KUNMING
ELECTRONICS CO., LTD. ***SPECIFICATION***

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RJ45 CONNECTOR	KMRJ001&003	DATE : 2019.02.14

1. Application:
This specification covers the requirements for RJ-45 Connector.

2. Ratings:
Voltage: 125 volts AC
Current: 1.5A
Temperature: -20~70℃
Humidity: 85%RH.MAX

3. Electrical characteristics:

Item	Property	Test condition	Performance
3-1	Low Level contact resistance	EIA 364-23 The object of this test procedure is to detail a standard method to measure the electrical resistance across a pair of mated contacts such that the insulating films, if present, will not be broken or asperity melting will not occur. Subject mated contacts assembled in housing to closed circuit current of 100mA maximum at open circuit at 20 mV maximum.	20 mΩ Max

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Item	Property	Test condition	Performance
3-2	Insulation resistance	EIA 364-21 The object of this test procedure is to detail a standard method tl assess the insulation resistance of connectors. This test procedure is used to determine the resistance offered by the insulation materials and the various seals of a connector to a DC potential tending to produce a leakage of current through or on the surface of these members. Measure by applying test potential between the adjacent contacts, and between the contacts and ground in the mated connector assemblies. Test Voltage: 500 Vdc.	500 MΩ Min
3-3	Insulation resistance	EIA 364-20 The object of this test procedure is to detail a test method to prove that a connector can operate safely at its rated voltage and withstand momentary over potentials due to switching, surges and/or other similar phenomena. Measure by applying test potential between the adjacent contacts, and between the contacts and ground in the mated connector assemblies. Test Potential : 500 Vac at sea level, 60Hz Test Duration : 60 seconds	1. No flashover, No spark over, No excess leakage, No breakdown. 2. Current leakage : < 0.5mA

4. Electrical characteristics:

Item	Property	Test condition	Performance
4-1	Insertion and extraction force	EIA 364-13 The object of this test is to detail a standard method for determining the mechanical forces required for inserting connector. Subject connector to mate and extracted to measure the mechanical forces required to engage and disengage at a rate of 12.5mm per minute. Record by using autograph.	1. Insertion force： Maximum 30N (With latch depressed). 2. Extraction force Minimum 50N (With latch depressed at An advantageous angles)

Item	Property	Test condition	Performance
4-2	Life test	EIA 364-09 The object of this test procedure is to detail a uniform test method for determining the effects caused by subjecting a connector to the conditioning action of insertion and extraction, simulating the expected life of the connectors. Durability cycling with a gauge is intended only To produce mechanical stress. Durability performed with mating components is intended to produce both mechanical and wear stress.	1. 750 insertion /extraction cycles at a maximum rate of 200 cycles per hour. 2. No evidence of damage. 3.Initial:20mΩ Max. After test:100mΩ Max.
4-3	Solder ability	EIA 364-52 Category 3 The object of this test procedure is to detail a uniform test method for determining connector solder ability. The test procedure contained herein utilizes the solder dip technique. It is not intended to test or evaluate solder cup, solder eyelet, other hand-soldered type or SMT type terminations. Subject unmated connectors should be tested according to the condition listed below : Steam Aging Temperature : 90 ~ 96℃ Steam Aging Duration: 1 hour±5 min. Soldering Temperature : 260±3℃ Soldering time: 5±1 seconds Flux : Unactivated	Continuous solder coating with a minimum 95% coverage.

Item	Property	Test condition	Performance
4-4	Vibration (Random)	EIA 364-28 Condition V Test letter A This test procedure is applicable to connectors that may, in service, be subjected to conditions involving vibration. Whether a connector has to function during vibration or merely to survive conditions of vibration should be clearly stated by the detailed product specification. In either case, the relevant specification should always prescribe the acceptable performance tolerances. Subject mated connectors should be tested according to the condition listed below : Test condition : Random Frequency : 50 ~ 2000 Hz PSD value : 5.35 Grms minimum Duration : 10 minutes/axis Times : Each of three mutually perpendicular planes.	1. No discontinuities of 1μs or longer duration. 2. No evidence of damage.
4-5	Physical Shock	EIA 364-27 Condition H The object of this test procedure is to detail a standard method to assess the ability of connector to withstand specified severity of mechanical shock. Subject mated connectors should be tested according to the condition listed below : Wave form: Half-sine Peak acceleration : 50 G's Duration : 11 ms Velocity change of 170 inches/sec.	1. No discontinuities of 1μs or longer duration. 2. No evidence of damage.

5. Environment characteristics:

Item	Property	Test condition	Performance
5-1	Humidity (Temperature Cycling)	EIA 364-31 Method III Test Condition A The object of this test procedure is to detail a standard test method for the evaluation of the properties of materials used in connectors as they are influenced by the effects of high humidity and heat. Subject mated connectors should be tested according to the condition listed below : Temperature : 25 ~ 65°C Humidity : 90 ~ 95% (R.H) Duration : 168 hours (7 complete cycles)	No evidence of damage.
5-2	Thermal Shock	EIA 364-32 Test Condition I The object of this test is to determine the resistance of a connector to exposure at extremes of high and low temperatures to the shock of alternate exposures to these extremes, simulating the worst case conditions for storage, transportation and application. Subject mated connectors should be tested according to the condition listed below : Temperature : -20 ~ 70°C Cycles : 10cycles Exposure time at temp. extremes : 30 minutes	No evidence of damage.
5-3	Thermal Stress	The part shall withstand 50 cycles between limits at 15℃ to 30℃ per minute as measured on the product.	No evidence of damage.

Item	Property	Test condition	Performance
5-4	Salt Spray	EIA 364-26 Test Condition A The object of this test procedure is to detail a standard test method to assess the effects of a controlled salt laden atmosphere on connector components, finishes and mechanisms. Subject mated and unmated connectors should be tested according to the condition listed below : Temperature : 35±1.1°C Humidity: 95 ~ 98% (R.H.) PH Value: 6.5 ~ 7.0 Duration: 72 hours	No evidence of damage.
5-5	Temperature Life	EIA 364-17 Test Condition 3 Method A The object of this test is to detail a standard test method to assess the ability of a connector to withstand elevated temperatures with or without electrical loading. Subject mated connectors should be tested according to the condition listed below : Temperature: 70±2°C; Duration: 96 hours	No evidence of damage.
5-6	Cold resistance	The object of this test is to detail a standard test method to assess the ability of a connector to withstand elevated temperatures with or without electrical loading. Subject mated connectors should be tested according to the condition listed below. Temperature: -20±2°C; Duration : 96 hours	No evidence of damage.

6. Appearance:

No scratches, soil, rust or discoloration shall be observed.

7. Compliance with specifications:

The above specification shall be read in conjunction with the applicable drawing and the individual specification,

Whenever this specification conflicts with the applicable drawing or the individual specification, the latter shall govern.

8. Country of origin:

This jack is made and assembly in china.

9. Amendment:

When the amendment of this specification comes into necessity, it shall be made by the mutual consultation and the agreement between manufacturer and customer.