

Single 10/100 BASE-TX Filtered Connector Module

MODEL NO. : **RJ-032**

Features

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

DESIGNFOR 100 BASE-TX TRANSMISSION OVER UTP-5 CABLE

OPERATING TEMP RANGE:-40 TO +85

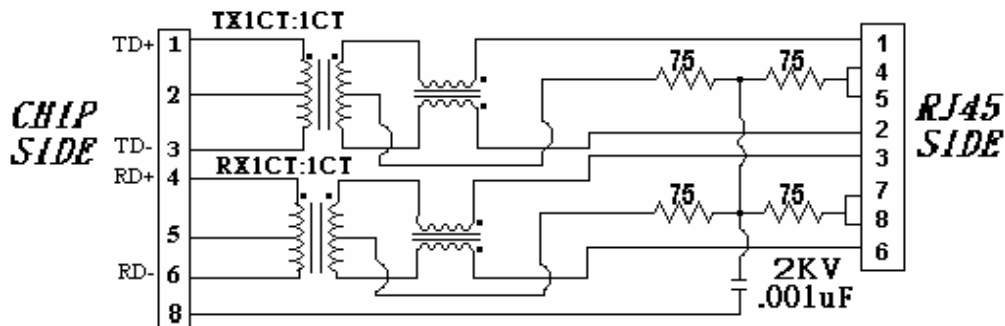
STORAGE TEMP RANGE:-55 TO +125

PRIMARY OCL INDUCTANCE: 350uH MIN AT100KHz/0.1Vrms
8mA DC BIAS

Typical Performance Characteristics

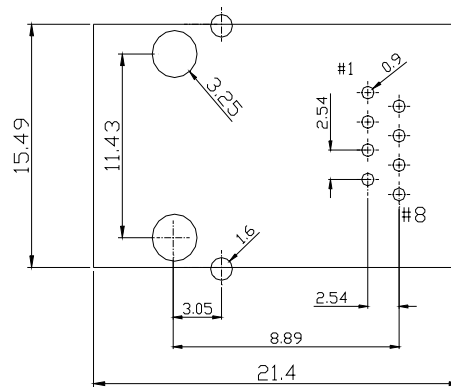
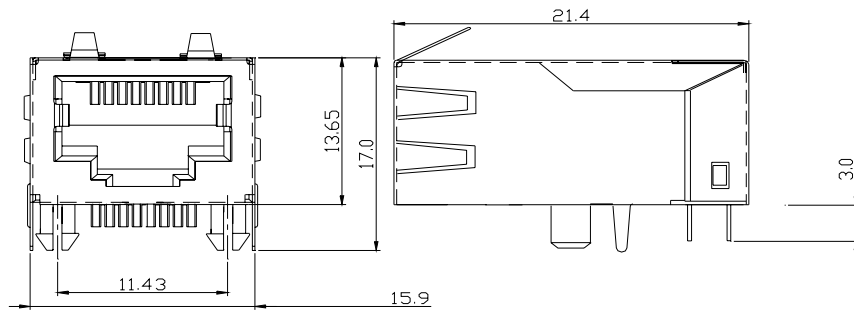
Insertion Loss (dB MAX)		Return Loss (dB Min @100Ω)				Differential to Common Mode Rejection (dB MIN)	Cross talk (dB MIN)					CMRR (dB MIN)	Isolation Voltage (Vrms min)
MHz		MHz				MHz	MHz					MHz	1500
0.3~100	100~125	0.5~40	60	80	100	0.3~100	20	40	60	80	100	0.3~100	
-0.8	-1.2	-18	-14.5	-12	-10	-35	-47	-40	-37	-35	-33	-30	

Schematic: Design on MDI Interface Circuitry



Dimension: mm

TOLERANCE: ± 0.30



RECOMMENDED P.C.B LAYOUT
COMPONENT SIDE OF BOARD

Ordering Information

RJ - 032

RJ45

Series NO.

Taimag USA

55 Charles Drive Tewksbury Ma 01876

tel: 978.777.7725 fax: 978.777.4877 <http://www.Taimagusa.com>

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 : 30 μ "min. Gold

(b) Solder tail Area : 100 μ "min. Tin/Lead(9:1)

(c) Under plating : 50 μ "min. Nickel over all

RJ Joint Contact : Brass, Thickness=0.35mm

Finish : 100 μ "min. Tin/Lead(9:1) over 50 μ "min. Nickel

B. Plastic Part :

(1) Set Housing : Thermoplastic, PBT, Black

UL FILE NO. : E130155

Manufacturer : NAN YA PLASTICS CORP.

Grade :1403G3

Flame Class : UL 94V-0

(2) Insert : Thermoplastic, PBT, Black

UL FILE NO. : E130155

Manufacturer : MITSUI Petrochemical Industries

Grade : CH230N

Flame Class : UL 94V-0

(3) Spacer : Thermoplastic, PBT, Black

UL FILE NO. : E130155

Manufacturer : NAN YA PLASTICS CORP.

Grade : 1403G3

Flame Class : UL 94V-0

C. Shield Material :

Cartridge t=0.25mm

10 μ "-20 μ " Thick Nickel over 10 μ "-20 μ " min Thick Nickel

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 : $\Delta R=300m\Omega$ 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.