

# Single 10 BASE-TX Filtered Connector Module

## MODEL NO. : RJ-246TA1

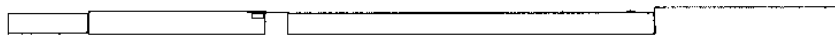
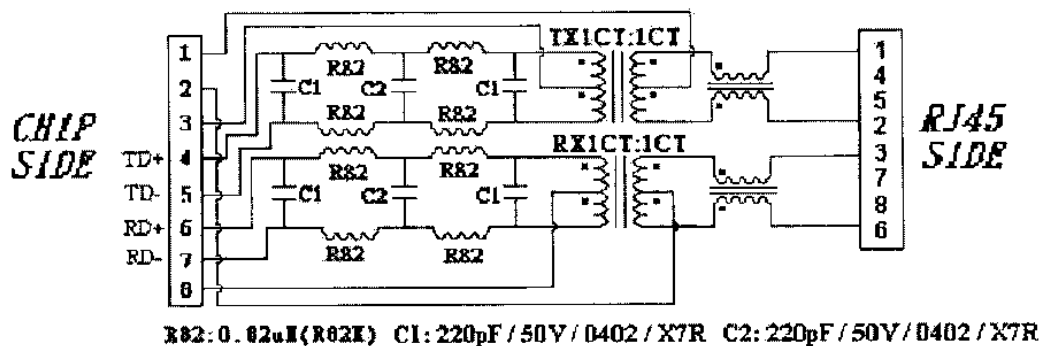
Features :

- ⊙ 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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## Ordering Information

**R J - 2 4 6 T A 1**

**R J 4 5**

**Series N O .**

### 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 : Contact Area : 6 $\mu$ "min. Gold over 50  $\mu$ "min. Nickel**

**RJ Joint Contact : SPCC, Thickness=0.3mm**

**Finish : 80 $\mu$ "min. Sn over 50  $\mu$ "min. Nickel**

##### B. Plastic Part :

**(1) Set Housing : Thermoplastic, LCP, Black**

**UL FILE NO. : E106764**

**Manufacturer : POLYPLASTICS CO LTD.**

**Grade : E130i(d)(e)**

**Flame Class : UL 94V-0**

**(2) Insert : Thermoplastic, LCP, Black**

**UL FILE NO. : E106764**

**Manufacturer : POLYPLASTICS CO LTD.**

**Grade : E130i(d)(e)**

**Flame Class : UL 94V-0**

**(3) Spacer : Thermoplastic, LCP, Black**

**UL FILE NO. : E106764**

**Manufacturer : POLYPLASTICS CO LTD.**

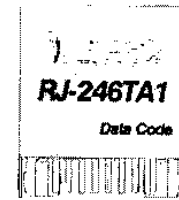
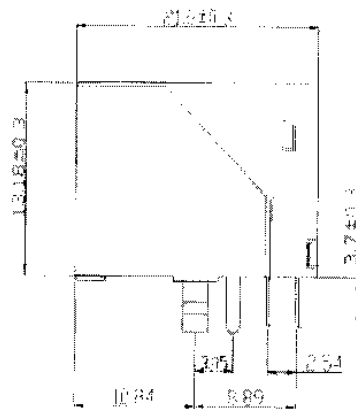
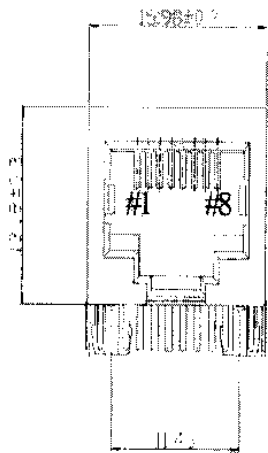
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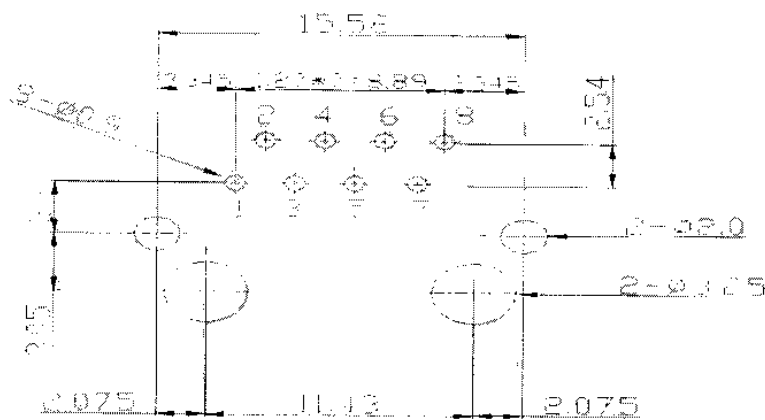
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**Dimension:** mm

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



Connector Marking



**RECOMMENDED P.C.B LAYOUT  
COMPONENT SIDE OF BOARD**

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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:

