

# Ceviconn

Part Number : RT5-3040K22P

\*\*Replacement of Part Number : RT5-1040K22A

\*\*Part Number : RT5-3040K22P is a replacement of RT-1040K22A. Mechanical size & Electronical schematic are the same, only RT5-3040K22P is an improved version.

Description : RJ45 1X1 Tab Up  
Through Hole, Long Body  
10/100/1000 Base-T  
Contact Area : Gold Flash  
LED:without LED  
PoE plus

Spec No.	Update Date	Revision
RT50294-00	2014/1/13	A

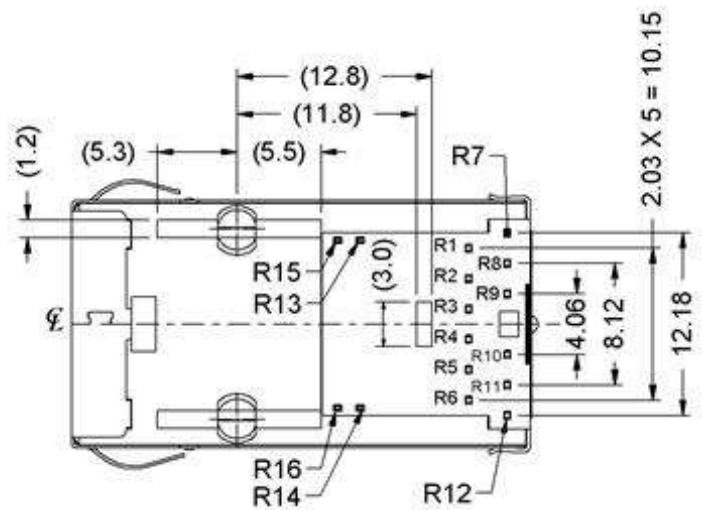
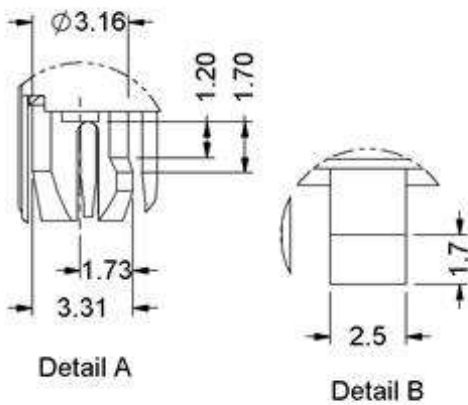
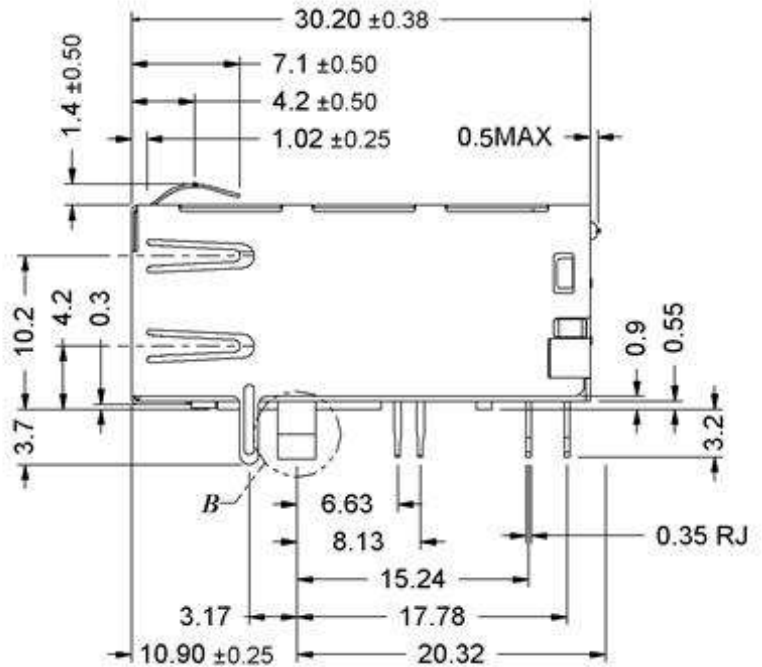
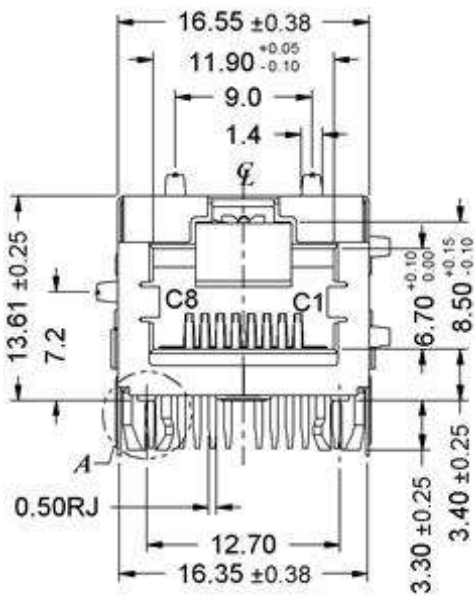
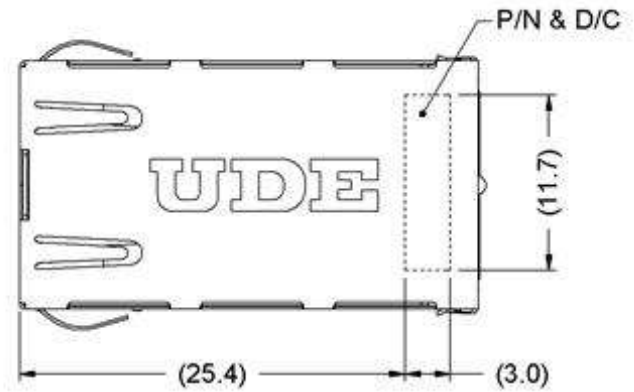
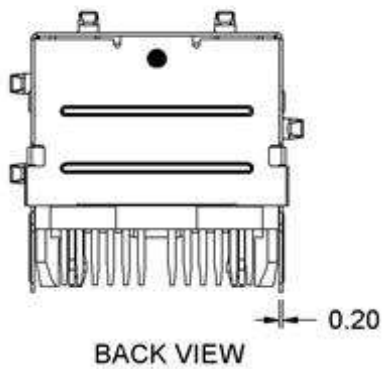
Approved	Checked	Prepared

Contact us : **Ceviconn** : <http://www.ceviconn.com>  
Address : Striewitzweg 6E, 14513 Teltow, Brandenburg, Germany  
Phone : +49-3328-4448201;+49-3328-4441906; 49-1575-6870327  
Http : [www.ceviconn.com](http://www.ceviconn.com)  
Email : [sales@ceviconn.com](mailto:sales@ceviconn.com); [vickie.liang@ceviconn.com](mailto:vickie.liang@ceviconn.com)

1. MECHANICAL DIMENSION

1.1 Product Dimension

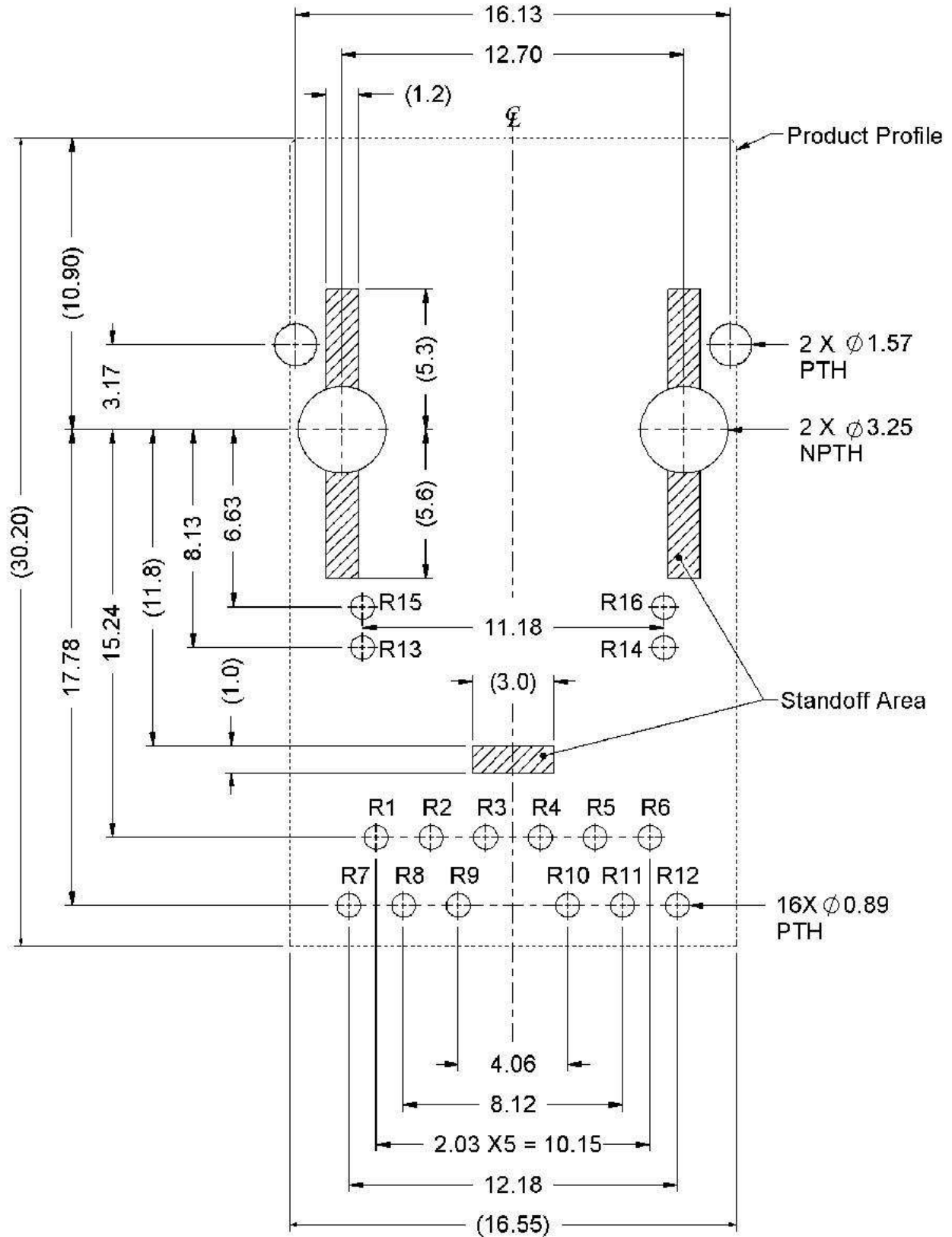
General Tolerance : X.X : ± 0.25  
X.XX : ± 0.13



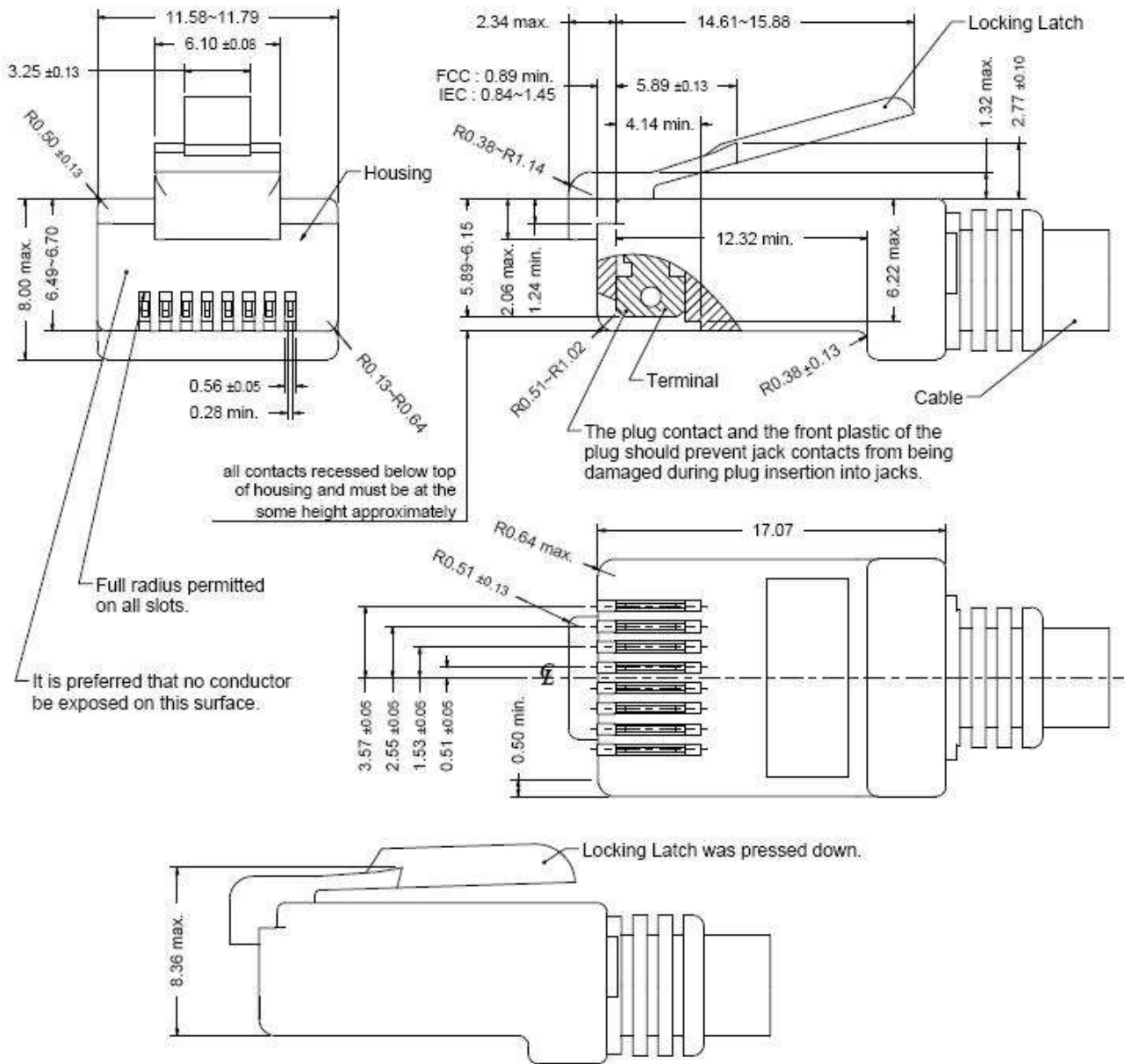
1.2 Recommended PCB Layout

Component Side of Board

All dimension tolerance are  $\pm 0.05\text{mm}$  unless otherwise specified



### 1.3 Standard RJ45 Plug Specification



- All dimensions follow :

FCC subpart F, 68,500, Figure (C)(2)(i) & (C)(2)(ii) & (C)(3)(i)

IEC 60603-7

- All plugs must be meeting the requirements of plug Go & No-Go gauge.

Gauge follow : FCC subpart F, 68,500, Figure (C)(4)(i) & (C)(5)(i)

- There must be no damage to Housing and Locking Latch.

- There must be no nicks and cuts in cable.

- Durability : 750 cycles generally

## 2. REQUIREMENTS

### 2.1 Design and Construction

Product shall be of design, construction and physical dimensions specified on applicable.

### 2.2 Material

#### 2.2.1 Terminal Parts (Underplating :30 $\mu$ )

2.2.1.1 RJ Terminal : PH. Bronze, Thickness=0.30mm

Finish : Contact Area : Gold Flash

2.2.1.2 Input Terminal : Brass, Thickness=0.35mm

Finish : 100 $\mu$ " min. Tin

2.2.1.3 Case Terminal : Brass, Thickness=0.30mm

Finish : 100 $\mu$ " min. Tin

#### 2.2.2 Plastic Parts <UL94V-0>

2.2.2.1 Housing : PA6T, Black

2.2.2.2 Case : PA6T, Black

2.2.2.3 Spacer : PBT, Black

2.2.2.4 Holder : PBT, Black

#### 2.2.3 Shield Parts

2.2.3.1 Front Shield : Stainless, Thickness=0.20mm, Pre-soldering

Back Shield : Brass, Thickness=0.25mm,

Finish : 100 $\mu$ " min. Tin over 30

### 2.3 Operating and Storage Temperature

Operating Temperature : 0°C to +70°C

Storage Temperature : -40°C to +85°C

### 2.4 RJ45 specifications

Insulation Resistance 500MΩ min.

Insertion force with the latch depressed : 22N max

Removal force with the latch depressed 44N max

Locking Force of Plug Latch : 50N min. @ 60+/-5 sec

Durability : 750 cycles

### 2.5 Performance and Test Description

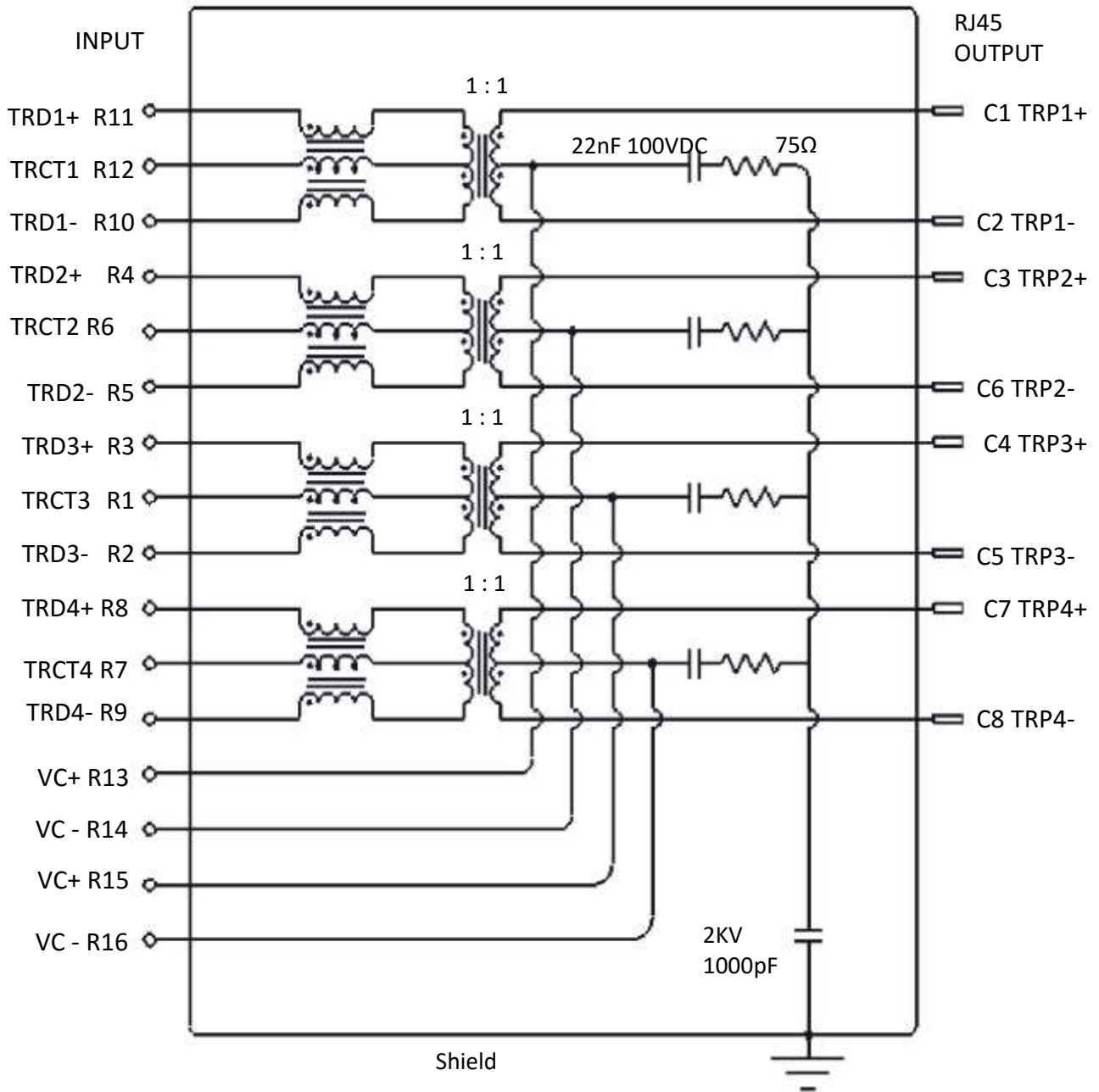
Product is designed to meet electrical, mechanical and environmental performance requirements specified in below table. All tests are performed at ambient environmental conditions per MIL-STD-1344A and EIA-364 unless otherwise specified.

### 2.6 Packaging and Packing

All parts shall be packaged and packed to protect against physical damage 、 corrosion and deterioration during shipment and storage.

### 3. ELECTRICAL CHARACTERISTICS

#### 3.1 Schematic



### 3.2 Transmitter filter & Receiver filter

Type : Balance low pass 100Ω imped

Insertion loss : 1~100 MHz -1.0dB max.

Return loss : 1~30 MHz -18dB min. load

30~60MHz -14dB min. load

60~80MHz -12dB min. load

80~100MHz -10dB min. load

### 3.3 Common Mode Rejection

@ 1~100 MHz -30dB min.

### 3.4 Cross Talk

@ 1~100 MHz -30dB min.

### 3.5 Inductance (@100KHz,0.1V, 24mA DC BIAS)

Input (R11-R10), Input(R4-R5) Input(R3-R2), Input(R8-R9): 350 μH min.

### 3.6 HiPot Test

Input(R11-R10) To Output(C1-C2) : 1500Vac 60s or 2250Vdc 60s

Input(R4-R5) To Output(C3-C6) : 1500Vac 60s or 2250Vdc 60s

Input(R3-R2) To Output(C4-C5) : 1500Vac 60s or 2250Vdc 60s

Input(R8-R9) To Output(C7-C8) : 1500Vac 60s or 2250Vdc 60s

### 3.7 Balanced DC line current

720mA MAX @57VDC continuous

1.2A MAX @57VDC for 200 milliseconds





5. DIPPING TEMPERATURE PROFILE

Note :

The measuring point for the specified temperature shall be on the soldered part of the lead.

