

Salt Spray Test for Fixed Attenuators and Terminations

1. Test Purpose

To evaluate the metal materials and its protective coatings used for RF ONE Coax Fixed Attenuators and Terminations are able to withstand the accelerated corrosion test which simulates the effects of seacoast atmospheres. This test was operated in accordance with method 101 of MIL-STD-202.

2. DUT Product Information



Sample Pictures before Salt Spray Test

Description of Sample Units are listed in below table.

*All DUT samples are made of passivated stainless steel 303

No.	P/N	Product Description	Qty
1	RFHB6730VC2A	1.85mm Attenuator, DC-67 GHz, 2W, 30dB	2
2	RFHB500324C2	2.4mm Attenuator, DC-50 GHz, 2W, 3dB	2
3	RFHB4003KC2	2.92mm Attenuator, DC-40 GHz, 2W, 3dB	2
4	RFHB1830SC2	SMA Attenuator, DC-18 GHz, 2W, 30dB	2
5	RFT5002242A	2.4mm Male Termination, DC-50 GHz, 2W	1
6	RFT5002241A	2.4mm Female Termination, DC-50 GHz, 2W	1
7	RFT1802S2	SMA Male Termination, DC-18 GHz, 2W	1
8	RFT1802S1	SMA Female Termination, DC-18 GHz, 2W	1

3. Test Instrument

No.	Instrument
1	Q-FOG SSP & CCT Cyclic Corrosion Testers

4. Test Description

Salt Pray test is performed per MIL-STD-202G Method 101, Condition B. During the salt spray test, the attenuator connector is mated to a capped dummy connector according to MIL-DTL-3933J.

Test Conditions:

Units are non-operating.

Salt solution concentration:5%wt

PH of solution:6.5-7.2

Chamber temperature: (35 ± 3)°C

Fog collection:(1-3)mL/hour

Test duration:48 hours



5. Test Results

After the 48 hour salt spray test, the samples were taken out of chamber and naturally dried up to 0.5 hour. Then use water flow not higher than 35 °C to gently clean and remove the white residue from the samples. Visual inspection showed no corrosion trace on the sample units, and all sample units still function well within specification.

Unit appearance (After testing, No cleaning)

		
RFHB6730VC2	RFHB500324C2	RFHB4003KC2
		
RFHB1830SC2	RFT5002242A	RFT5002241A
		
RFT1802S2	RFT1802S1	