

Product specification

1. Scope

This specification applies to the RF Connector, specifying the product's performance indicators, test methods and test requirements.

Applicable Product Models: F0MCRF-S50P0S0S-04 .

2. Applicable Standards

The following documents form a part of this specification. 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.

2.1 MIL-STD-202

2.2 EIA-364

3. Appearance and Dimensions

4.1 Appearance: The product surface shall be free from defects, dirt, cracks and mechanical damage. Contacts shall be free from rust, oxidation or plating peeling.

4.2 Appearance and dimensions shall comply with the requirements of product drawings.

4.3 Exchangeable: Exchangeable with same specification products.

4. Materials

Materials used in the construction of this product shall be as specified on the applicable product drawing.

5. Test Requirements and Procedures Summary

Serial No.	Item	Test Method	Technical Requirements
1	Examination of Product	Visual inspection	Meet the drawing requirements, no damage or abnormality in visual appearance
Electrical Requirement			

2	Low Level Contact Resistance	Apply the level condition of 20mV max. for the open circuit voltage and 10mA max. test current. then measure them that between each coupled terminal mated connector. (MIL-STD-202 Method 307)	Inner contact: 40mΩ Max. Initial Ground contact: 40mΩ Max. Initial
3	Insulation Resistance	100V DC is applied for one minute between Inner contact and Ground contact. (MIL-STD-202 Method 302)	Insulation Resistance:500MΩ Min. Initial
4	Dielectric Withstanding Voltage	200V AC is applied for one minute between Inner contact and Ground contact. (MIL-STD-202 Method 301)	No creeping discharge or flash over shall occur, Current leakage: 2mA Max
5	VSWR	Measure the VSWR as shown by the network analyzer Frequency:100MHz~6GHz	0.1GHz~3GHz≤1.3 3GHz~6GHz≤1.5
Mechanical Characteristics			
6	Vibration	Mated connectors are fixed on the vibration tester's 3 mutually perpendicular planes. Vibration frequency traverse from 10Hz to 100Hz , then to 10Hz in 15 minute at 1.5mm amplitude. Test duration for each plane is 5 cycles (approx 75min). 5mA DC shall be carried to all contacts during the test with an electrical discontinuity monitor.	Appearances have no abnormality. Electrical discontinuity less than 1 u sec
7	Physical Shock	Mated connectors are fixed on the shock tester's 3 mutually perpendicular planes. Dropping 3 times each to normal and reversed 3 mutually perpendicular planes (total of 18 times). The test condition: acceleration 75g max., during of the plus: 11 ms .100mA DC shall be carried to all contacts during the test with an electrical discontinuity monitor. (MIL-STD-202G Method 213 Condition B)	

8	Durability	Mating and Unmating the samples for 30 times at a speed of 25±3mm per minute.	After 30 cycles appearances have no abnormality.
Environmental Performance			
9	Thermal Shock	The mated connectors shall be exposed to the following condition for 5 cycles. 1 cycle: 1) -40℃ for 30 minutes 2) +5~+35℃ for 5minutes Max. 3) +90℃ for 30 minutes 4) +5~+35℃ for 5minutes Max (MIL-STD-202, Method 107)	Appearances have no abnormality
10	Humidity	The mated connectors are exposed to the temperature of 40±2℃, 90~95% relative humidity for 96 hours. (MIL-STD-202,Method103,Test Condition B)	
11	Temperature Life	The mated connectors are exposed to the temperature of 90℃±2℃ for 96 hours,Recover for 2 hours under standard conditions, test electrical properties immediately.	