

# SPECIFICATION

SPEC. NO. : \_\_\_\_\_ REV : XA

DATE : \_\_\_\_\_

PRODUCT NAME : RJ45 1x1 Tab up  
w/ Transformer & w/o LED Option

PRODUCT NO : KW-P55121


Product Number : KW-P55121

Product Description : RJ45 1x1 Tab up w/ Transformer & w/o LED Option

## 1 SCOPE

### 1.1 Content

1.1.1 This specification covers performance, tests and quality requirements for RJ45 1x1 Tab up w/ Transformer & w/o LED Option.

## 2 APPLICABLE DOCUMENTS

The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, latest edition of the specification applies. In the event of conflict between requirements of this specification and product drawing, product drawing shall take precedence.

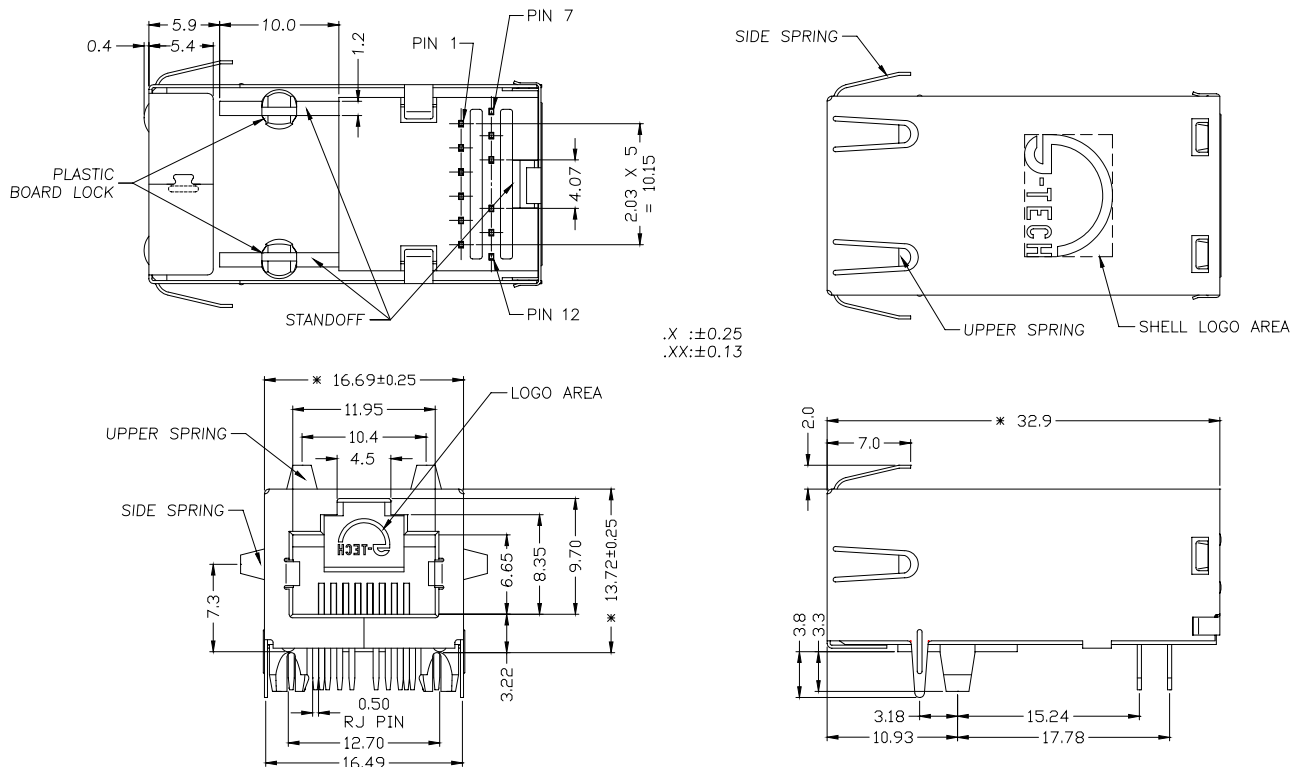
### 2.1 Commercial standards, specifications and report

2.1.1 MIL-STD-1344A

2.1.2 EIA-364

## 3 MECHANIC DIMENSIONS

### 3.1 Dimensions



.X :±0.25  
.XX:±0.13

General Tolerance :

. X : ±0.25

. XX : ±0.13

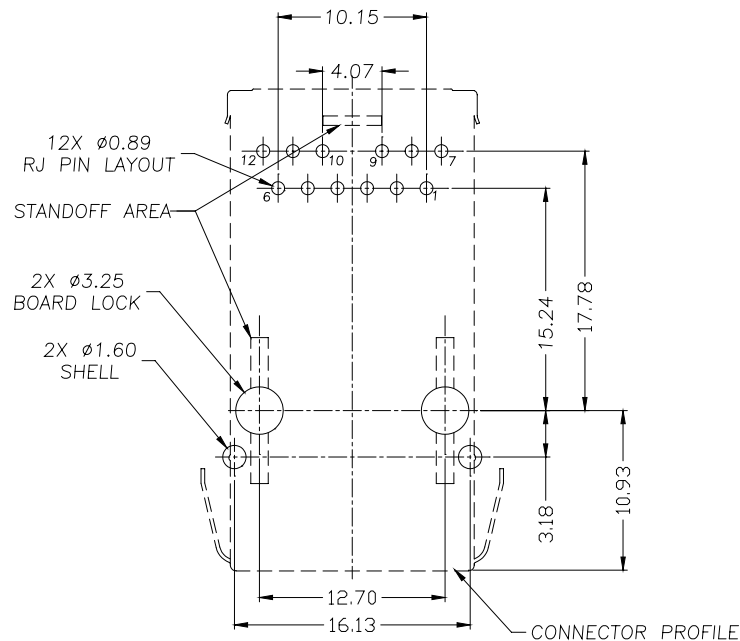
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### 3.2 PCB Layout



RECOMMENDED PCB LAYOUT  
COMPONENT SIDE

ALL DIMENSION TOLERANCE ARE  $\pm 0.05\text{mm}$   
UNLESS OTHERWISE SPECIFIED

## 4 REQUIREMENTS

### 4.1 Design and Construction

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

### 4.2 Materials and Finish

#### 4.2.1 Contact :

4.2.1.1 RJ Contact : Phosphor Bronze , Thickness=0.30mm

Finish : ( a ) Contact Area :  $30\ \mu\text{m}$  min. Gold

( b ) Solder tail Area :  $120\ \mu\text{m}$  min. Tin/Lead (9:1)

( c ) Underplating :  $50\sim 100\ \mu\text{m}$  Nickel over all

4.2.1.2 Link Contact : Brass , Thickness=0.25mm

Finish :  $120\ \mu\text{m}$  min. Tin/Lead (9:1) over  $50\sim 100\ \mu\text{m}$  Nickel

4.2.1.3 Joint Contact : Brass , Thickness=0.35mm

Finish :  $120\ \mu\text{m}$  min. Tin/Lead (9:1) over  $50\sim 100\ \mu\text{m}$  Nickel

#### 4.2.2 Plastic Part :

4.2.2.1 Housing : Thermoplastic , PA46 , Black

Flame Class : UL94 V-0

4.2.2.2 Case : Thermoplastic , PA46 , Black

Flame Class : UL94 V-0

#### 4.2.3 Shell

4.2.3.1 Front Shell : Brass , Thickness=0.20mm  
Finish : 120 μ ” min. Tin/Lead (9:1) over 50~100 μ ” Nickel

4.2.3.2 Back Shell : Stainless, SUS304 , Thickness=0.20mm

#### 4.2.4 Transformer

4.2.4.1 Material : FR4, Thickness=0.60mm

4.2.4.2 Two Layer PCB

#### 4.3 Operating and Storage Temperature

4.3.1 Operating Temperature : 0 TO +70

4.3.2 Non-Operating Temperature : -40 TO +85

#### 4.4 Ratings

4.4.1 Voltage rating : 125 VAC

4.4.2 Current rating : 1.5 A

#### 4.5 Performance and Test Description

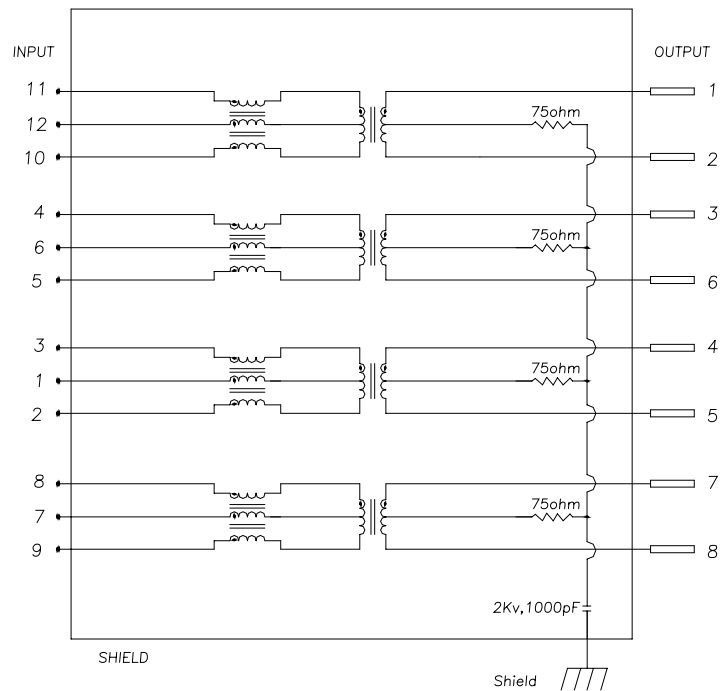
Product is designed to meet electrical, mechanical and environmental performance requirements specified in below table. All tests are performed at ambient environmental conditions per MIL-STD-1344A and EIA-364 unless otherwise specified.

#### 4.6 Packaging and Packing

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

## 5 ELECTRICAL CHARACTERISTICS

### 5.1 Schematic



### 5.2 Transmitter filter & Receiver filter

Type : Balance low pass 100 impedance

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

Return loss : 1~30 MHz -18dB MIN. load 100  
30~60 MHz -16dB MIN. load 100  
60~80 MHz -12dB MIN. load 100  
80~100 MHz -10dB MIN. load 100

### 5.3 Common Mode Rejection

@ 1~100 MHz -30dB MIN.

### 5.4 Cross Talk

@ 1~100 MHz -25dB MIN

### 5.5 INDUCTANCE @ 100KHz, 0.1V, 8mA DC BIAS

Input(11-10), Input(4-5), Input(3-2), Input(8-9) : 350  $\mu$  H MIN.

### 5.6 Hi Pot TEST

Input(11-10) to Output(1-2) : 1500VAC, 60sec

Input(4-5) to Output(3-6) : 1500VAC, 60sec

Input(3-2) to Output(4-5) : 1500VAC, 60sec

Input(8-9) to Output(7-8) : 1500VAC, 60sec

