

## Single 10/100 BASE-TX Filter Connector Module MODEL NO. : RJ-006TA1

### 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**

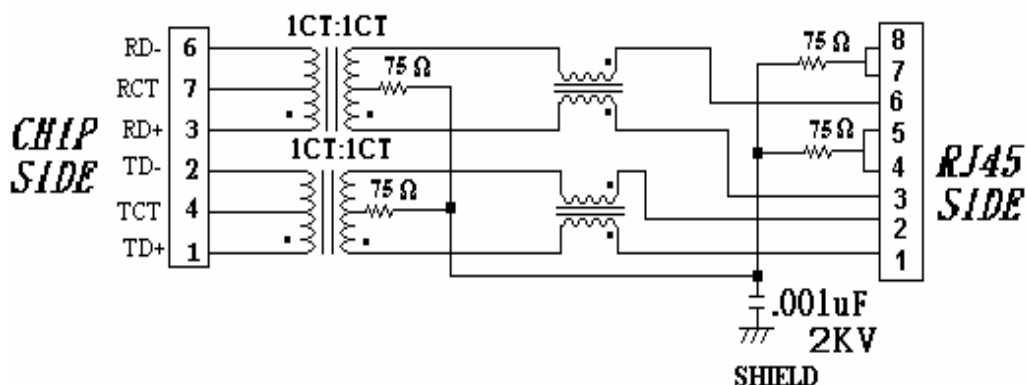
**Storage TEMP. range:-55 to +125**

**Primary OCL inductance: 350μH MIN. at 100KHz/0.1Vrms 8mA DC bias**

### Typical Performance Characteristics@ 25

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	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



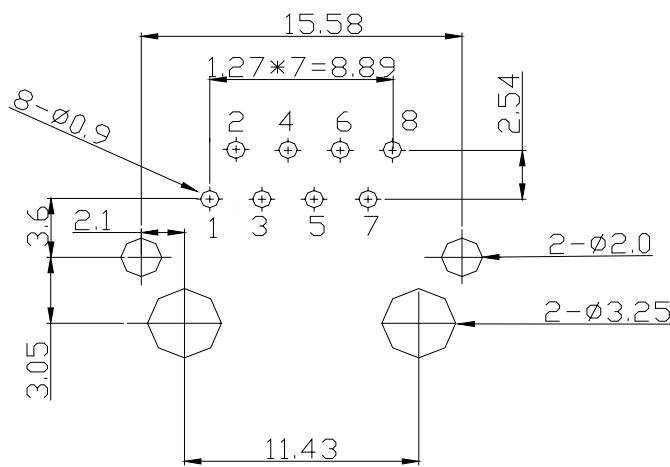
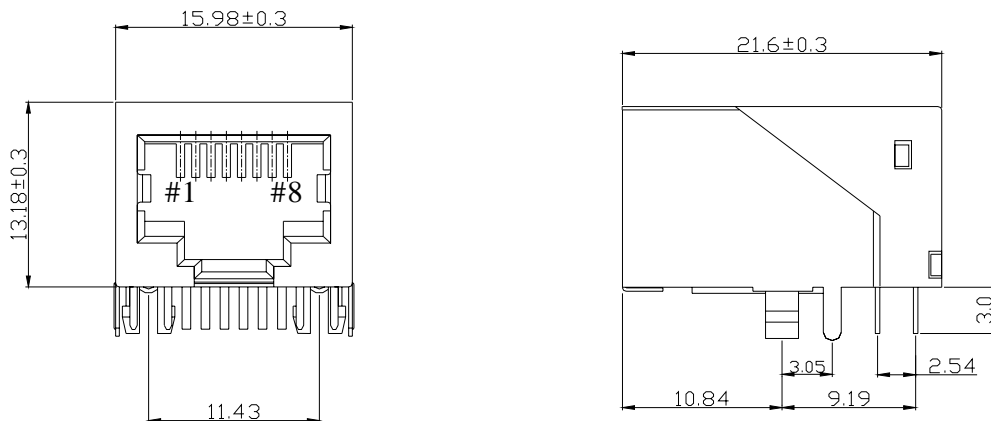


NUMBER:RD-SDRJ-006TA1  
DATE : 2005/09/08 I(REV:A1)

# MODEL NO. : RJ-006TA1

**Dimension:** mm

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



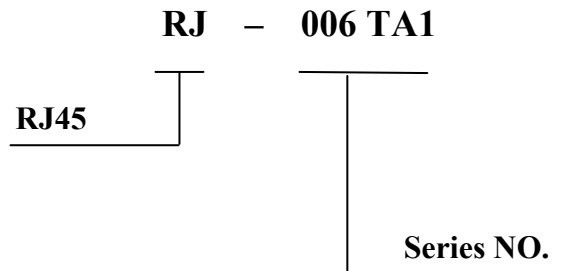
RECOMMENDED P.C.B LAYOUT  
COMPONENT SIDE OF BOARD



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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=0.30mm

Finish :Contact Area : 6 $\mu$ "min. Gold over 50  $\mu$  "min. Nickel

RJ Joint Contact : Phosphor Bronze, Thickness=0.3mm

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



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## **MODEL NO. : RJ-006TA1**

**Manufacturer : SHIKONG SYNTHETIC FIBERS CORP.**

**Grade : E202G30BK**

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

**C. Shield Material :**

**Cartridge t=0.25mm**

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

### **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:

