

Single 10/100 BASE-TX Filtered Connector Module MODEL NO. : RJL12-002LC1

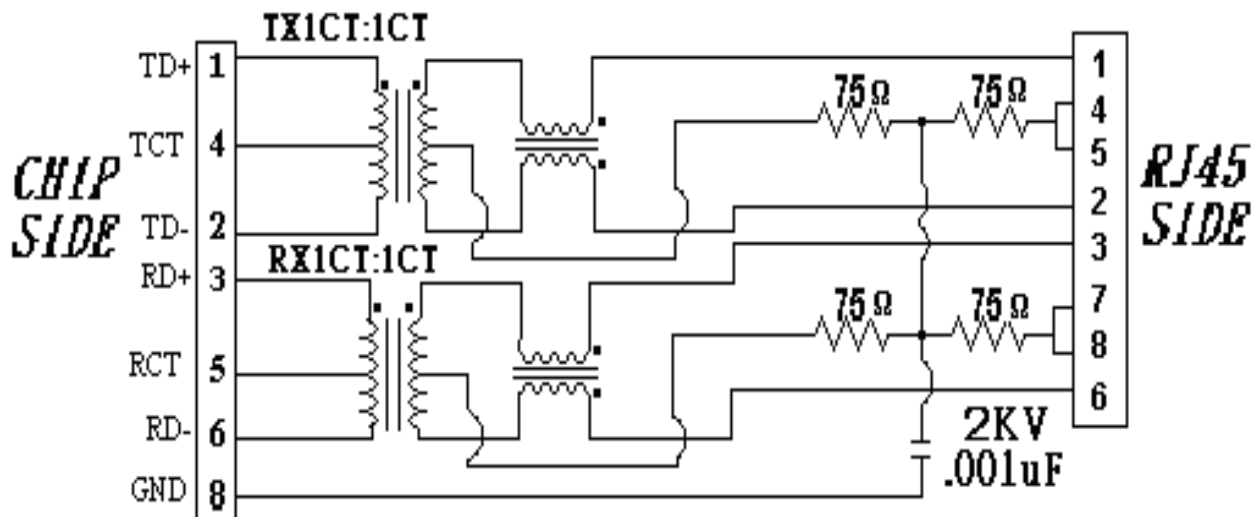
Features :

- ⊙ 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°C to +85°C
- ⊙ Storage TEMP. range: -55°C to + 125°C
- ⊙ Primary OCL inductance: 350μH MIN. at 100KHz/0.1Vrms with 8mA DC bias.

Typical Performance Characteristics

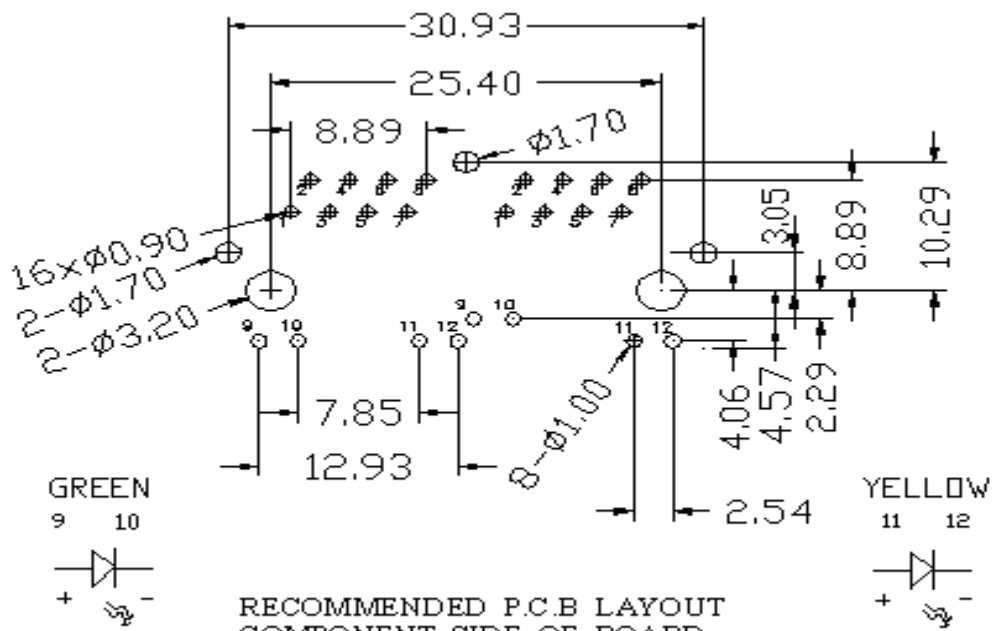
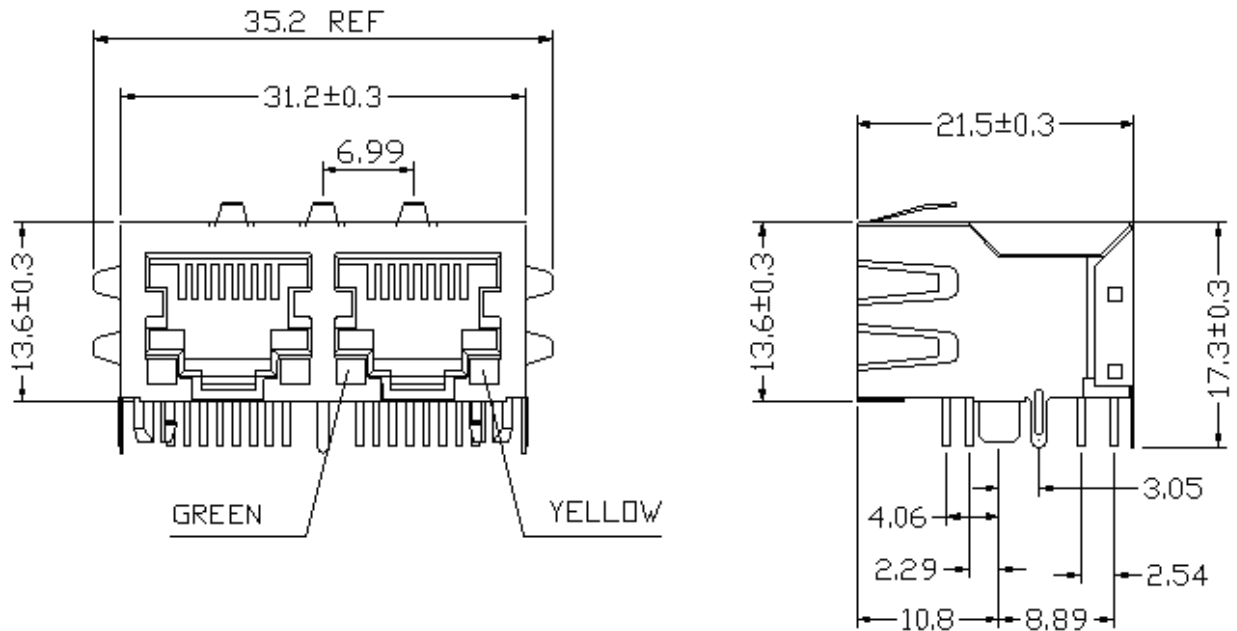
| Insertion Loss (dB MAX) | Return Loss (dB Min @100±15Ω) | | | | Differential to Common Mode Rejection (dB MIN) | Cross talk (dB MIN) | | | | | CMRR (dB MIN) | Isolation Voltage (Vrms min) |
|----------------------------|----------------------------------|-----|-----|-------|---|------------------------|-----|-----|-----|-----|------------------|------------------------------------|
| | MHz | MHz | MHz | MHz | | MHz | MHz | MHz | MHz | MHz | | |
| 1~100 | 1~30 | 40 | 50 | 60~80 | 1~100 | 20 | 40 | 60 | 80 | 100 | 1~100 | 1500 |
| -1.1 | -16 | -14 | -12 | -10 | -33 | -47 | -40 | -37 | -35 | -33 | -30 | |

Schematic: Design on MDI Interface Circuitry



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



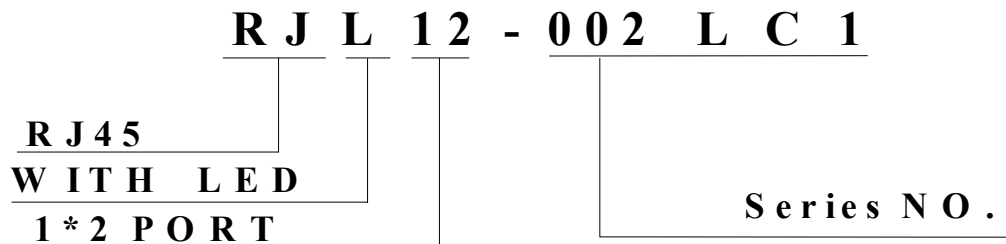


NUMBER:RD-SD-RJL12-002LC1

DATE :2009/09/16-R (REV:A1)

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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=0.35mm

Finish : Contact Area :6 μ "min. Gold over 50 μ "min. Nickel

RJ Joint Contact : Brass, Thickness=0.30mm

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

LED Joint Contact : SPCC, Thickness=0.50mm

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

B. Plastic Part :

(1) Set Housing : Thermoplastic, LCP, Black

UL FILE NO. : E106764

Manufacturer : POLYPLASTICS CO LTD.

Grade : E130i(d)(e)

Flame Class : UL 94V-0

(2) Insert : Thermoplastic, LCP, Black

UL FILE NO. : E106764

Manufacturer : POLYPLASTICS CO LTD.

Grade : E130i(d)(e)

Flame Class : UL 94V-0

(3) Spacer : Thermoplastic, LCP, Black

UL FILE NO. : E106764

Manufacturer : POLYPLASTICS CO LTD.

Grade : E130i(d)(e)

Flame Class : UL 94V-0



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C. Shield Material :

Cartridge $t=0.25\pm 0.05$ mm

30 μ "MIN 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

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 : 10.3 grams
2. package : 50 pcs / tray / 0.522 kgms
3. Carton : 400 pcs / 8 layers of tray
4. Gross weight : 4.482 kgms

Package drawing:

