

## Single 10 BASE-TX Filtered Connector Module MODEL NO. : RJ-246TA1

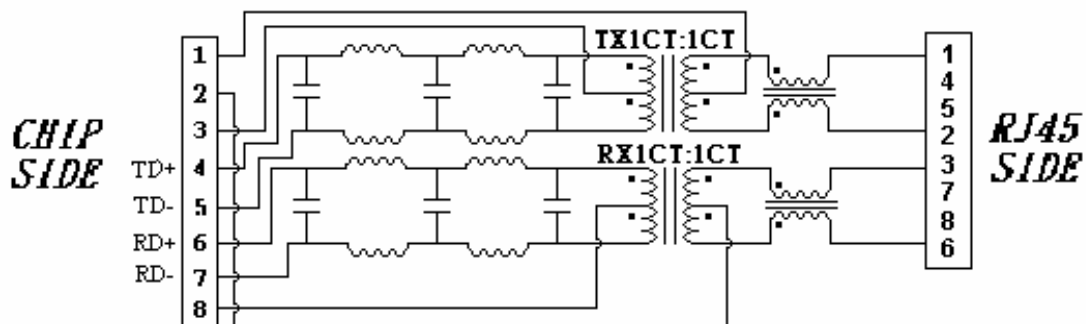
Features :

- ◎ 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°C to +85°C
- ◎ Storage TEMP. range:-55°C to +125°C
- ◎ Primary OCL inductance: 350μH MIN. at 100KHz/0.1Vrms 8mA DC bias

### Typical Performance Characteristics@ 25°C

Insertion Loss TX/RX (dB MAX)	Return Loss TX/RX (dB Min @100Ω)	Differential to Common Mode Rejection (dB MIN)	Attenuation TX/RX (dB MAX)				Cross talk TX/RX (dB MIN)	CMRR TX/RX (dB MIN)	Isolation Voltage (Vrms min)
			20	25	30	40			
MHz	MHz	MHz	MHz				MHz	MHz	1200
1-10	5-10	0.3~100	20	25	30	40	1-10	30~100	
-1.0	-13.5	-35	-5/-4.2	-18/-11	-28/-16	-33/-26	-30/-30	-30/-30	

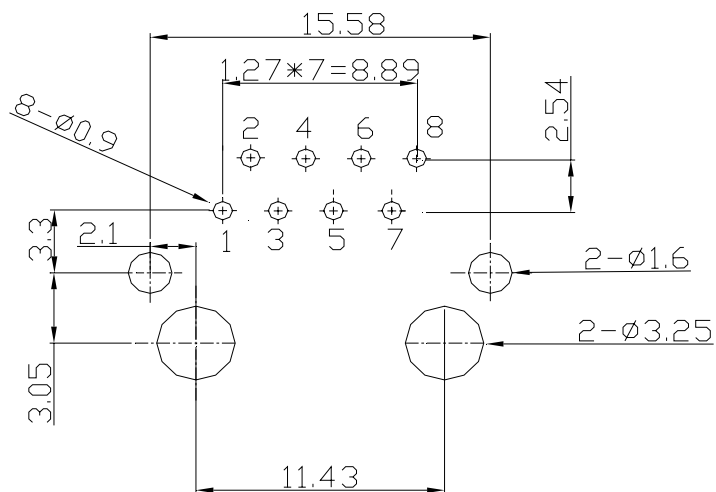
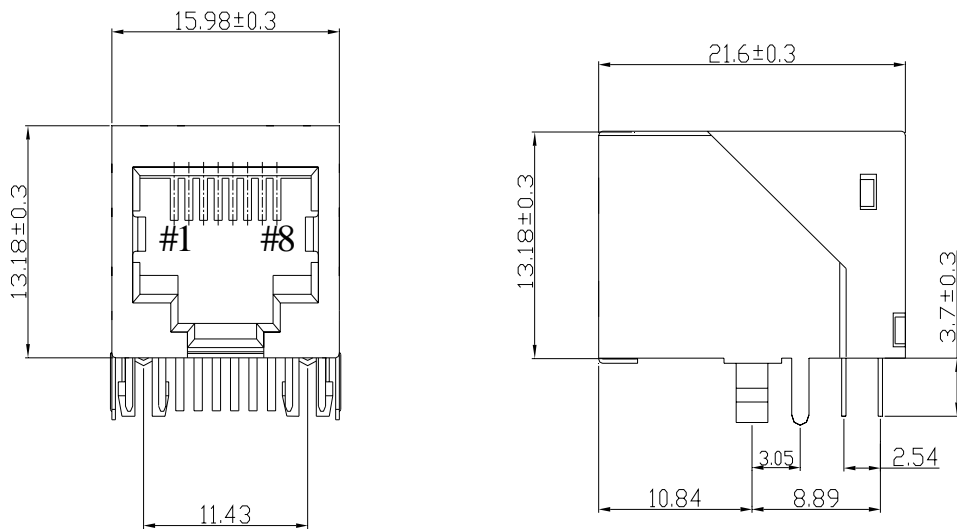
### Schematic: Design on MDI Interface Circuitry



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**Dimension:** mm

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



RECOMMENDED P.C.B LAYOUT  
COMPONENT SIDE OF BOARD





NUMBER:RD- LJF16-021A(LK)  
DATE : 2007/10/29 -R(REV:A2)

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## **MODEL NO. : RJ-246TA1**

### **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**

### **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

### Package drawing:

