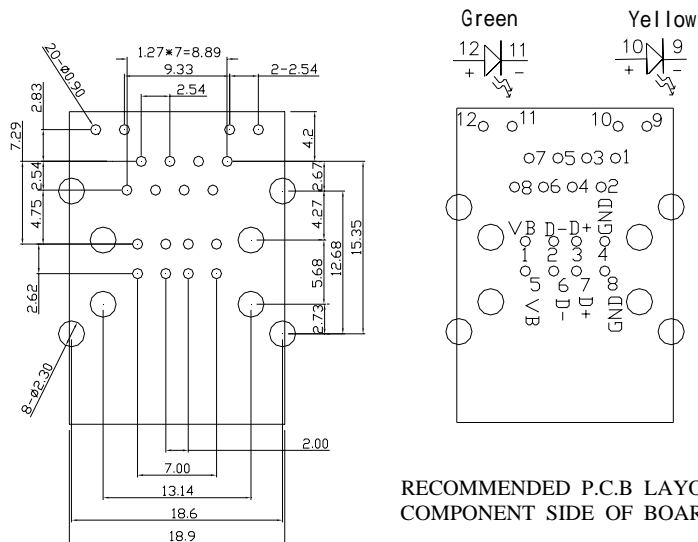
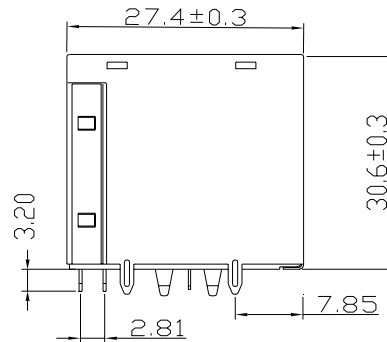
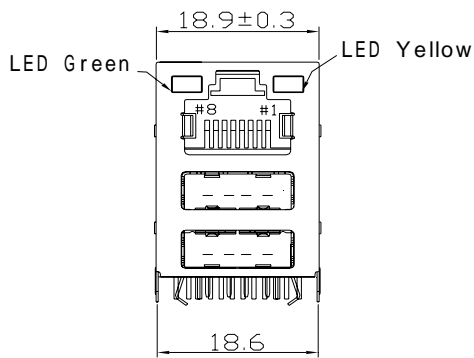
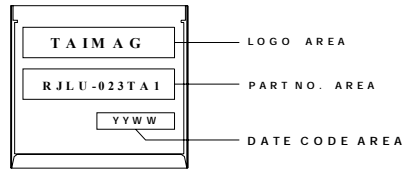


NUMBER:RD-RJ-RJLU-023TA1  
 DATE :2005/09/07 I (REV:A1)

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Dimension: mm

TOLERANCE:±0.15 (Unless otherwise specified)



RECOMMENDED P.C.B LAYOUT  
 COMPONENT SIDE OF BOARD



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## Ordering Information

R J 4 5	R J L U	- 0 2 3 T A 1	S e r i e s N O .
W i t h L E D			
w i t h U S B			

## Requirements :

### 1. Design and Construction

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

### 2. Materials and Finish

#### A. Contact:

**RJ Contact : Phosphor Bronze, Thickness=0.30mm**

**Finish : (a) Contact Area : 6 $\mu$ "min. Gold over 50 $\mu$ "min. Nickel**

**RJ Joint Contact : Brass, Thickness=0.40mm**

**Finish : 80 $\mu$ "min. Sn over 50 $\mu$ "min. Nickel**

**USB Contact : Phosphor Bronze, Thickness=0.25mm**

**Finish : (a) Contact Area : 30 $\mu$ "min. Gold over 50 $\mu$ "min. Nickel**

**LED Joint Contact : Brass, Thickness=0.30mm**

**Finish : 80 $\mu$ "min. Sn over 50 $\mu$ "min. Nickel**

#### B. Plastic Part :

**(1) Set Housing : Thermoplastic, PBT, Black**

**UL FILE NO. : E107536**

**Manufacturer : NAN YA PLASTICS CORP.**

**Grade :1403G3**

**Flame Class : UL 94V-0**

**(2) Insert : Thermoplastic, PBT, Black**

**UL FILE NO. : E107536**

**Manufacturer : MITSUI Petrochemical Industries**

**Grade : CH230N**

**Flame Class : UL 94V-0**



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**(3) Spacer : Thermoplastic, PBT, Black**

**UL FILE NO. : E107536**

**Manufacturer : NAN YA PLASTICS CORP.**

**Grade : 1403G3**

**Flame Class : UL 94V-0**

### **C. Shield Material :**

**Cartridge t=0.25mm**

**10 $\mu$ "-20 $\mu$ " Thick Nickel over 10 $\mu$ "-20 $\mu$ " min Thick Nickel**

### **D. LED Lamp**

**(a) Lens Color : Transparent with color**

**(b) Emitted Color : Green & Yellow**

**(c) View Angle : 65°**

**(d) Wave Length : Green 565nm ; Yellow 585nm**

**(e) Recommended operation current (IF) : 20 mA**

## **3. Ratings**

**(1) Voltage rating : 125 VAC**

**(2) Current rating : 1.5A**

### **Durability :**

**(1) 1000 cycles with no function damage for RJ-45 . Abnormalities shall be present after the test.**

**(2) Low Level Contact Resistance :  $\Delta R=30m\Omega$  maximum (final)**

**(3) The sample should be mounted in the tester and fully mated and unmated 500 times per hour at the rate of 25mm/min. EIA-364-09C.**



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1. Unit weight :20.6 grams
2. package : 50 pcs / tray / 1.044 kgms
3. Carton : 400 pcs / 8 layers of tray
4. Gross weight : 8.964 kgms

### Package drawing:

