

## Single 10/100 BASE-TX Filtered Connector Module MODEL NO. : RJL-301LC1

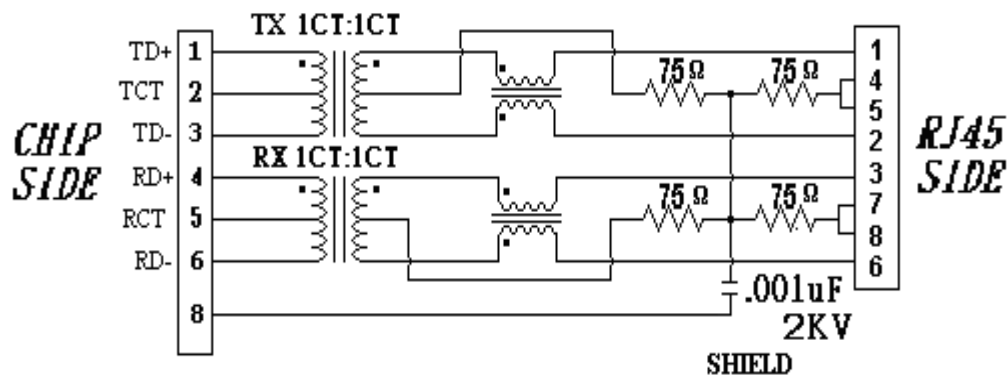
### Features

- ⊙ 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
- ⊙ With the LED lamp

### 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					
1~100	1~30	40	50	60~80	1~100	20	40	60	80	100	1~100	1500
-1.0	-16	-14	-12	-10	-33	-47	-40	-37	-35	-33	-30	

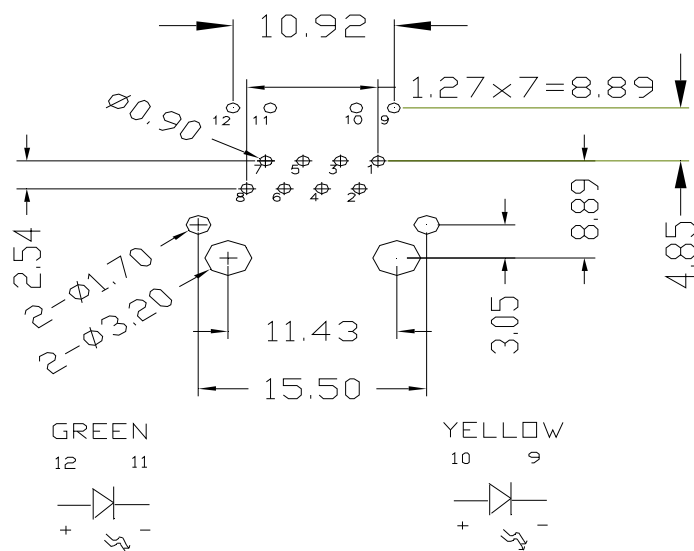
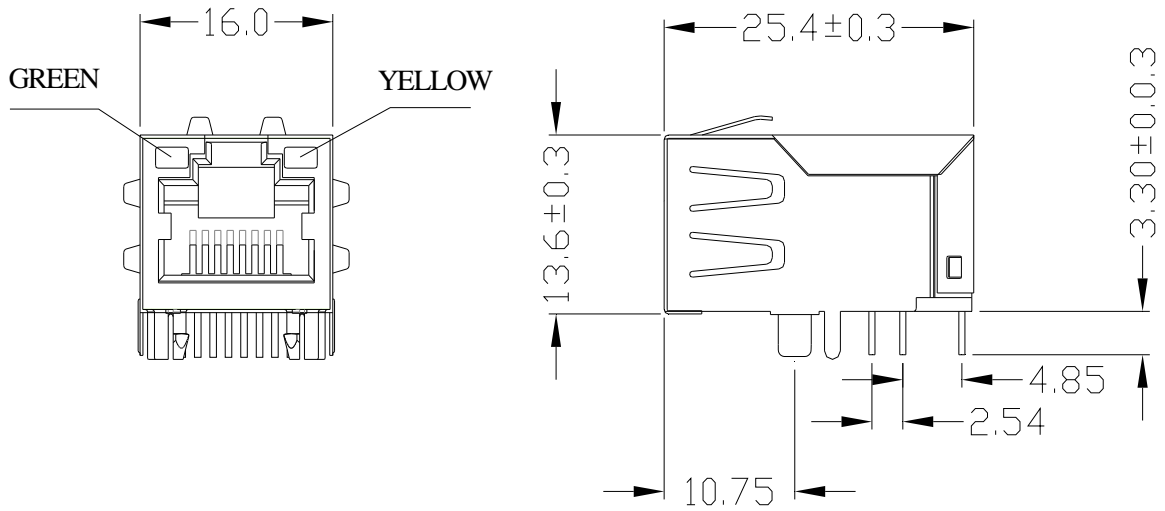
### Schematic : Design on MDI Interface Circuitry



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**Dimension:** mm

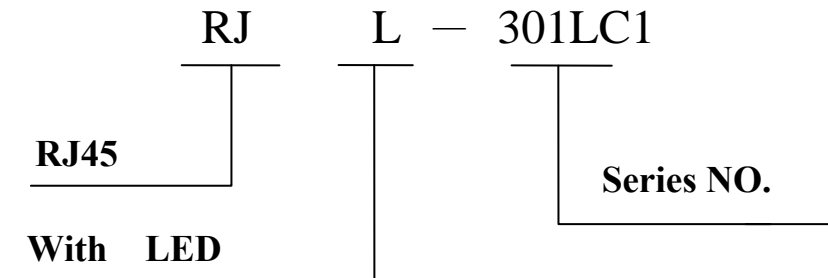
**TOLERANCE:±0.15 (unless otherwise specified)**



RECOMMENDED P.C.B LAYOUT  
COMPONENT SIDE OF BOARD

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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 $\mu$ "min. Gold over 50 $\mu$ "min. Nickel**

**RJ Joint Contact : Brass, Thickness=0.35mm**

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

**LED Joint Contact : SPCC, Thickness=0.30mm**

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

##### B. Plastic Part :

**(1) Set Housing : Thermoplastic, Nylon 66 Black**

**UL FILE NO. : E130155**

**Manufacturer : POLYPLASTICS CO LTD.**

**Grade : 6410G5**

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

**(2) Insert : Thermoplastic, Nylon 66 Black**

**UL FILE NO. : E130155**

**Manufacturer : POLYPLASTICS CO LTD.**

**Grade : 6410G5**

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

**(3) Spacer : Thermoplastic, Nylon 66 Black**

**UL FILE NO. : E130155**

**Manufacturer : POLYPLASTICS CO LTD.**

**Grade : 6410G5**

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



NUMBER : RD-SDR JL-301LC1  
DATE :2008/10/16 -R(REV:A1)

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### C. Shield Material :

Cartridge  $t=0.20\text{mm}$

10 $\mu$ "-20 $\mu$ " Thick Nickel over Brass

### D. LED Lamp

(a) Lens Color : Transparent with color

(b) Emitted Color : Green & Yellow

(c) View Angle : 60°

(d) Wave Length : Green 570nm ; Yellow 585nm

(e) Forward Current / Reverse Voltage :

Green 30 mA /(5V) ; Orange 40 mA /(5V) ; Yellow 20 mA / (5V)

### 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.: RJL-301LC1

1. Unit weight :7.9 grams
2. package : 50 pcs / tray / 435 kgms
3. Carton : 600 pcs / 12 layers of tray
4. Gross weight : 5.765 kgms

### Package drawing:

