

## Single 10/100 BASE-TX Filtered Connector Integrated LED (PoE) MODEL NO. : RJPLB-203TC1

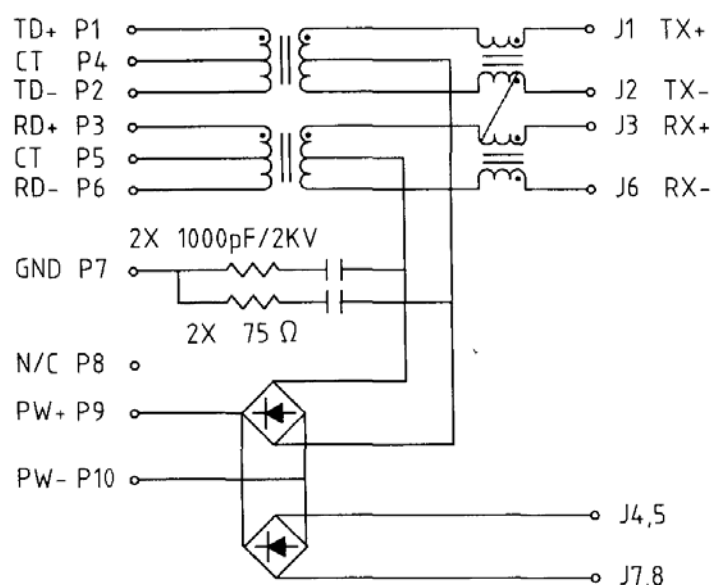
### Features:

- ◎ 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 8mA DC bias

### 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					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	

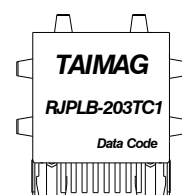
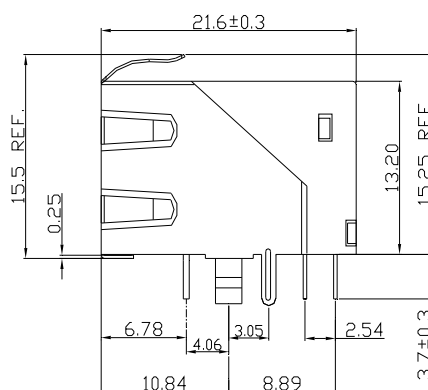
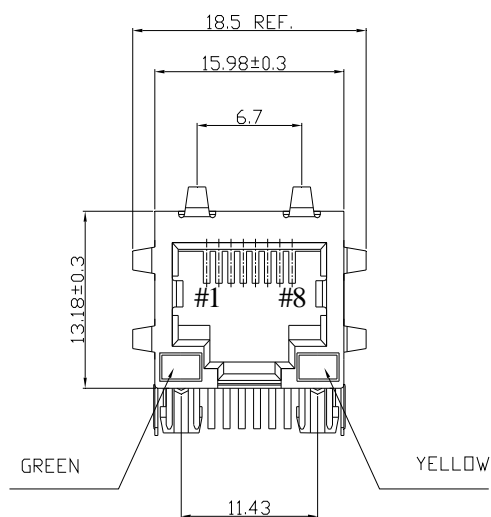
### Schematic: Design on MDI Interface Circuitry



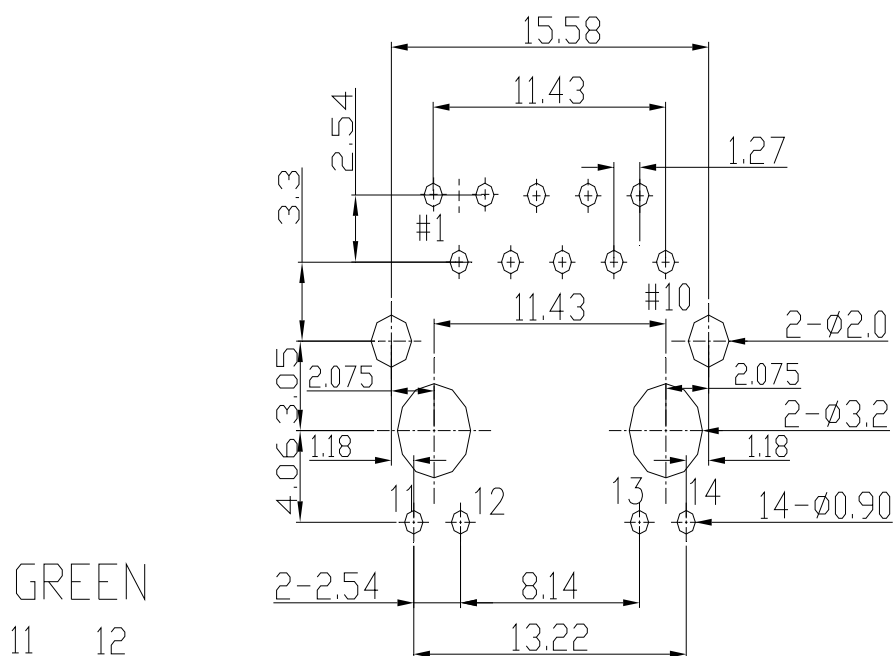
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**Dimension: mm**

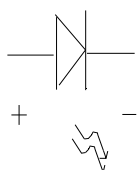
**TOLERANCE:  $\pm 0.15$  (unless otherwise specified)**



Connector Marking

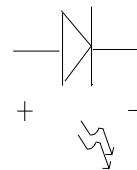


GREEN  
11 12



RECOMMENDED P.C.B LAYOUT  
COMPONENT SIDE OF BOARD

YELLOW  
13 14





NUMBER:RD-SDRJLBP-203TC1  
DATE : 2008/02/04 R(REV:A4)

## MODEL NO. : RJPLB-203TC1

### Ordering Information

R J		P	L B	-	2 0 3 T C 1	
R J 4 5						Series N O .
P o E				W i t h	L E D	

## 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 : SPCC, Thickness=0.3mm

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

LED Joint Contact : SPCC, Thickness=0.50mm

Finish : 80 $\mu$ "min. Sn over 50 $\mu$ "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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## **MODEL NO. : RJPLB-203TC1**

**Manufacturer : SHIKONG SYNTHETIC FIBERS CORP.**

**Grade : E202G30BK**

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

### **C. Shield Material :**

**Cartridge t=0.25mm**

**10μ"-20μ" Thick Nickel over Brass**

### **D. LED Lamp**

**(a) Lens Color: Transparent with color**

**(b) Emitted Color: Green & Yellow**

**(c) Viewing Angle: 60°**

**(d) Dominant Wavelength: Green 570nm ; Yellow 585nm**

**(e) Forward Current / Reverse Voltage : Green 30 mA /(5V) ; Yellow 20 mA /(5V)**

**(f) Material : Green (GaP/GaP) ; Yellow (GaAsP/GaP)**

## **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 :5.7 grams
2. package : 100 pcs / tray / 0.61 kgms
3. Carton : 1000 pcs / 10 layers of tray
4. Gross weight : 6.6455 kgms

### Package drawing:

