

## Single 10/100 BASE-TX Filtered Connector Module MODEL NO. : RJL-005YC1

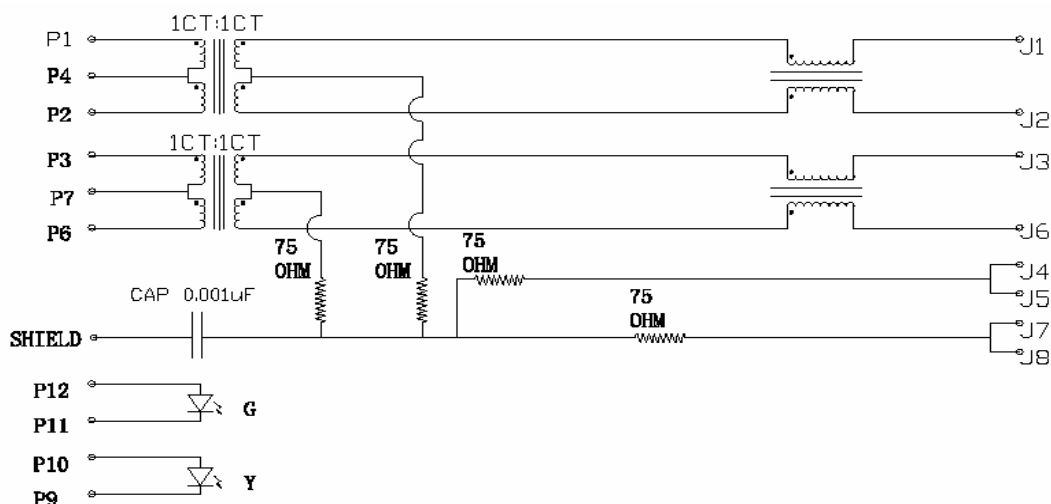
### Features:

- ⊙ 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: 0°C to +70°C
- ⊙ Storage temp range: -55°C to + 125°C
- ⊙ Primary OCL inductance: 350uH MIN at 100KHz/0.1Vrms with 8mA DC bias.
- ⊙ With the LED lamp.

### Typical Performance Characteristics @ 25°C

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

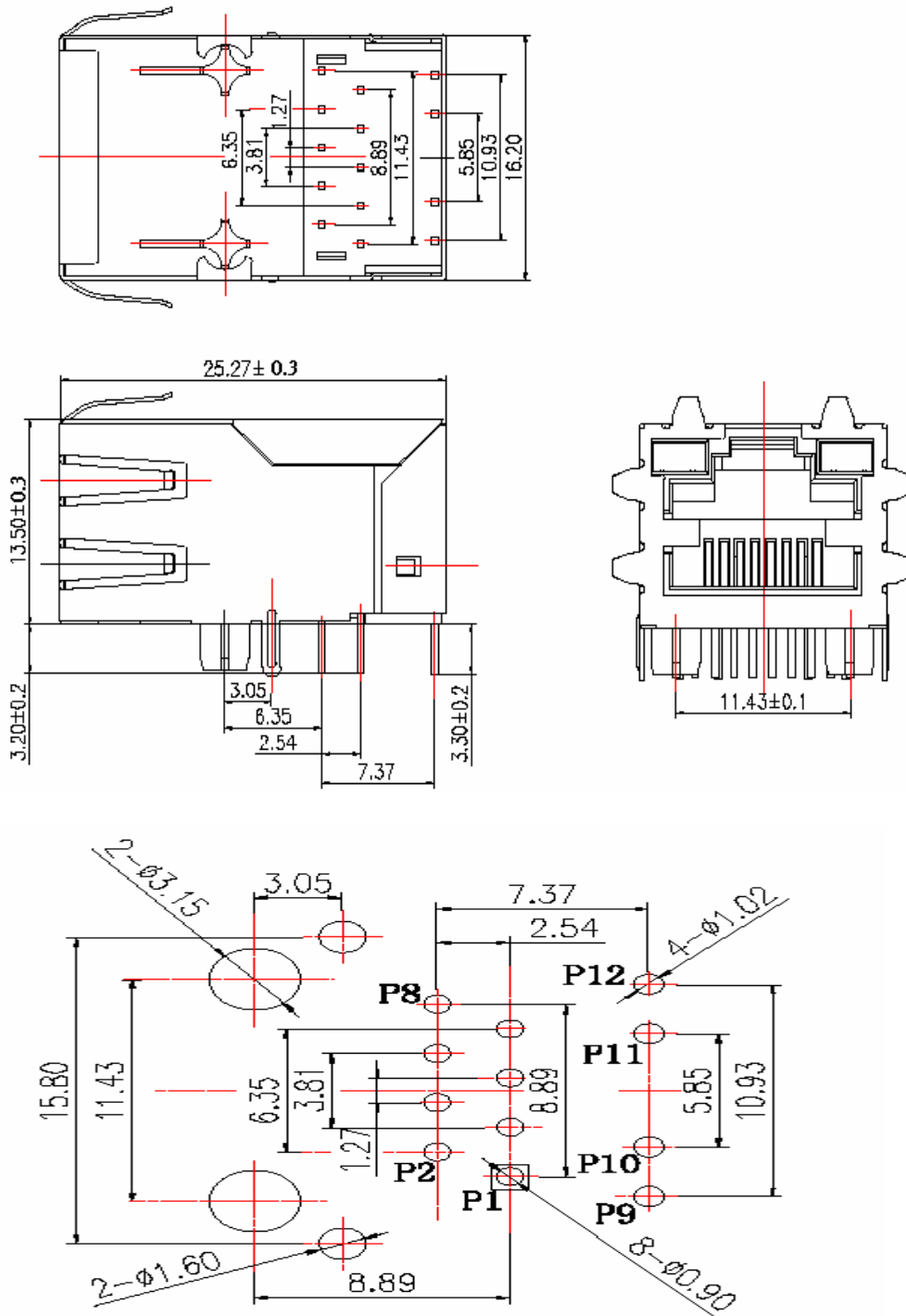
### Schematic: Design on MDI Interface Circuitry



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**Dimension:** mm

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



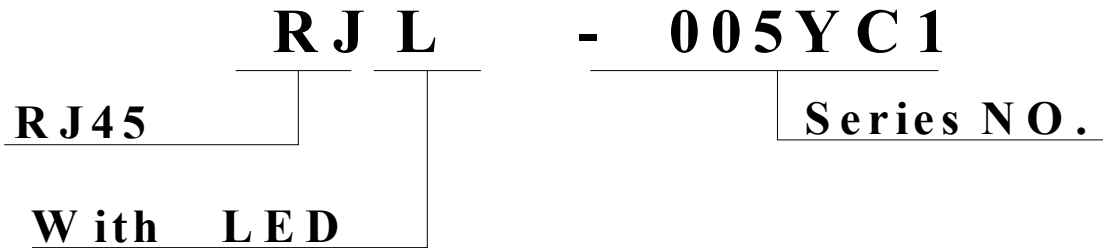
RECOMMENDED P.C.B LAYOUT  
COMPONENT SIDE OF BOARD



NUMBER:RD-SD-TS-50009-1 (YH)  
DATE :2006/05/18 -H(REV:A1)

**MODEL NO. : RJL-005YC1**

**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=0.36±0.01mm**

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

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

**Finish : 80μ”min. Sn over 50 μ”min. Nickel**

**LED Joint Contact : Brass, Thickness=0.50mm**

**Finish : 80μ”min. Sn over 50 μ”min. Nickel**

**B. Plastic Part :**

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

**UL FILE NO. : E205196**

**Manufacturer : SINO HERO INDUSTRIES LTD.**

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

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

**UL FILE NO. : E205196**

**Manufacturer : SINO HERO INDUSTRIES LTD.**

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

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

**UL FILE NO. : E205196**

**Manufacturer : SINO HERO INDUSTRIES LTD.**

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

**C. Shield Material :**

**Cartridge t=0.23mm**

**30 μ”MIN Thick Nickel over Brass**



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### **D. LED Lamp**

- (a) Lens Color : Transparent with color**
- (b) Emitted Color : Green,Orange & Green**
- (c) View Angle : 65°**
- (d) Wave Length : Green 565nm ; Yellow 590nm**
- (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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<b>REV.</b>	<b>Revision Description</b>	<b>DATE</b>
A1	First Release	2006/05/18