

## Quad 10/100 BASE-TX Filtered Connector Module MODEL NO. : RJ14-007TA1

### 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**

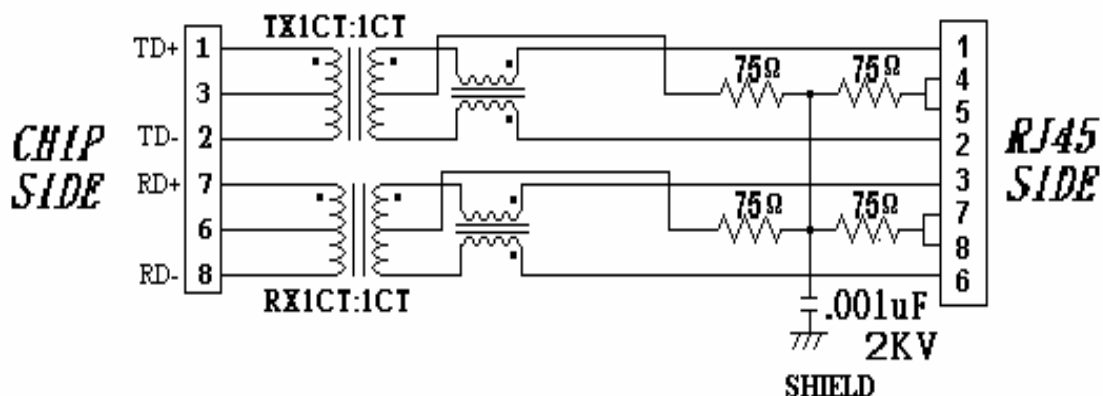
**Storage TEMP. range:-55 to +125**

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

### Typical Performance Characteristics @ 25C

| Insertion Loss<br>(dB MAX) | Return Loss<br>(dB Min @100±15Ω) |     |     |       | Differential to<br>Common<br>Mode Rejection<br>(dB MIN) | Cross talk<br>(dB MIN) |     |     |     |     | CMRR<br>(dB MIN) | Isolation<br>Voltage<br>(Vrms min) |
|----------------------------|----------------------------------|-----|-----|-------|---|------------------------|-----|-----|-----|-----|------------------|------------------------------------|
| 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              |                                    |

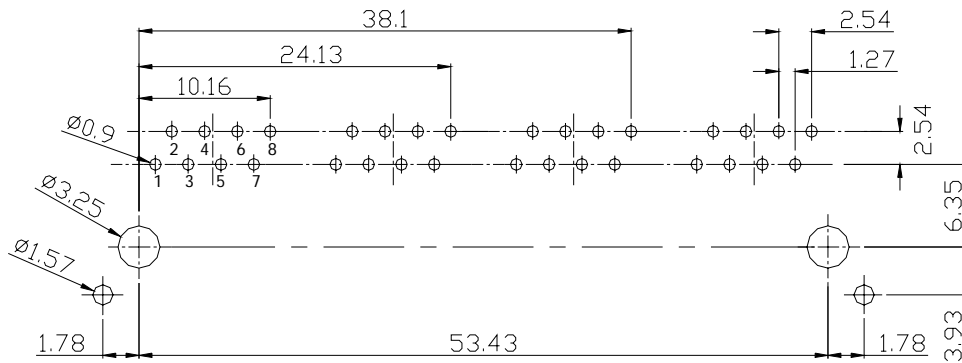
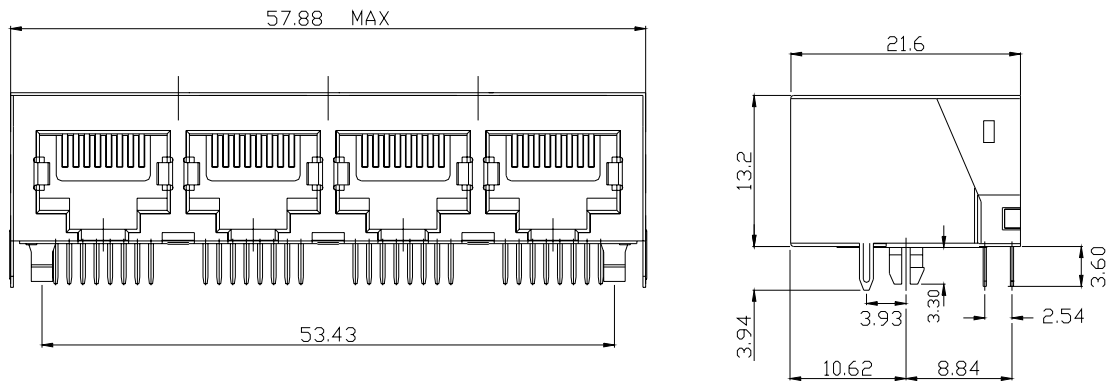
### Schematic: Design on MDI Interface Circuitry



**MODEL NO. : RJ14-007TA1**

**Dimension: mm**

**TOLERANCE:  $\pm 0.30$**



PC Board Layout  
Component Side Shown



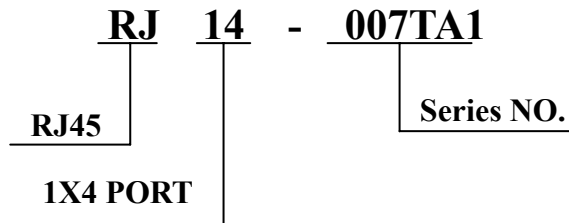
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DATE :2005/09/08I (REV:A1)

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## MODEL NO. : RJ14-007TA1

### 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 : (a) Contact Area : 6 $\mu$ "min. Gold

RJ Joint Contact : Brass, Thickness=0.4mm

Finish : 80 $\mu$ "min. Sn

##### 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

##### 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



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**Durability :**

**1000 cycles with no function damage for RJ-45 . Abnormalities shall be present after the test. Low Level Contact Resistance : R=30m maximum (final)  
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 :18.2 grams
2. package : 36 pcs / tray / 0.6952 kgms
3. Carton : 360 pcs / 10 layers of tray
4. Gross weight : 7.645 kgms

### Package drawing:

