



NUMBER:RD-RJ-SDRJLU-010TA1
 DATE :2005/09/06 I (REV:A1)

10/100 BASE FILTER WITH DUAL USB 2.0 CONNECTOR

Model NO.: RJLU-010TA1

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

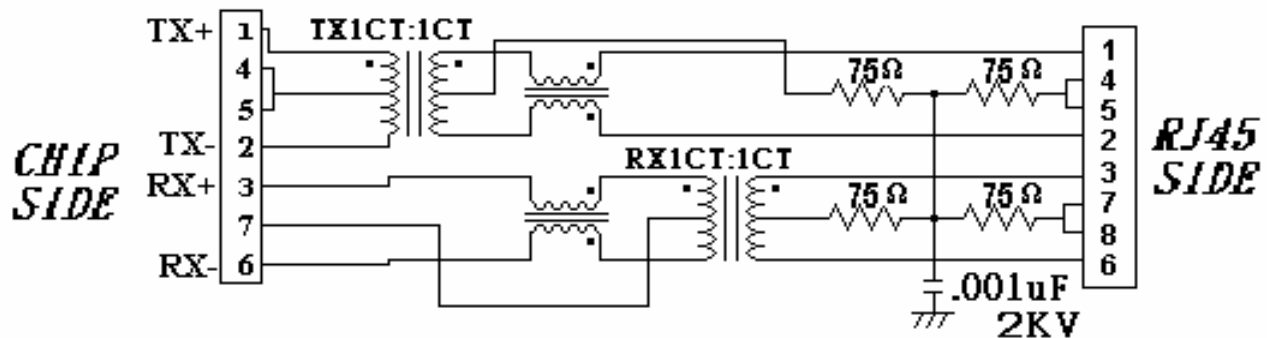
Primary OCL inductance : 350 μ H MIN. at 100KHz/100mV with 8mA DC bias

With the LED lamp

Typical Performance Characteristics@ 25°C

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

Schematic : Design on MDI Interface Circuitry



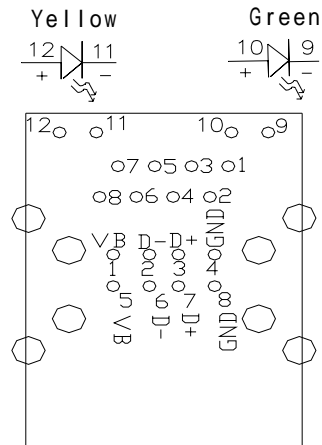
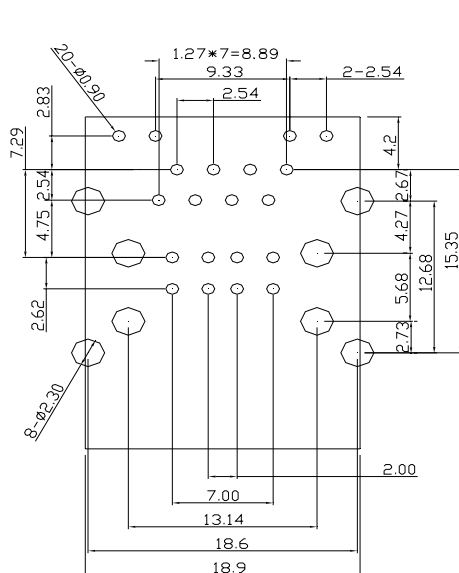
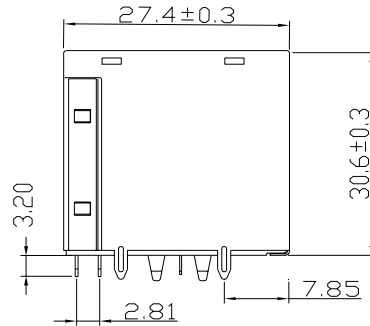
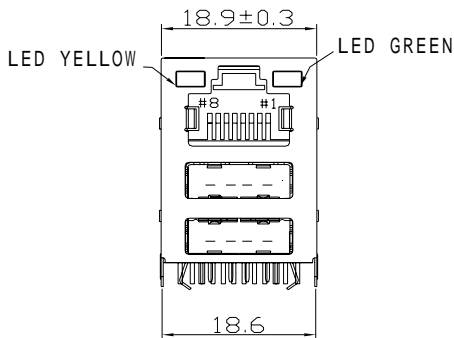
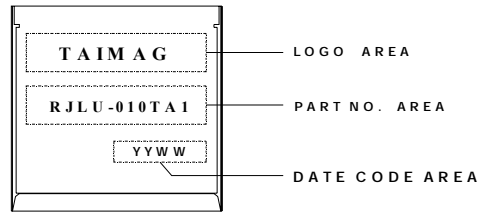


NUMBER:RD-RJ-SDRJLU-010TA1
DATE :2005/09/06 I (REV:A1)

Model NO.: RJLU-010TA1

Dimension: mm

TOLERANCE:±0.15 (Unless otherwise specified)



**RECOMMENDED P.C.B LAYOUT
COMPONENT SIDE OF BOARD**



NUMBER:RD-RJ-SDRJLU-010TA1
DATE :2005/09/06 I (REV:A1)

MODEL NO : RJLU-010TA1

Ordering Information

| | | | |
|----------------------|----------------|----------------------|--------------------------|
| | R J L U | - 0 1 0 T A 1 | |
| R J 4 5 | | | 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 μ "min. Gold over 50 μ "min. Nickel

RJ Joint Contact : Brass, Thickness=0.20mm

Finish : 80 μ "min. Sn over 50 μ "min. Nickel

USB Contact : Phosphor Bronze, Thickness=0.25mm

Finish : (a) Contact Area : 30 μ "min. Gold over 50 μ "min. Nickel

LED Joint Contact : Brass, Thickness=0.20mm

Finish : 80 μ "min. Sn over 50 μ "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.



NUMBER:RD-RJ-SDRJLU-010TA1
DATE :2005/09/06 I (REV:A1)

Grade : E202G30BK

Flame Class : UL 94V-0

(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 μ "-20 μ " 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.



NUMBER:RD-RJ-SDRJLU-010TA1
DATE :2005/09/06 I (REV:A1)

Model NO.: RJLU-010TA1

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:

