

Quad 10/100 BASE-TX Filter Connector Module MODEL NO. : RJ14-001TC1

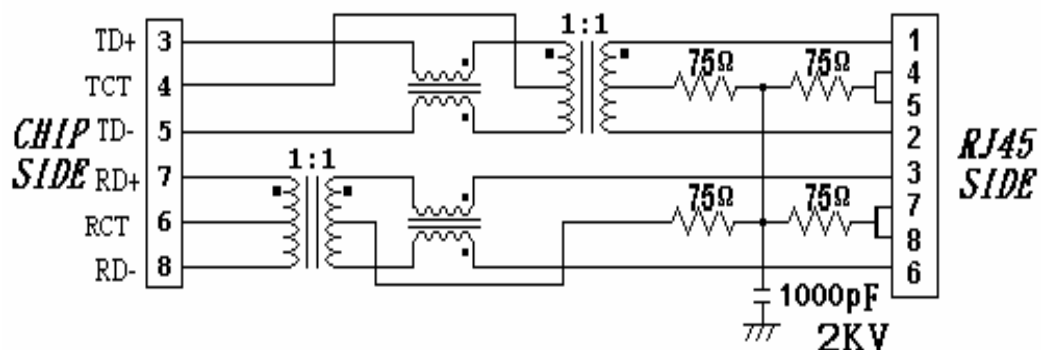
Features

- 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



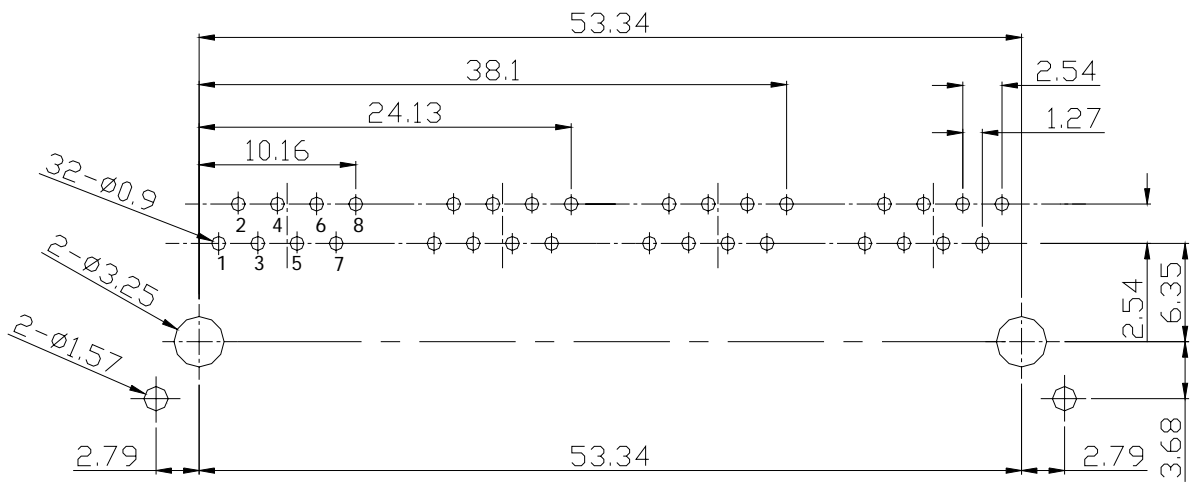
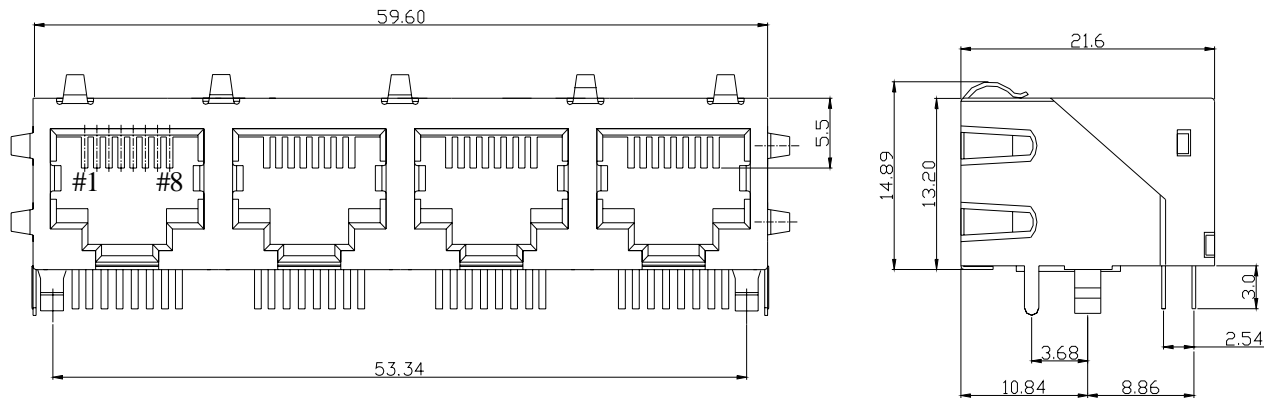


NUMBER : RD-RJ-RJ14-001TC1
DATE :2005/09/02 I (REV:A2)

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Dimension: mm

TOLERANCE:±0.15



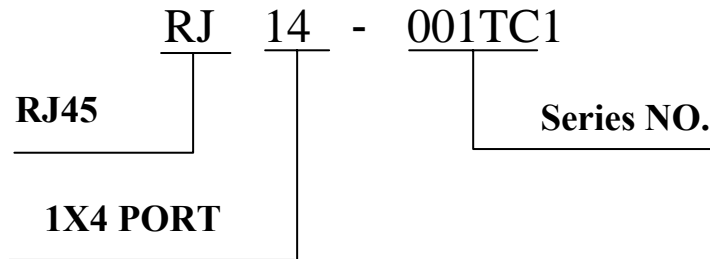
PC Board Layout
Component Side Shown



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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 : (a) Contact Area :6 μ "min. Gold

RJ Joint Contact : Brass, Thickness=0.4mm

Finish : 80 μ "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

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C. Shield Material :

Cartridge $t=0.25\text{mm}$

$10\ \mu\text{''}$ - $20\ \mu\text{''}$ Thick Nickel over Brass.

3. Ratings

(1) Voltage rating : 125 VAC

(2) Current rating : 1.5A

Durability :

1000 cycles with no function damage for RJ-45 . Abnormalities shall be present after the test.

Low Level Contact Resistance : $\Delta R=30\text{m}\Omega$ 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:

