

Quad 10/100 BASE-TX Filtered Connector Module MODEL NO. : RJ14-249TC1

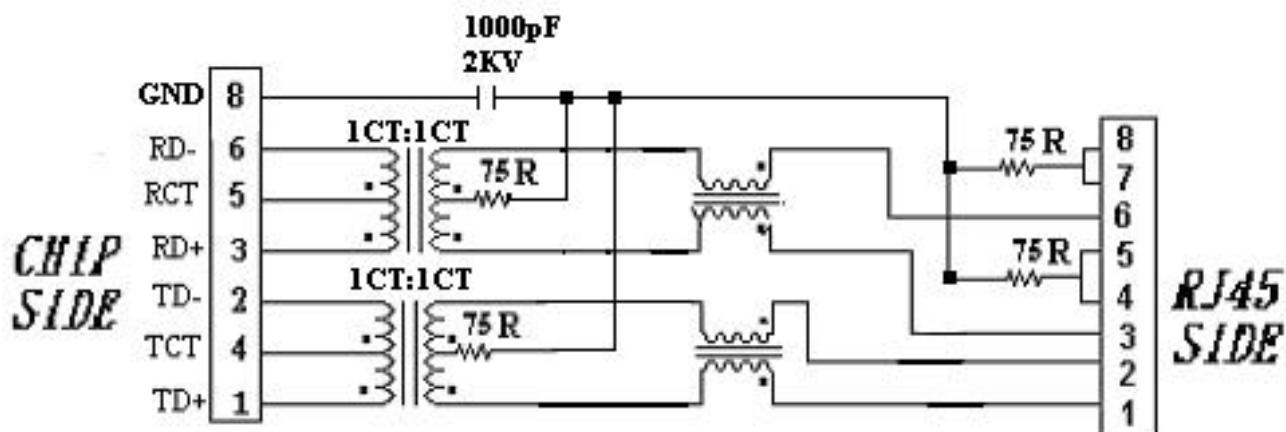
Features:

- 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

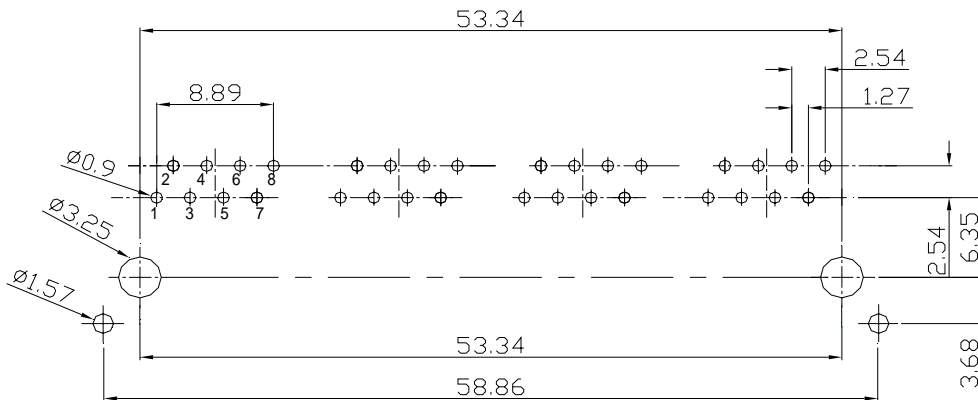
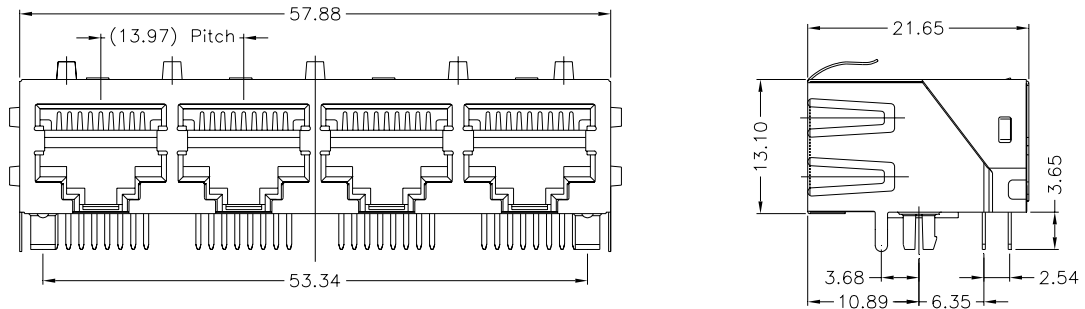




NUMBER : RD-SD-J8064E64(Pu)
DATE :2006/01/26 – R(REV:A1)

MODEL NO. : RJ14-249TC1

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



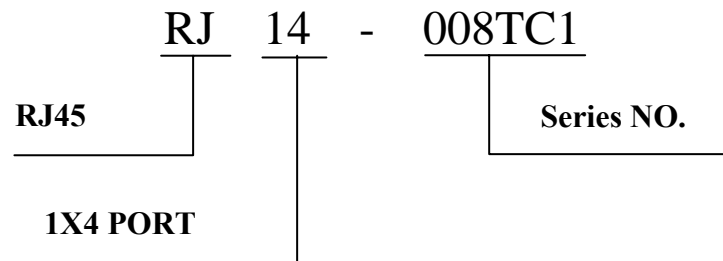
PC Board Layout
Component Side Shown



NUMBER : RD-SD-J8064E64(Pu)
DATE :2006/01/26 – R(REV:A1)

MODEL NO. : RJ14-249TC1

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 : 6 μ "min. Gold over 50 μ "min. Nickel

RJ Joint Contact : Brass, Thickness=0.4mm

Finish : 80 μ "min. Sn over 50 μ "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



NUMBER : RD-SD-J8064E64(Pu)
DATE :2006/01/26 – R(REV:A1)

MODEL NO. : RJ14-249TC1

(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 μ ”-20 μ ” 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 : $\Delta R=30m\Omega$ 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.



NUMBER : RD-SD-J8064E64(Pu)
DATE :2006/01/26 – R(REV:A1)

MODEL NO. : RJ14-249TC1

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:

