

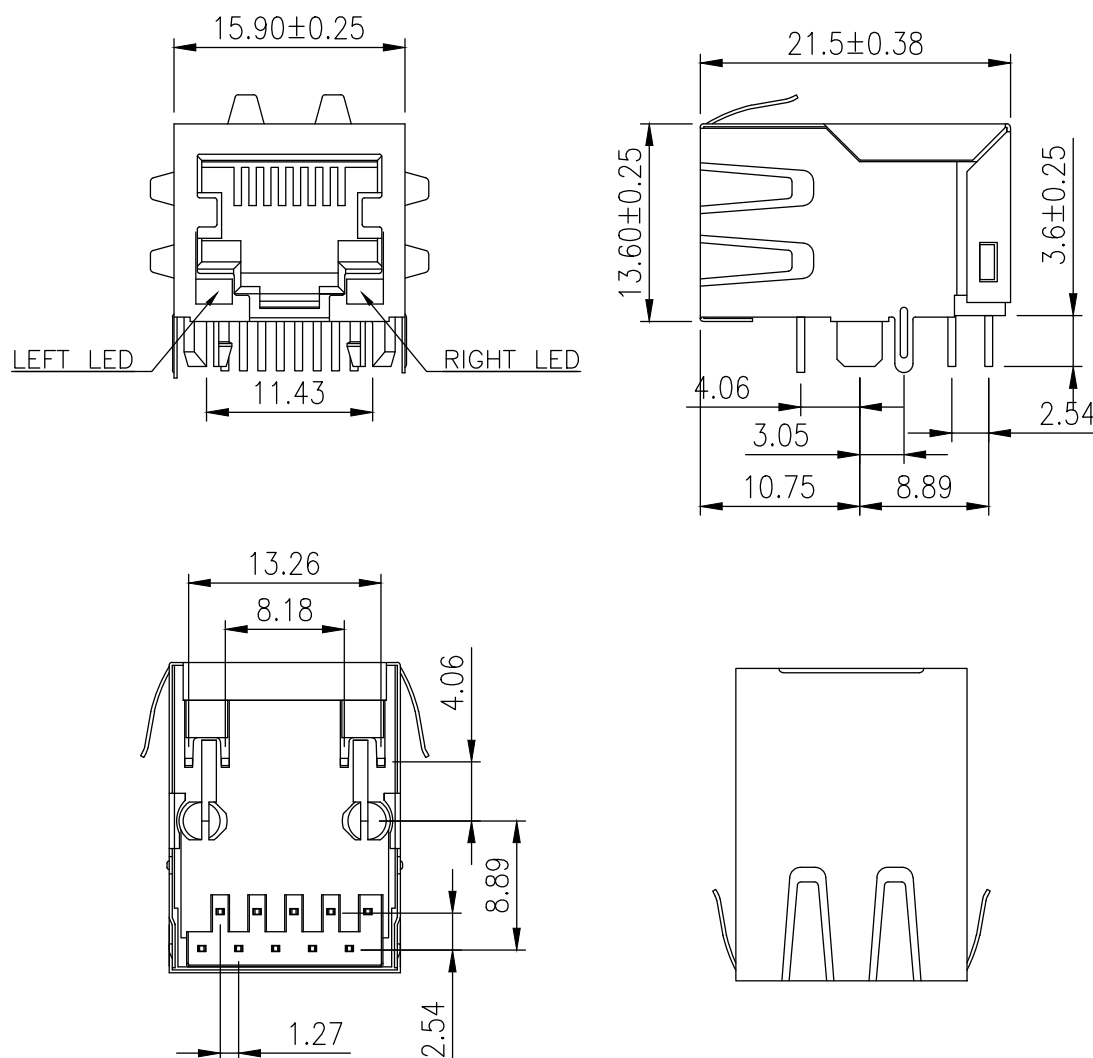
Part Number: AE-RJD101B010H-30

1*1 Port RJ45 10/100/1000Base-T Network Connector

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- RoHS compliant.
- Housing: LCP Black UL94V-0.
- Shielding: 0.2mm Thickness With Brass.
- Contact: Phosphor bronze. With 30μ" gold plating.
- Operating Temperature: -40°C TO +85°C.

Mechanicals:



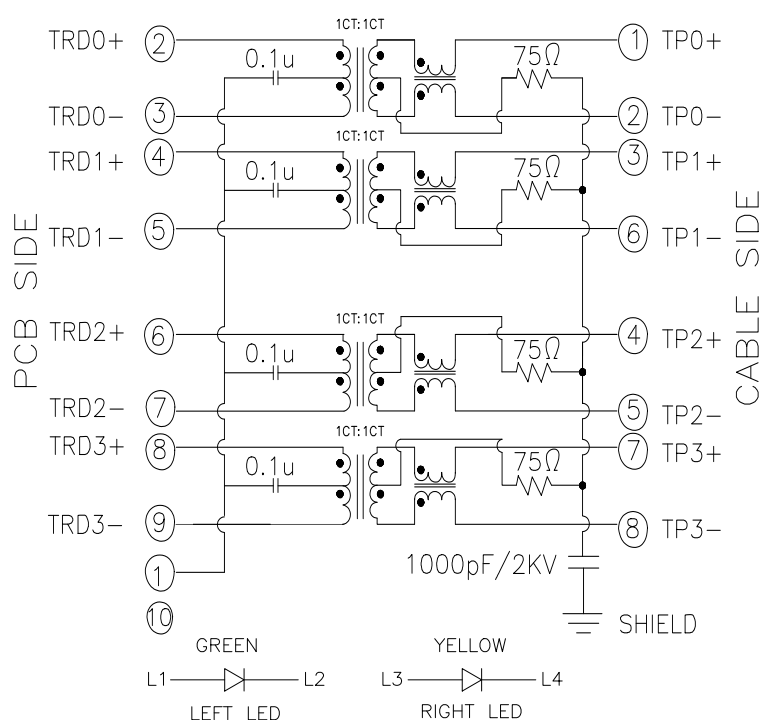
Unless otherwise specified, all dimensions tolerances is $\pm 0.254 / 0.010$.

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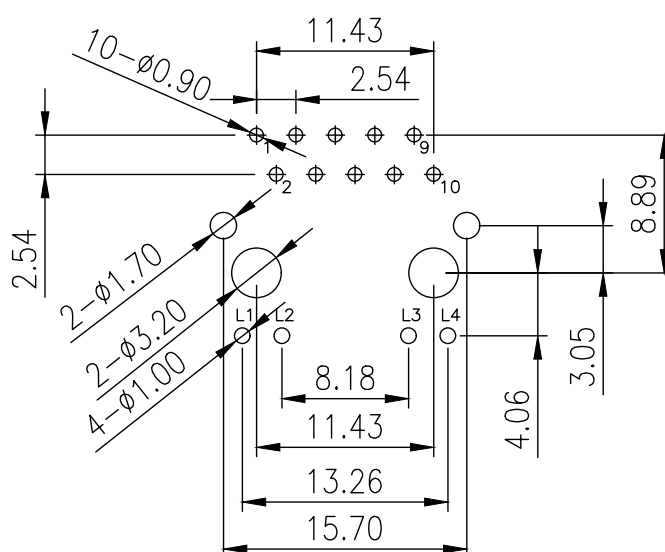
Schematic



Electrical Characteristics

1. TR: (100KHz, 0.1V);
PINS: (P2-P3): (J1-J2) = 1:1 $\pm 2\%$
PINS: (P4-P5): (J3-J6) = 1:1 $\pm 2\%$
PINS: (P6-P7): (J4-J5) = 1:1 $\pm 2\%$
PINS: (P8-P9): (J7-J8) = 1:1 $\pm 2\%$
2. LX: (100KHz, 100mV, 8mA, DC Bias)
PINS: (P2, P3), (P4, P5), (P6, P7), (P8, P9)
= 350uH MINIMUM
3. DCR:
PINS: (J1-J2), (J3-J6), (J4-J5), (J7-J8)
= 1.40HMS MAXIMUM
4. HI-POT:
PINS (P2, P4, P6, P8) TO (J1, J3, J4, J7) = 2250VDC
FOR 60 SECONDS
5. INSERTION LOSS:
- 1.0dB MAXIMUM AT 0.3MHz TO 100MHz;
6. RETURN LOSS:
- 18dB MINIMUM AT 1MHz TO 30MHz;
- 13dB MINIMUM AT 30MHz TO 60MHz
- 10dB MINIMUM AT 60MHz TO 80MHz
7. CROSS TALK:
- 30dB MINIMUM AT 1MHz TO 100MHz
8. COMMON TO COMMON MODE REJECTION:
- 30dB MINIMUM AT 1MHz TO 100MHz

Recommended PCB Layout:



Suggested PCB Layout
All dim. tolerance are $\pm 0.05\text{mm}$.

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Reliability Test And Condition:

Test Item	Test Condition	Cycles or Hours	Reference
Vibration Test	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
Drop Test	1. Height: 1m 2. Concrete platform	6 Times	IEC-68-2-32
Thermal Shock Test	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
Solderability Test	Dipped in 245±5 °C molten solder	Time: 3~5 seconds	IEC-68-2-20
High Temperature Test	1. Humidity: less than 50% RH 2. Temperature: 85±2 °C	Duration: 96 hours	IEC-68-2-2
Low Temperature Test	Temperature: -40±3 °C	Duration: 96 hours	IEC-68-2-1