

## 10/100 BASE FILTER WITH CONNECTOR MODEL NO. : RJ14-025TA1

### 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

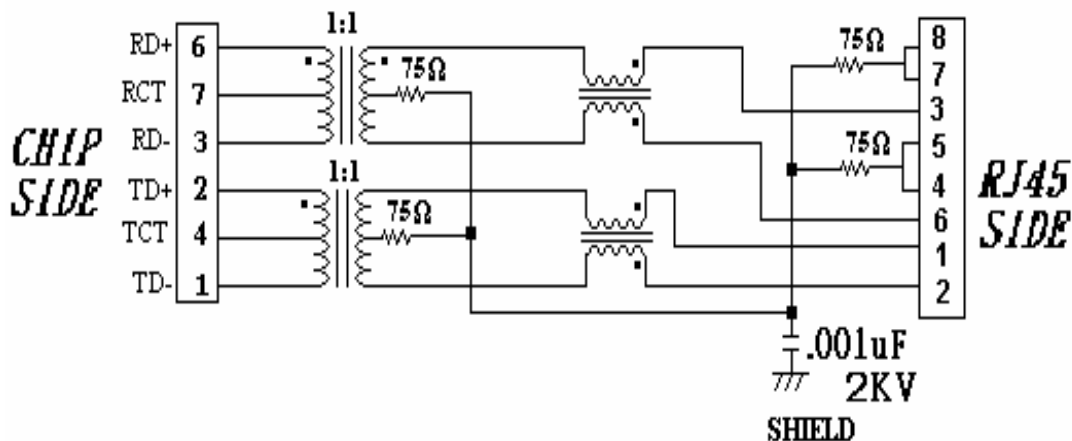
Storage TEMP. range:-55 to +125

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

### Typical Performance Characteristics@ 25C

Insertion Loss (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



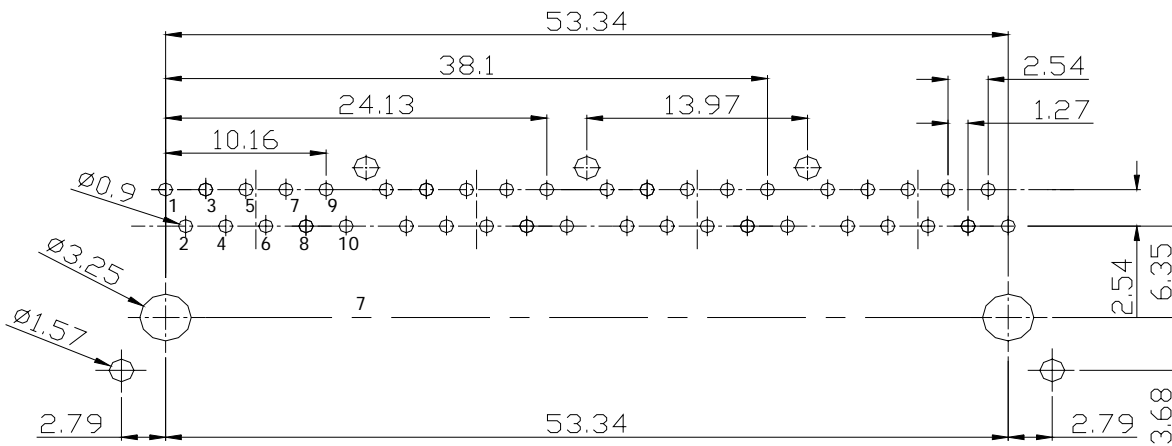
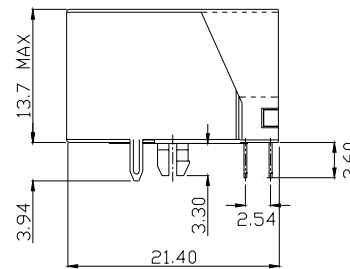
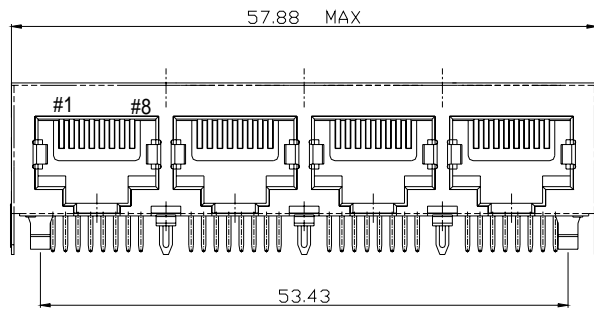


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# MODEL NO. : RJ14-025TA1

Dimension: mm      TOLERANCE:  $\pm 0.15$



PC Board Layout  
Component Side Shown



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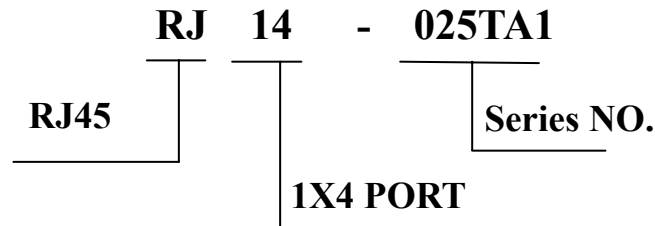
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**MODEL NO. : RJ14-025TA1**

## 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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## **MODEL NO. : RJ14-025TA1**

### **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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## MODEL NO. : RJ14-025TA1

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:

