

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

Model NO.: RJLU-012TA1

### CROSS REFERECE:

#### 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

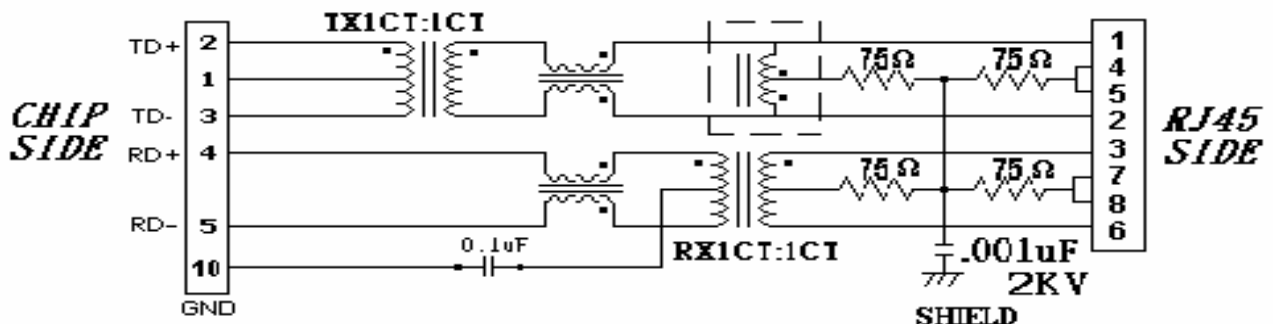
Primary OCL inductance : 350μH MIN. at 100KHz/100mV with 8mA DC bias

With the LED lamp

### Typical Performance Characteristics@ 25°C

Insertion Loss (dB MAX)	Return Loss (dB Min @100±15Ω)				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



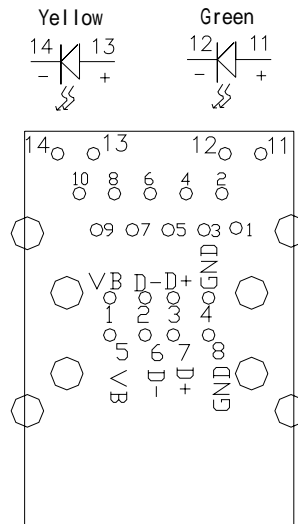
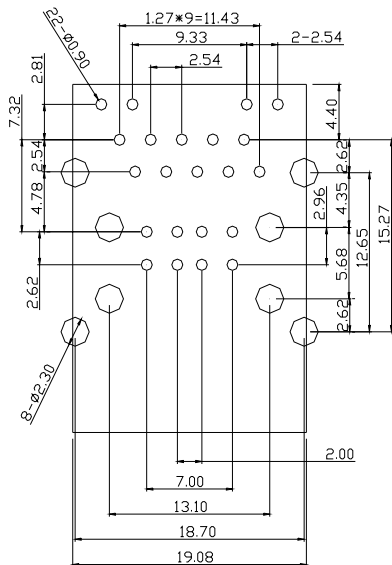
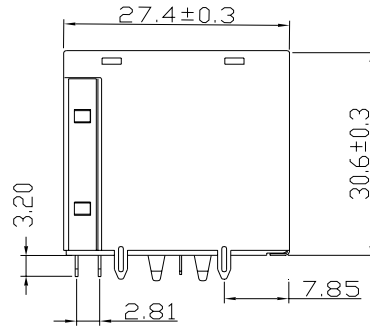
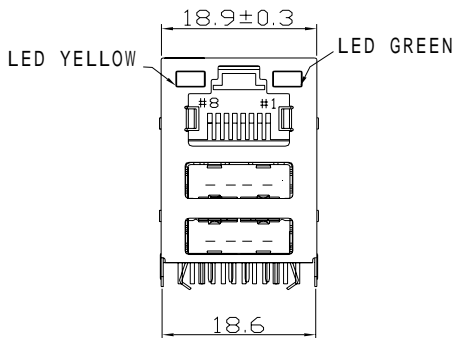
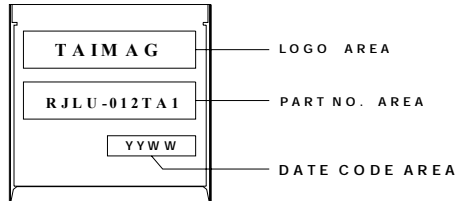


NUMBER:RD-SDRJLU-012TA1  
DATE :2005/09/06 – I (REV:A1)

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**Dimension:** mm

**TOLERANCE:**±0.15 (Unless otherwise specified)



RECOMMENDED P.C.B LAYOUT  
COMPONENT SIDE OF BOARD



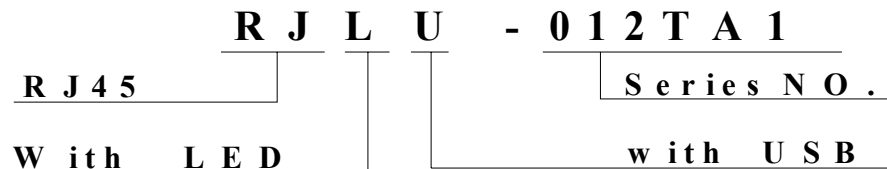
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### Ordering Information



### 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 : 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 : Contact Area : 30 $\mu$ "min. Gold over 50 $\mu$ "min. Nickel**

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

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

##### B. Plastic Part :

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

**UL FILE NO. : E107536**

**Manufacturer : SHIKONG SYNTHETIC FIBERS CORP.**

**Grade : E202G30BK**

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

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

**UL FILE NO. : E107536**

**Manufacturer : SHIKONG SYNTHETIC FIBERS CORP.**

**Grade : E202G30BK**

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



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(3) Spacer : Thermoplastic, PBT, Black

UL FILE NO. : E107536

Manufacturer : SHIKONG SYNTHETIC FIBERS CORP.

Grade : E202G30BK

Flame Class : UL 94V-0

### C. Shield Material :

Cartridge t=0.25mm

10 $\mu$ ”-20 $\mu$ ” Thick Nickel over Brass

### 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:

