

## Single 10/100/1000 BASE-TX Filtered Connector Module MODEL NO. : TJLG-001TA1

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**

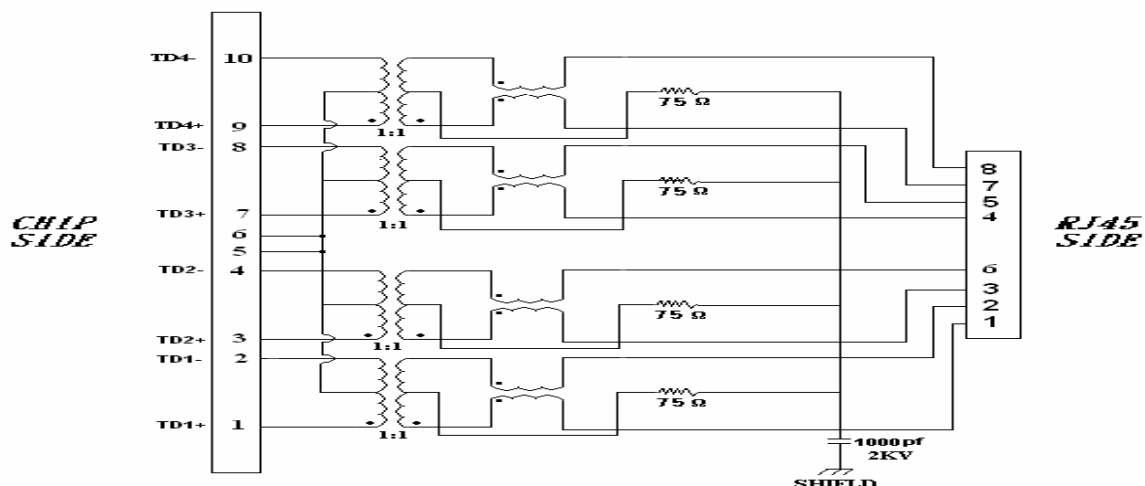
◎ **Storage TEMP. range: -55 to + 125**

- Primary OCL inductance: 350 $\mu$ H MIN. at 100KHz/0.1Vrms with 8mA DC bias
- With the LED lamp.

### Typical Performance Characteristics @25

Insertion Loss (dB MAX)	Return Loss (dB Min @100 $\Omega$ $\pm$ 15 $\Omega$ )				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	

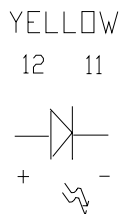
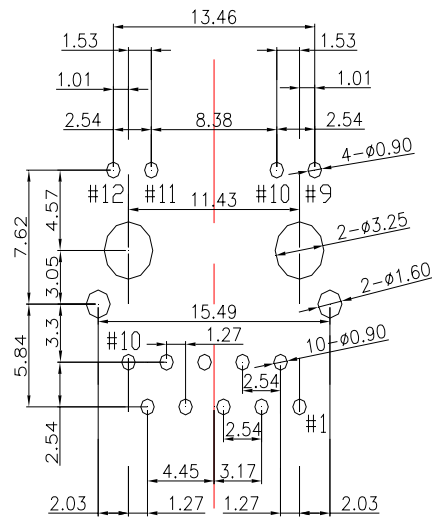
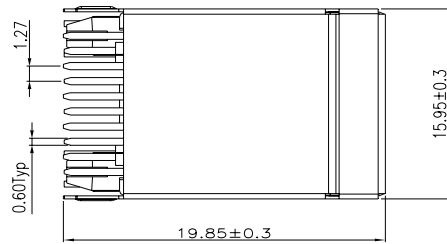
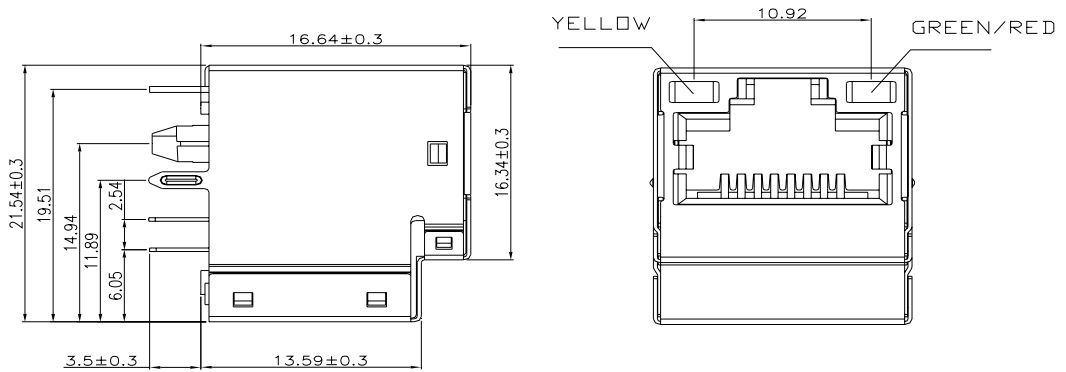
### Schematic Design on MDI Interface Circuitry



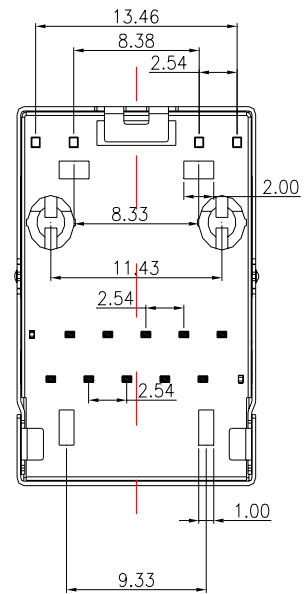
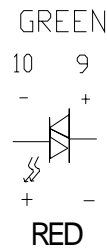
## MODEL NO. : TJLG-001TA1

Dimension: mm

TOLERANCE:±0.15 (unless otherwise specified)



P.C.B. LAYOUT  
TOP VIEW





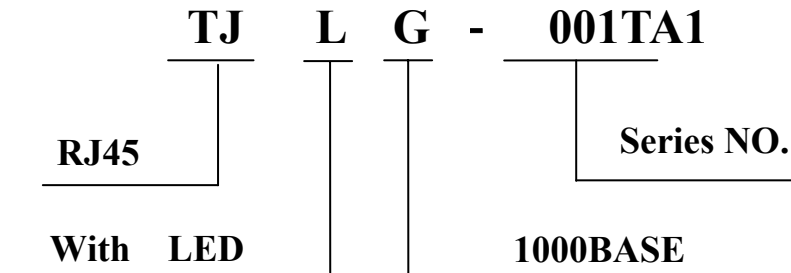
NUMBER:RD-SD-TJLG-001TA1  
DATE : 2006/11/09 R(REV:A1)

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## MODEL NO. : TJLG-001TA1

### 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 : 5 $\mu$ "min. Gold over 50  $\mu$ "min. Nickel

RJ Joint Contact : SPCC, Thickness=0.30mm

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

LED Joint Contact : Brass, Thickness=0.50mm

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

UL FILE NO. : E107536

Manufacturer : SHIKONG SYNTHETIC FIBERS CORP.

Grade : E202G30BK

Flame Class : UL 94V-0



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## **MODEL NO. : TJLC-001TA1**

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

**Cartridge  $t=0.25\text{mm}$**

**$10\ \mu\text{m}$ - $20\ \mu\text{m}$  Thick Nickel over Brass**

### **D. LED Lamp**

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

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

**(c) View Angle :  $65^\circ$**

**(d) Wave Length : Yellow 585nm ;Green 565nm ;Red 635nm**

**(e)Recommended operation current (IF) : 10 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.**

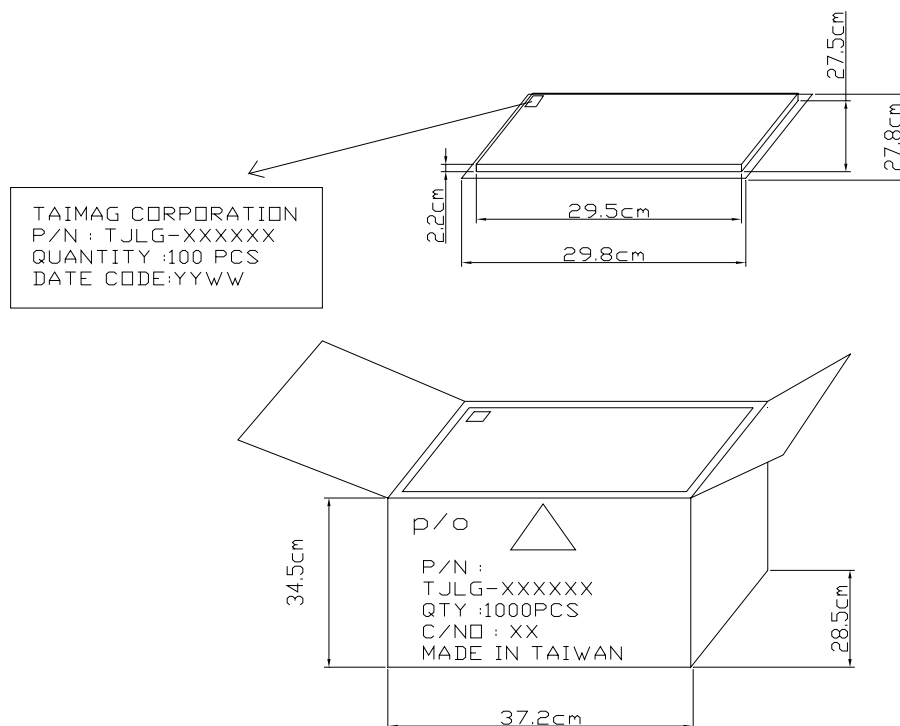
**(2)Low Level Contact Resistance :  $\Delta R=30\text{m}\Omega$  maximum (final)**

**(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.**

## Model NO.: TJLG-001TA1

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:





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**MODEL NO. : TJLG-001TA1**

<b>REV.</b>	<b>Revision Description</b>	<b>DATE</b>
A1	First Release	2006/11/09