#### 1. Scope

This specification covers the requirements for product performance, test methods of RJ45 series

#### 2. Applicable document

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

#### 3. Ordering information

Refer to the drawing.

# 4. Connector dimensions

Refer to the drawing.

# 5. Material

Housing: Thermoplastic (UL 94V-0) Color: Black Terminal: Copper alloy Plating: Gold plated Shell: Copper alloy Plating: Nickel plated

# 6. Accommodated P.C.B layout

Refer to the drawing.

# 7. Rating

Operating voltage(Max.)	125V AC/DC
Current rating(Max.)	1.5A AC/DC
Temperature range-operating	-40°C +85°C(Including terminal temperature rese)

# 8. Performance

All tests shall be performed as bellow conditions unless otherwise specified. Temperature Range: -15 °C to +35 °C Humidity Range:25%to85%

Test item	Requirement	Test Condition
Examination of product	Meets requirements of product drawing and specification.	Visual inspection No physical damage



# **TXGA Industrial Electronics (S.Z.) Co., Ltd**

**RJ45 Connector series** 

Test item	Requirement	Test Condition	
	Electrical Performance		
Contact Resistance	50mΩ Max. (Initial)	Sub ject mated contacts assemnled housing to 20 mV maximum 100mA. Measured from plug side to PCB side. (EIA-364-23B)	
Insulation Resistance	500 MΩ Min.	Mated connectors with 500±10%V DC between adjacent contacts or ground. (EIA-364-21C)	
Dielectric Strength	Without damaged such as arcing or breakdown etc	Mated connectors with 1000±5% V DC for 1 minute 0.5mA between adjacent contacts or ground. (EIA-364-20B)	

#### **Mechanical Performance**

Durability	Appearance	No mechanical damage	Operation Speed:10 to 20 cycle /Min. Durability Cycles:750 Cycles (EIA-364-09C)
	Contact resistance	50mΩ Max.	
Connector Mating Force	22N Max.		Mating connectors at maximum rate25±3mm Per minute and measure the force. (EIA-364-20B)
Plug Retention Force	50N Min.		Put the connector and plug in a vertical position,hang a 50N object at the bottom of the plug for 60s±5s.

#### **Environmental Performance and others**

Thermal Shock	Appearance	No Damage	Samples shall be placed in the test chamber with the test condition for 5 cycles: 1>40°C ~ 30 minutes
	Contact resistance	50mΩ Max.	2>.+25°C ~ 5 minutes 3>.+85°C ~ 30 minutes 4>.+25°C ~ 5 minutes (EIA-364-32A)
	Insulation resistance	500MΩ Min.	



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**RJ45 Connector series** 

Test item	Requirement		Test Condition
Salt Spray	Appearance	No detrimental corrosion allowed in contact area.	Subject mated and unmated connectors should betested according to the condition listed below: Temperature:(35±2)°C Humidity:(95-98)%(R.H) PH:6.5-7.2 Duration:(1u":8H;1.5u":12H;3u":24H;6u":over48H.)
	Contact resistance	50mΩ Max.	It shall be subjected to standard atmospheric condition 1 h. after removing the salt deposits. It should meet the contact resistance.Non-contact area(5±1)%salt-solution(35±2)℃ for 8 hours. (EIA-364-26B)
Solderability	More than 95% of the dipped surface shall be wet with solder Mechanical characteristics shall be satisfied		Immerse the solder pin of the connector in the solder bath at $235^{\circ} \pm 5^{\circ}$ for $5\pm 0.5$ seconds.After dipped the pin in the flux of RAM or R type 5 seconds. (EIA-364-52)
Resistance to soldering heat	Without deformation of case or excessive lossen.		Place the connector on the P.C.Board, then immerse the solder pin up to the surface of the borard in the solder bath at Solder Temp: 260±5°C,5±0.5sec. (EIA-364-56C)