

MHF® I SMA ADAPTER For Plug and Receptacle

Part No. Plug: 90193-001 Receptacle: 90193-002

Product Specification

Qualification Test Report No. TR-25061

0	S25402	October 6, 2025	H. Takao	-	K. Yufu
Rev.	ECN	Date	Prepared by	Checked by	Approved by

1. Scope

This product specification defines the test conditions and the performances of the MHF I SMA ADAPTER For Plug and Receptacle.

2. Product Name and Parts No.

2.1 Product Name

MHF I SMA ADAPTER for Plug

MHF I SMA ADAPTER for Receptacle

2.2 Parts No.

MHF I SMA ADAPTER for Plug: 90193-001

MHF I SMA ADAPTER for Receptacle: 90193-002

3. Rating

3.1 Operating Conditions

Operating temperature: 233 to 358K(-40°C to +85°C) (Containing temperature rise by current)

4. Test and Performance

Test Condition

Unless otherwise specified, all tests and measurements shall be performed.
under the following conditions in accordance with MIL-STD-202.

Temperature: 288K to 308K(15°C to 35°C)

Pressure: 866hPa to 1066hPa (650mmHg to 800mmHg)

Relative humidity: 45 to 75% R.H.

4.1. Electrical Performance**1. VSWR**

Reference standard: -

Test conditions: Measure the VSWR as shown in Fig.1 by the network analyzer.

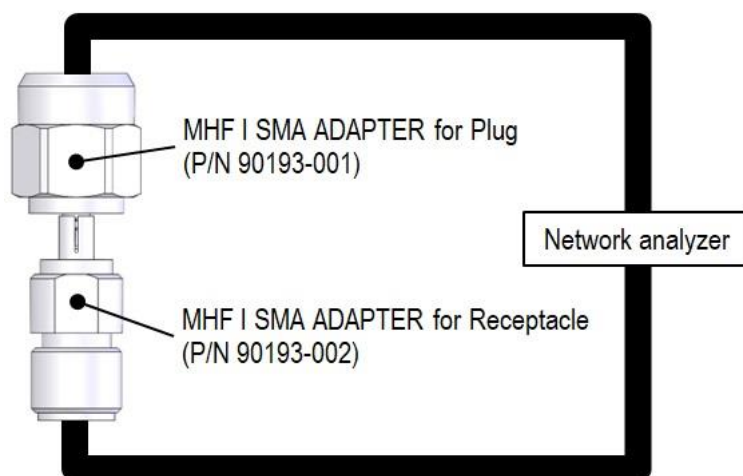


Fig.1

Pass criteria:

0.1 to 3.0GHz:	1.30 MAX.
3.0 to 6.0GHz:	1.50 MAX.
6.0 to 9.0GHz:	2.00 MAX.

2. Insulation resistance

Reference standard: MIL-STD-202-302, Test condition A

Test conditions: Apply DC 100 V between the inner contact and the ground contact.

Pass criteria: 500 MΩ MIN.

3. Dielectric withstanding voltage

Reference standard: MIL-STD-202-301

Test conditions: Apply AC 200V(rms) between the inner contact and the ground contact for a minute.

Pass criteria: No abnormalities such as creeping discharge, flashover, insulator breakdown occur.

4.2. Mechanical Performance**1. Durability**

Reference standard: -

Test conditions: Place the adapter on the push-on/pull-off machine, and repeat mating and unmating at a speed 25±3mm/min. along the mating axis.

【Mating connector】	【Cycle】
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90193-001: MHF I Plug	3,000cycles
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90193-002: MHF I Receptacle	500cycles
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Pass criteria:

VSWR:	Shall meet4.1.1
Insulation resistance:	Shall meet4.1.2
Dielectric withstanding voltage:	Shall meet4.1.3

4.3 Test Sequence and Specimen Quantity

Table.1 Test Sequence and Sample Quantity

Test Item	Test sequence
VSWR	1,5
Insulation resistance	2,6
Dielectric withstanding voltage	3,7
Durability	4
Sample Quantity	3pcs.

※Numbers indicate test sequences.