

## Single 10/100BASE-TX Filtered RJ45 Connector Module MODEL NO. : RJL-043LC2

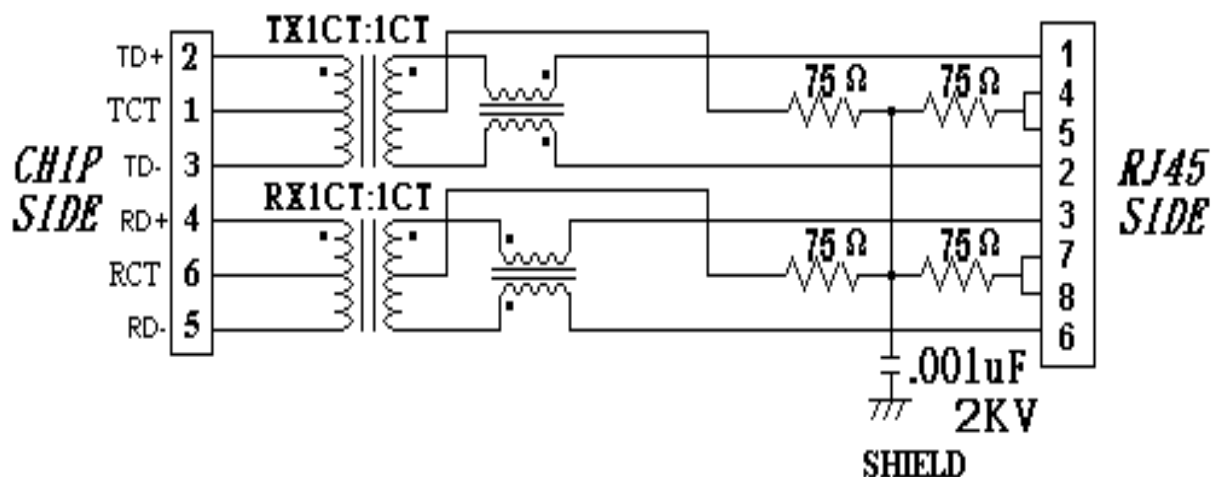
### Features

- ⊙ 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: -40°C to + 80°C
- ⊙ Primary OCL inductance: 350μH MIN. at 100KHz/0.1Vrms with 8mA DC bias
- ⊙ Mating /Unmating Force :5 LBS Max.
- ⊙ With the LED lamp
- ⊙ Plug TI Jack Retention Force:10LBS Min.
- ⊙ Insulation Resistance:1000M OHMS Min.@100VDC
- ⊙ Dielectric Withstanding Voltage:1000 VAC Rms Min./One Minute.
- ⊙ Wave Soldering Temperature:260/ 5 Seconds Max..

### Typical Performance Characteristics

Insertion Loss (dB MAX)	Return Loss (dB Min @100±15Ω)			Cross talk (dB MIN)	CMRR (dB MIN)	Isolation Voltage (Vrms min)
MHz	MHz			MHz	MHz	1500
1~100	1~30	30~60	60~80	1-100	1~100	
-1.0	-18	-16	-12	-30	-30	

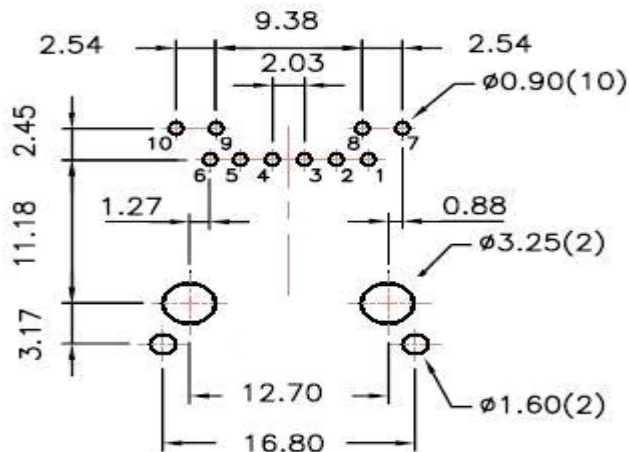
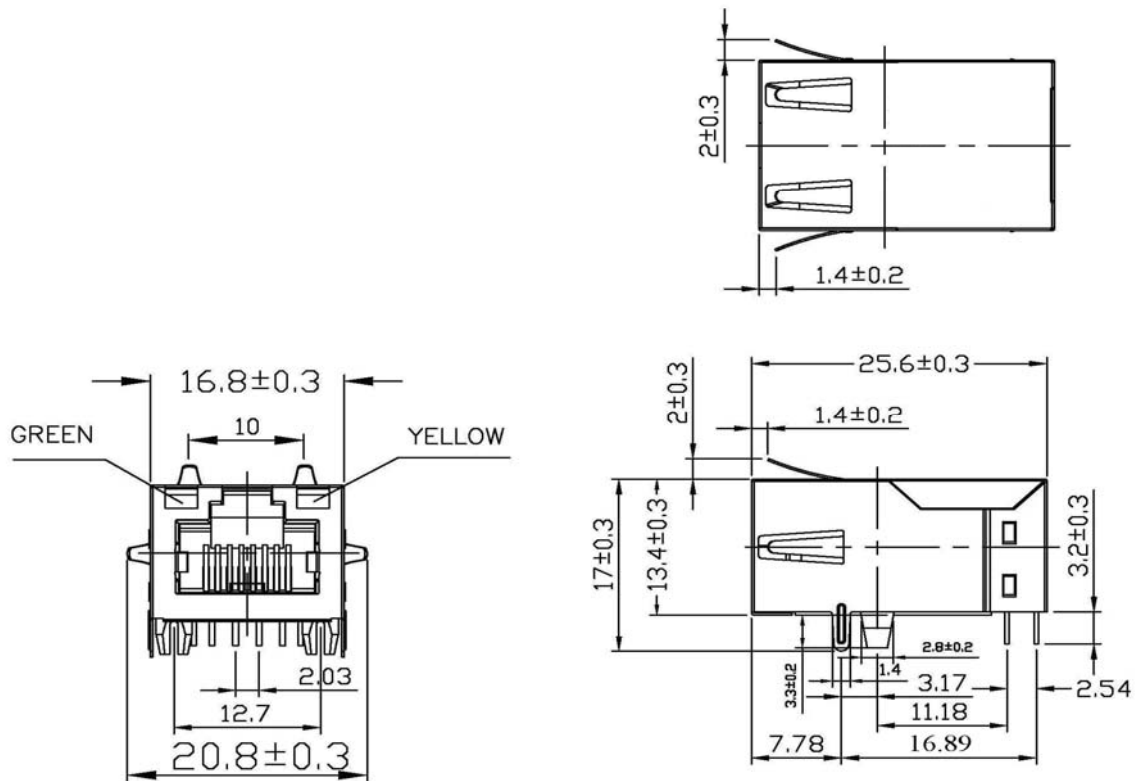
### Schematic : Design on MDI Interface Circuitry



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**Dimension:** mm

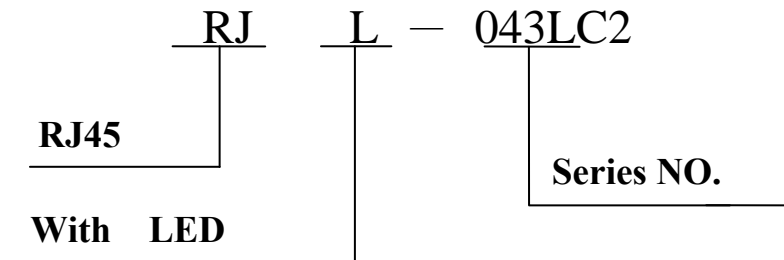
**TOLERANCE:±0.15 (unless otherwise specified)**



RECOMMENDED PCB LAYOUT  
COMPONENT SIDE

## MODEL NO. : RJL-043LC2

### 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 : 15 $\mu$ "min. Gold over 50 $\mu$ "min. Nickel

RJ Joint Contact : Brass, Thickness=0.35mm

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

##### B. Plastic Part :

(1) Set Housing : Thermoplastic, LCP, Black

UL FILE NO. : E83005

Manufacturer : POLYPLASTICS CO LTD.

Grade : E130i(+1)

Flame Class : UL 94V-0

(2) Insert : Thermoplastic, LCP, Black

UL FILE NO. : E83005

Manufacturer : POLYPLASTICS CO LTD.

Grade : E130i(+1)

Flame Class : UL 94V-0

(3) Spacer : Thermoplastic, LCP, Black

UL FILE NO. : E83005

Manufacturer : POLYPLASTICS CO LTD.

Grade : E130i(+1)

Flame Class : UL 94V-0



NUMBER : RD-SDRJL-043LC2  
DATE :2010/02/22 -R(REV:A1)

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### C. Shield Material :

Cartridge  $t=0.20\text{mm}$

30 $\mu$ ” 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) ; 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-043LC2

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:

