1. Scope

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

Applicable Product Models:FRJ45049 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

Shell:Copper alloy/Nickel plating

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 20 mV maximum 100 mA .Measured from plug side to PCB side. (EIA-364-23)	30 mΩ MAX (Initial) 50 mΩ MAX (Final) See notese
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% VAC for 6 seconds 1.0mA between adjacent contacts or ground. (EIA-364-20)	No Breakdown

MECHANICAL REQUIREMENT

6	Solder ability	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-364-52)	Solderable area shall have a minimum of 95% solder coverage

7	Resistance to Soldering Heat	Will pin/shielding shell immersed in to the solder groove iron foot，260±5℃ temoeratur，time for 10±0.5s.	Pin/iron feet more than 95% tin, no bubble,virtual welding phenomenon, glossiness is good
8	Mating and Un-mating Force	Insert connector (male to female) at a rate of 25.4 mm per minute. (EIA -364-13)	30N Max
9	Durability	Operation Speed：10 to 20 cycle/min. Durability Cycles：750 Cycles. (EIA-364-09)	Appearance: Nodamage
			Contact Resistance：50 mΩ MAX

ENVIRONMENT PERFORMANCE AND OTHERS

10	Heat Resistance	Mate The sample connectors shall expose to 85±2 °C for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room condition for 1to2 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
11	Cold Resistance	Mate The sample connectors shall expose to-40±2°C for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room condition for 1to2 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

12	Salt Spray	Salt Mist Concentration: 5%±2; pH Value: 6.5~7.2; Spray Rate: 1.0~2.0 (ml/80 cm²/h); Relative Humidity (RH): ≥85%; Test Duration: 24 hours. (EIA-364-26B)	Meet visual requirements, show no physical damage, and meet requirements of additional tests as specified in the Product Qualification Test Sequence