

Single 10/100 BASE-TX Filtered Connector Integrated LED (PoE) MODEL NO. : RJPLB-203TC1

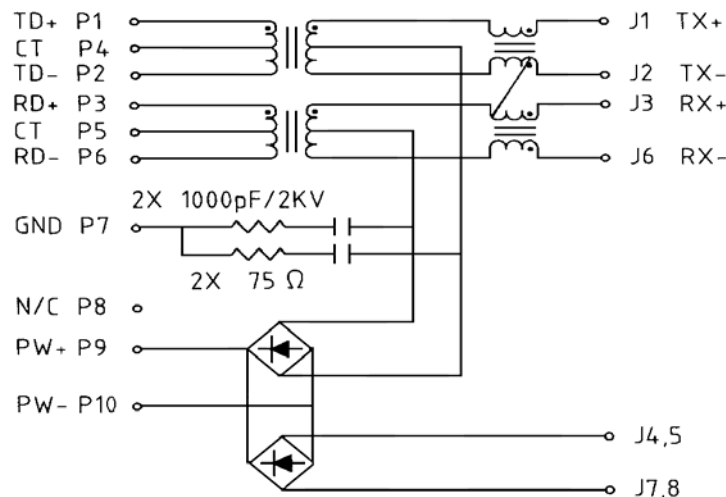
Features:

- ⊙ RoHS Compliant
- ⊙ Do not use material and use that the prohibition that SS-00259 stipulates
- ⊙ 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 IEEE802.3af 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
- ⊙ Shield (P7) <-> Data signals (P1-4-2,P3-5-6) , Shield(P7) <-> PoE Signals(J1-2,J3-6,J4-5,J7-8,P9-10) , PoE Signals (J1-2,J3-6,J4-5,J7-8,P9-10) <-> Data signals (P1-4-2,P3-5-6) to Isolation Voltage.

Typical Performance Characteristics@ 25°C

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	

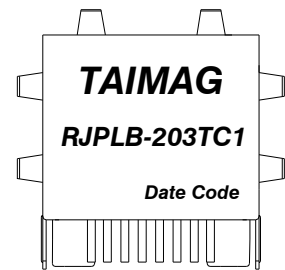
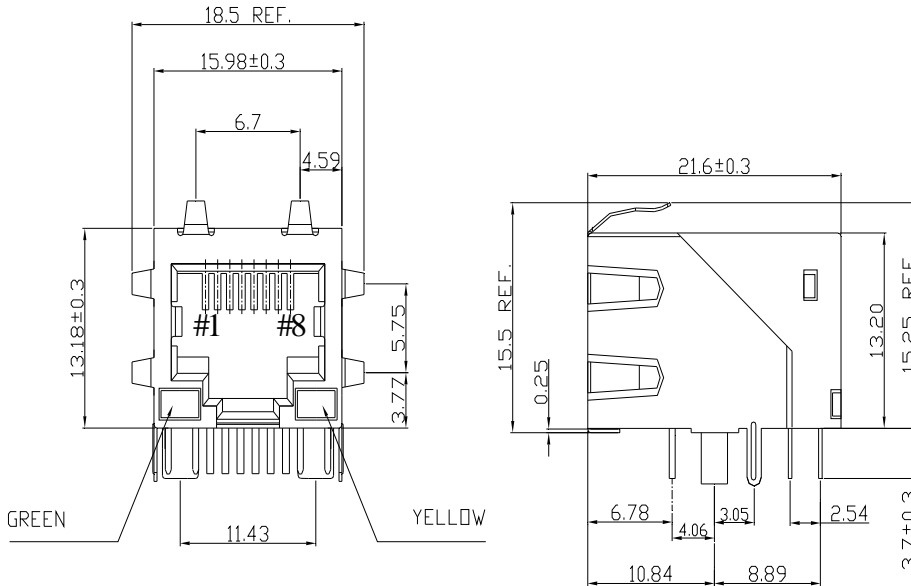
Schematic: Design on MDI Interface Circuitry



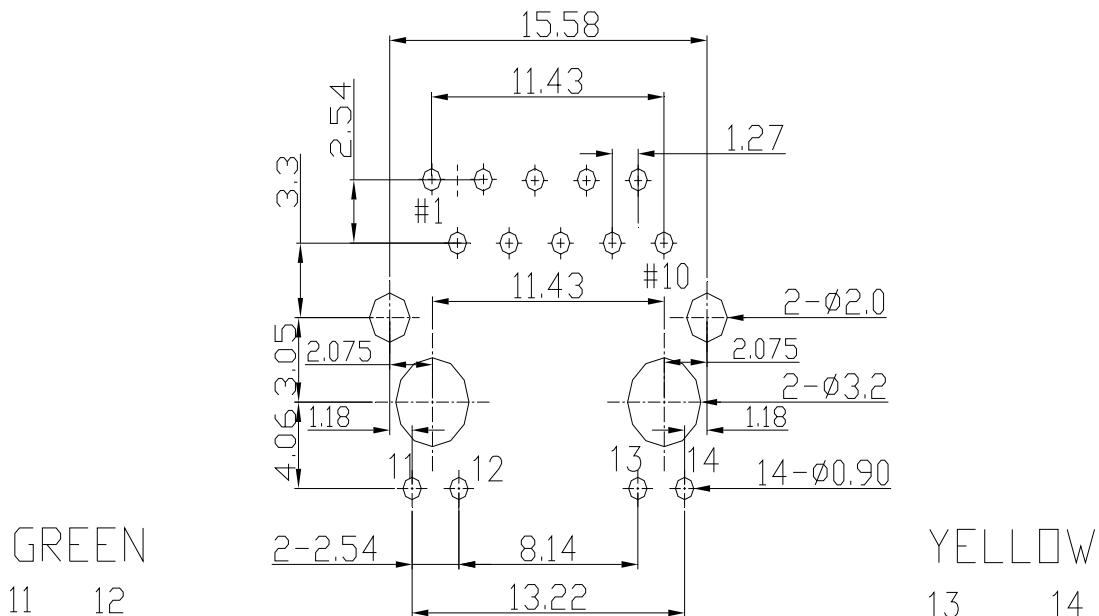
MODEL NO. : RJPLB-203TC1

Dimension: mm

TOLERANCE: ±0.15 (unless otherwise specified)

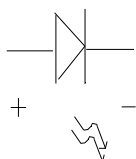


Connector Marking

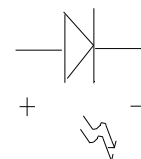


GREEN
11 12

YELLOW
13 14



RECOMMENDED P.C.B LAYOUT
COMPONENT SIDE OF BOARD





NUMBER:RD-SDRJLBP-203TC1
DATE : 2012/03/07 R(REV:A6)

MODEL NO. : RJPLB-203TC1 Ordering Information

R J	P	L B	-	2 0 3 T C 1
R J 4 5				Series N O .
P o E		W i t h L E D		

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 :6μ”min. Gold over 50 μ”min. Nickel

RJ Joint Contact : SPCC, Thickness=0.3mm

Finish : 80μ”min. Sn over 50 μ”min. Nickel

LED Joint Contact : SPCC, Thickness=0.50mm

Finish : 80μ”min. Sn over 50μ”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.

Grade : E130i(d)(e)

Flame Class : UL 94V-0

MODEL NO. : RJPLB-203TC1

C. Shield Material :

Cartridge $t=0.25\pm 0.05\text{mm}$

10 μ "-20 μ " Thick Nickel over Brass

D. LED Lamp

(a) Lens Color: Transparent with color

(b) Emitted Color: Green & Yellow

(c) Viewing Angle: 60°

(d) Dominant Wavelength: Green 570nm ; Yellow 585nm

(e) Forward Current / Reverse Voltage : Green 30 mA /(5V) ; Yellow 20 mA /(5V)

(f) Material : Green (GaP/GaP) ; Yellow (GaAsP/GaP)

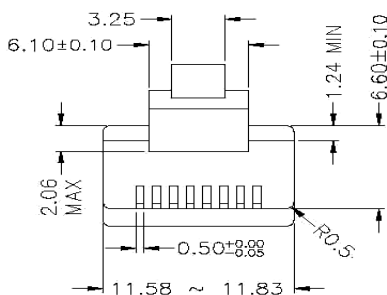
Durability :

(1)1000 cycles with no function damage for RJ-45 . Abnormalities shall be present after the test.

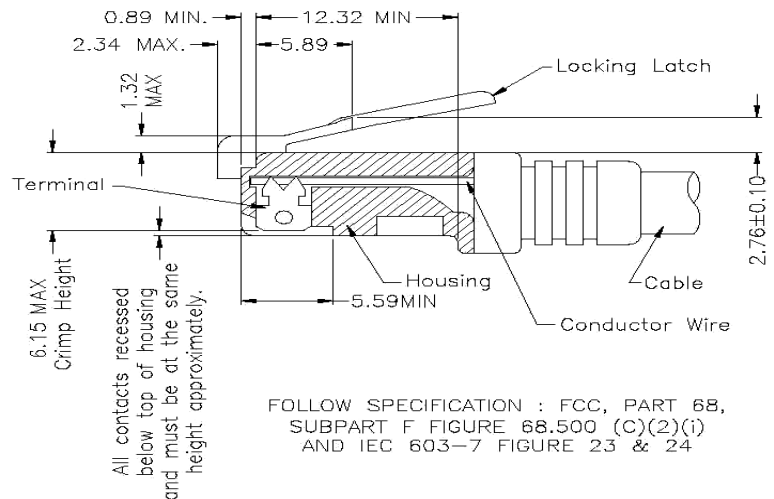
(2)Low Level Contact Resistance : $\Delta R=30\text{m}\Omega$ maximum (final)

(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.

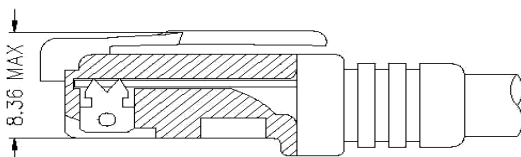
RJ PLUG SPECIFICATION :



- * There must be no damage to housing or locking latch. There must be no nicks or cuts in cable.
- * Durability : 750 cycles generally



FOLLOW SPECIFICATION : FCC, PART 68,
SUBPART F FIGURE 68.500 (C)(2)(i)
AND IEC 603-7 FIGURE 23 & 24



STANDARD MODULAR PLUG ASSEMBLY

FOLLOW SPECIFICATION : FCC, PART 68, SUBPART F
FIGURE 68.500 (C)(2)(ii)

MODEL NO.: RJPLB-203TC1

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:

