

Single 10/100 BASE-TX Filtered Connector Module MODEL NO. : RJLB-001TC1

Features

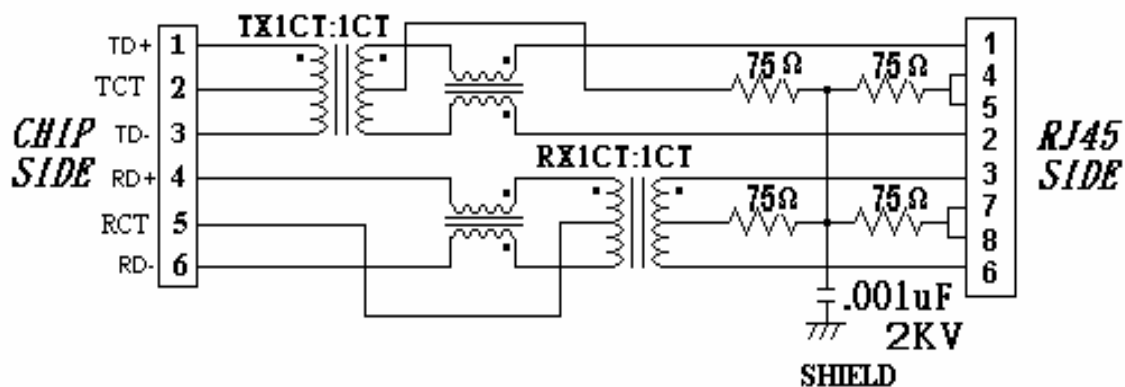
RoHS Compliant

- Fully shielded magnetics 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:350uH min AT100KHz/0.1Vrms 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 | -35 | -47 | -40 | -37 | -35 | -33 | -30 | |

Schematic Design on MDI Interface Circuitry



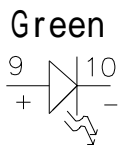
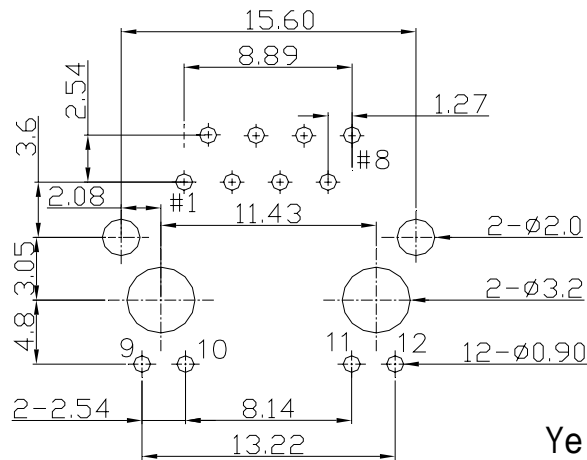
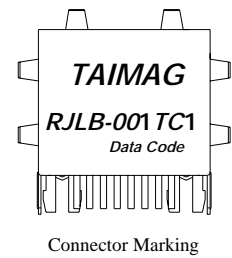
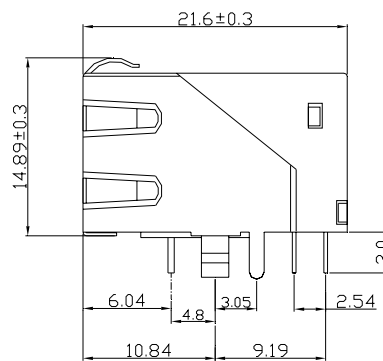
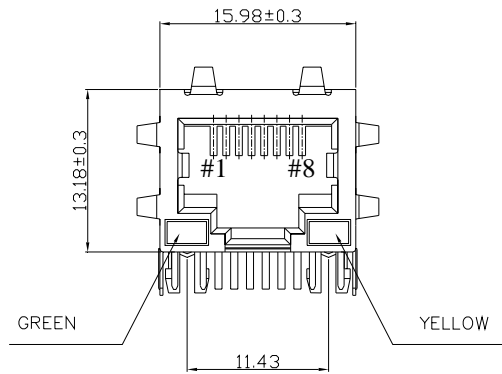


NUMBER : RD-SDRJLB-001TC1
DATE :2005/09/09 -I(REV:A1)

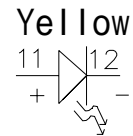
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Dimension: mm

TOLERANCE : ± 0.15 (unless otherwise specified)



RECOMMENDED P.C.B LAYOUT
COMPONENT SIDE OF BOARD

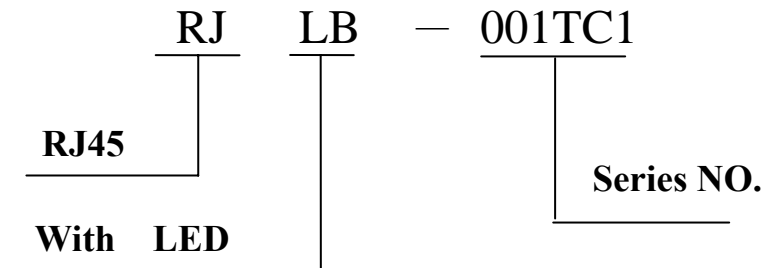




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Ordering Information



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 μ "min. Gold over 50 μ "min. Nickel

RJ Joint Contact : Brass, Thickness=0.3mm

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

LED Joint Contact : Brass, Thickness=0.50mm

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.

Grade : E202G30BK

Flame Class : UL 94V-0

(3) Spacer : Thermoplastic, PBT, Black

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C. Shield Material :

Cartridge $t=0.25\text{mm}$

$10\mu\text{''}-20\mu\text{''}$ 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 : $\Delta R=30\text{m}\Omega$ 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.