1. Scope

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

Applicable Product Models:FRJ45242 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:Selective gold plated on contact area and matte tin plated on tails area

Metal Panel：Zinc Alloy/Nickel plating

6. Rating

Operating voltage(Max.):50V AC

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

Temperature range-operating: -40°C -- +80°C

7. Performance

Serial Number	Test item	Procedure	Requirement
1	Examination Of Product	Visual inspection. (EIA-364-18)	Meets requirements of product Drawing. No physical damage.

ELECTRICAL REQUIREMENT

2	Contact Resistance	Subject mated contacts assembled housing to 20 mV maximum 100 mA .Measured from plug side to PCB side. (EIA-364-23)	10mΩ MAX
3	Insulation Resistance	Mated connectors with 500±10% VDC between adjacent contacts or ground. (EIA-364-21)	Minimum initial resistance: 500 MΩ
4	Dielectric withstanding Voltage	Mated connectors with 1000VAC for 6 seconds 1.0mA between adjacent contacts or ground. (EIA-364-20)	No Breakdown

MECHANICAL REQUIREMENT

5	Mating and Un-mating Force	Mating connectors at maximum rate 25.4millimeters/minute and measure the Insertion and Extraction force . (EIA -364-13D)	20N Max.
6	Durability	Operation Speed：10 to 20 cycle/min. Durability Cycles：750 Cycles. (EIA-364-09)	Appearance: Nodamage
			Contact resistance range

ENVIRONMENT PERFORMANCE AND OTHERS

7	Heat Resistance	Mate The sample connectors shall expose to 80±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)	Appearance: Nodamage The connection signal is normal with no disruptions
8	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)	Appearance: Nodamage The connection signal is normal with no disruptions
9	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)	Appearance: Nodamage