

## Single 10 BASE-TX Filtered Connector Module MODEL NO. : RJ-051TA1

### 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**

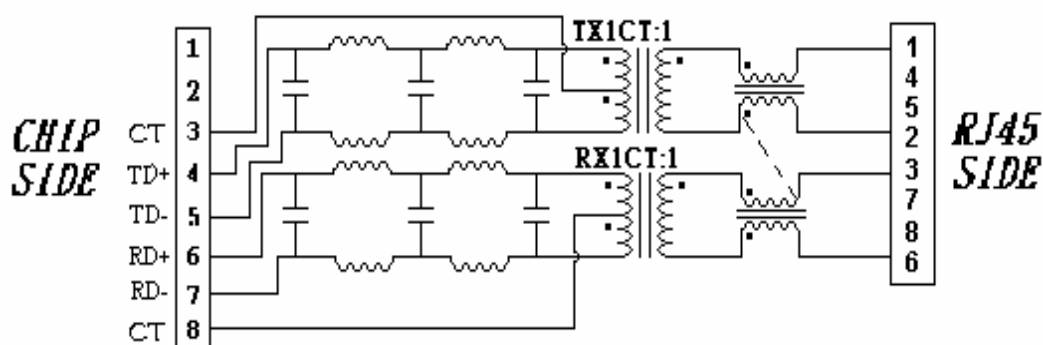
**Storage TEMP. range:-55 to +125**

**Primary OCL inductance: 350 $\mu$ H MIN. at 100KHz/0.1Vrms 8mA DC bias**

### Typical Performance Characteristics@ 25

Insertion Loss (dB MAX)	Return Loss (dB Min @100 $\pm$ 15 $\Omega$ )				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	

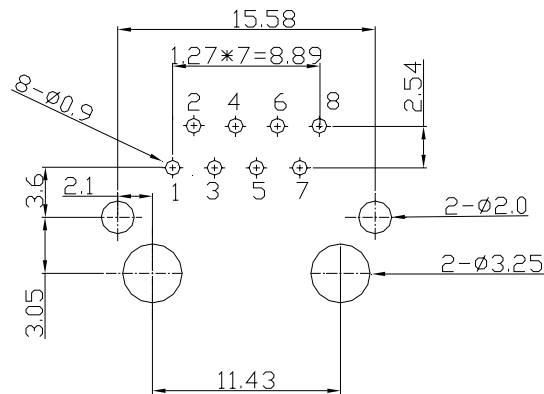
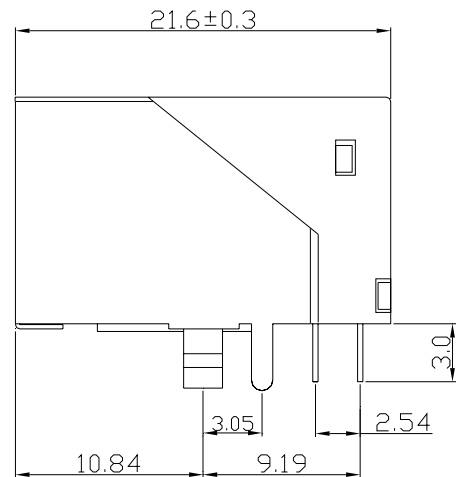
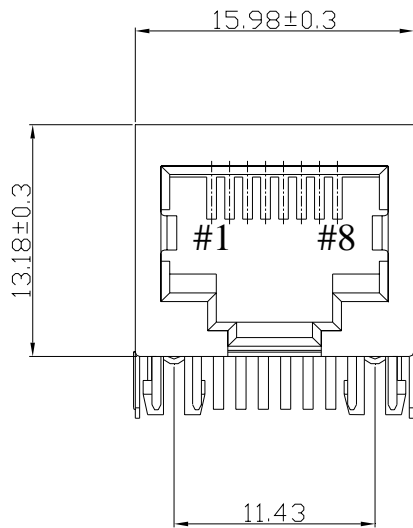
### Schematic: Design on MDI Interface Circuitry



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Dimension: mm

TOLERANCE:  $\pm 0.15$  (unless otherwise specified)



RECOMMENDED P.C.B LAYOUT  
COMPONENT SIDE OF BOARD





NUMBER:RD-SDRJ-051TA1  
DATE : 2005/09/09 I(REV:A1)

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## **MODEL NO. : RJ-051TA1**

**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 :**

**(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

