

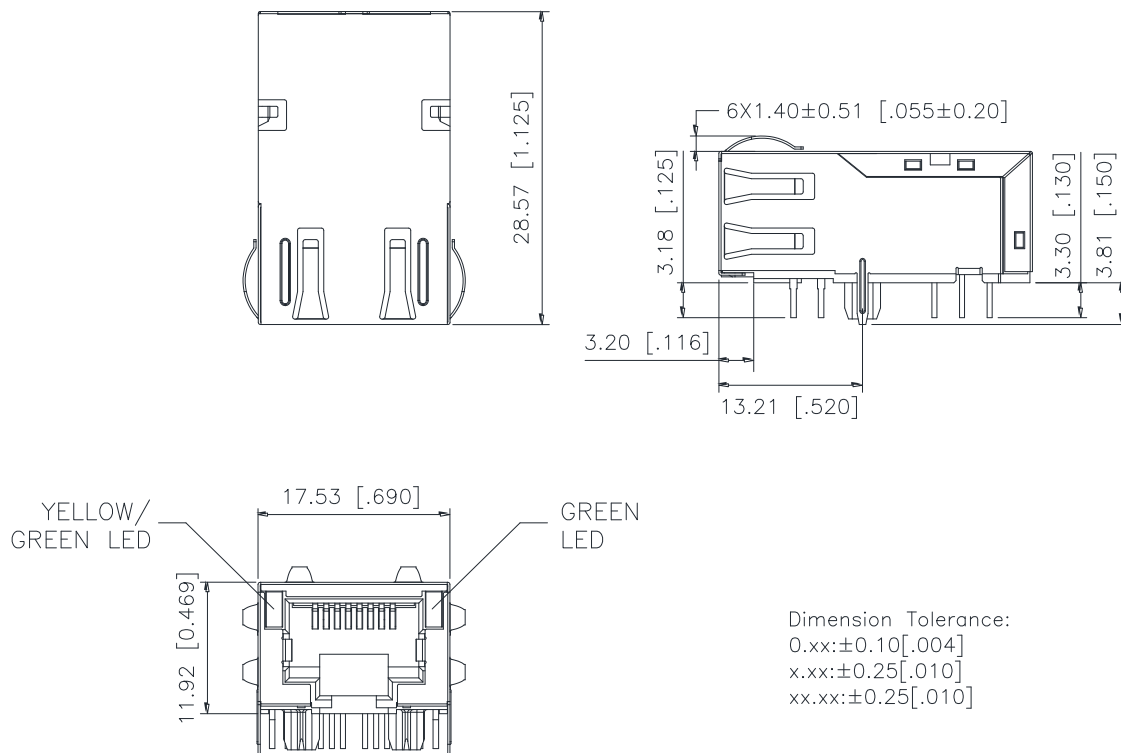
# Part Number: AE-RJD101G001

## 1\*1 Port RJ45 10G Network Connector

Page: 1/3

- RoHS compliant.
- Housing: PA46 Black UL94V-0.
- Shielding: 0.2mm Thickness With Brass.
- Contact: Phosphor bronze. With 6μ" gold plating.
- Operating Temperature: 0°C TO +70°C.
- Dielectric Withstanding Voltage Between Shield And Terminal: 2250 VDC, 1MIN.

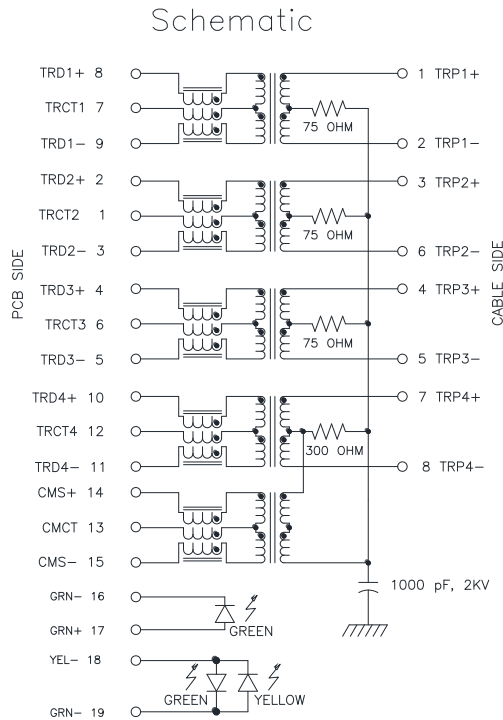
### Mechanicals:



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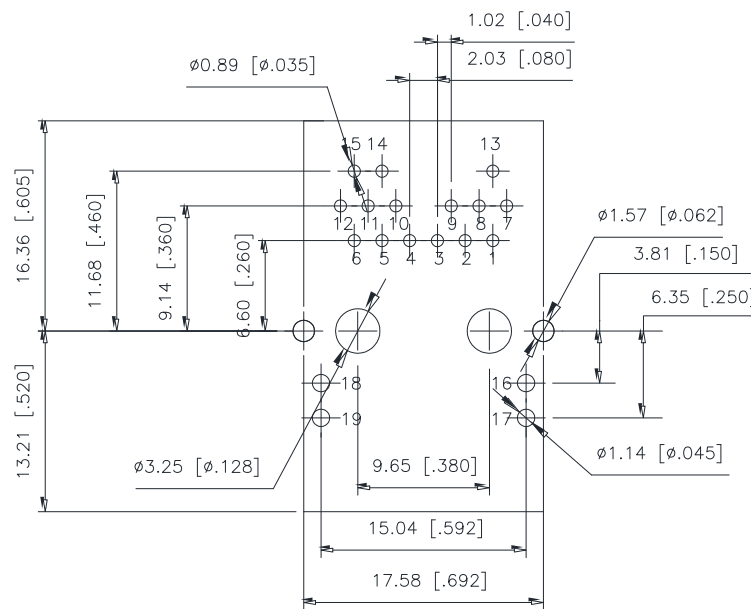
## 1\*1 Port RJ45 10G Network Connector

### Recommended PCB Layout:



### Electrical Characteristics:

- 1.TR:(100KHz,0.1V);  
PINS:(P8-P9):(J1-J2)=1:1±3%  
PINS:(P2-P3):(J3-J6)=1:1±3%  
PINS:(P4-P5):(J4-J5)=1:1±3%  
PINS:(P10-P11):(J7-J8)=1:1±3%
- 2.LX:(100KHz,100mV)  
PINS: (J1-J2),(J3-J6),(J4-J5),(J7-J8)=180uH MINIMUM
- 3.INSERTION LOSS(DATA CHANNELS):  
-3.0dB MAXIMUM AT 100KHz;  
-2.0dB MAXIMUM AT 1MHz TO 400MHz;
- 4.INSERTION LOSS(CM SENSE CHANNELS):  
-5.0dB MAXIMUM AT 3MHz TO 500MHz;
- 5.RETURN LOSS:  
-22dB MINIMUM AT 1MHz TO 100MHz;  
-22dB+18.27\*LOG(f/100) MINIMUM AT 100MHz TO 500MHz;
- 6.CROSS TALK:  
-28dB MINIMUM AT 1MHz TO 100MHz;  
-19dB MINIMUM AT 100MHz TO 500MHz;
- 7.COMMON MODE REJECTION RATIO:  
-35dB MINIMUM AT 1MHz TO 100MHz;  
-30dB MINIMUM AT 100MHz TO 300MHz;  
-25dB MINIMUM AT 300MHz TO 500MHz;
- 8.COMMON TO DIFFERENTIAL COMMON MODE REJECTION:  
-30dB MINIMUM AT 1MHz TO 250MHz;  
-22dB MINIMUM AT 250MHz TO 500MHz;



RECOMMENDED P.C.B LAYOUT  
TOP VIEW (COMPONENT SIDE)

Dimensions Tolerance:

All PCB LAYOUT Tolerances:±0.05[.002]

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Page: 3/3

**Reliability Test And Condition:**

Test Item	Test Condition	Cycles or Hours	Reference
<b>Vibration Test</b>	1. Amplitude: 0.75mm 2. Frequency: 5-500Hz 3. Number of sweep cycles per axis 10 4. Direction: X. Y. Z	Duration: 2 hours each direction	IEC-68-2-6
<b>Drop Test</b>	1. Height: 1m 2. Concrete platform	6 Times	IEC-68-2-32
<b>Thermal Shock Test</b>	1. Low temperature: -40℃ 2. High temperature: +85℃ 3. Soak time: 30 minutes 4. Transition time: less than 20 minutes	5 Cycles	IEC-68-2-14
<b>Solderability Test</b>	Dipped in 245±5 ℃ molten solder	Time: 3~5 seconds	IEC-68-2-20
<b>High Temperature Test</b>	1. Humidity: less than 50% RH 2. Temperature: 85±2 ℃	Duration: 96 hours	IEC-68-2-2
<b>Low Temperature Test</b>	Temperature: -40±3 ℃	Duration: 96 hours	IEC-68-2-1