1. Scope

This specification covers the performance, tests and quality requirements for the RJ45 Connector

Applicable Product Models:FRJ45263 series.

2. Applicable documents

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 (UL94V-0)

Terminal: Copper Alloy

Plating:Gold Plated

6. Accommodated P.C.B layout

Refer to the drawing.

7. Rating

Operating voltage(Max.):125V AC

Current rating(Max.) :1.5A allowable current to be applied

Temperature range-operating: -40°C -- +85°C

8. Performance

Serial Number	Test item	Procedure	Requirement
1	Examination Of Product	Visual inspection. (EIA-364-18)	Meets requirements of product Drawing. No physical damage.
2	Plating Thickness Measurement	Inspect plating thickness using X-ray evaluation. (EIA-364-48A)	Meet plating requirements defined in customer drawing

ELECTRICAL REQUIREMENT

3	Contact Resistance	Subject mated contacts assembled housing to 30 mV maximum 100 mA .Measured from plug side to PCB side. (EIA-364-23)	30 mΩ MAX (Initial) 50 mΩ MAX (Final)
4	Insulation Resistance	Mated connectors with 500±10% VDC between adjacent contacts or ground. (EIA-364-21)	Minimum initial resistance: 500 MΩ
5	Dielectric withstanding Voltage	Mated connectors with 1000±5% V AC for 1minute 0.5mA between adjacent contacts or ground (EIA-364-20)	No Breakdown

MECHANICAL REQUIREMENT

6	Solder ability	Subject specimens to steam aging prior to solderability, per category. Solder type and temperature shall be in accordance with the intended method of mounting the product. If not specified, use RMA or R type solder flux prior to solderability test. Then immerse the solder pin into the solder bath at Solder Temp：235℃±5℃, 5±0.5S. (EIA-364-52)	Solderable area shall have a minimum of 95% solder coverage

7	Resistance to Soldering Heat	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: (EIA-364-56C)	Without deformation of case or excessive lossen.
8	Mating and Un-mating Force	Mating connectors at maximum rate 12.5millimeters/minute and measure the Insertion and Extraction force . (EIA -364-13)	2.2kgf Max
9	Durability	Operation Speed：10 to 20 cycle/min. Durability Cycles：750 Cycles. (EIA-364-09)	Appearance: Nodamage
			Contact Resistance：50 mΩ MAX
10	Plug Retention Force	Put the connector and plug in a vertical position,hang a 7.7kgf object at the bottom of the plug for 60s±5s.	7.7kgf Min

ENVIRONMENT PERFORMANCE AND OTHERS

11	Humidity	At a temperature of 25℃~65℃ and relative humidity of 90% - 95% for 96 hours. Then, be left alone for 1 to 2 hours in a room ambient and test in the time. (EIA-364-31)	Meet visual requirements, show no physical damage, and meet requirements of additional tests as specified in the Product Qualification Test Sequence

12	Cold resistance	Put it in an environment with a temperature of -40±2 ℃ for 96 hours, then take it out and place it in normal humidity and room temperature for 1 to 2 hours and then test the contact impedance (excluding the resistance of the Crystal head and RJ45 jack).	Meet visual requirements, show no physical damage, and meet requirements of additional tests as specified in the Product Qualification Test Sequence
13	Temperature life (preconditioning)	Mated connectors and expose to 85 ℃ for 240 hours, Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed. (EIA-364-17)	Meet visual requirements, show no physical damage, and meet requirements of additional tests as specified in the Product Qualification Test Sequence
14	Salt Spray	Tested as below: Temperature: (35±2)℃ Humidity:(95-98)%(R.H.) PH: 6.5-7.2 Duration:X≤1u" :8H; 1u" < X < 3u" :12H; 3u" ≤X < 15u" :24H;15u≤X < 30u" :36H;X=30u" :48H;X=50u" :72H;It shall be subjected to standard atmospheric condition 1 hour after removing the salt deposits. It should meet the contact resistance. Object non-contact area: Temperature:(35±2)℃ Salt-solution (5±1)% . (EIA-364-26B)	Meet visual requirements, show no physical damage, and meet requirements of additional tests as specified in the Product Qualification Test Sequence