



# Agilent 909F

## Precision Coaxial Termination

### Data Sheet

#### DC to 6 GHz



#### Description

Agilent Technologies' 909F family of precision low reflection loads are intended for use as calibration standards.

Tantalum nitride on sapphire thin-film technology is used for exceptional long-term impedance stability. To ensure the best possible wear resistance characteristics, gold-plated beryllium copper has been used for the connector contacts.

#### Specifications

**Specifications** describe the instruments' warranted performance over the +15° to +35° C temperature range. **Supplemental characteristics** as denoted by "typical", "nominal", or "approximate" are provided as information useful in applying the instrument, but are non-warranted performance parameters.

**Frequency Range:** dc to 6 GHz, usable to 18 GHz

**Impedance (nominal):** 50  $\Omega$

#### Connector:

909F, APC-7

Option 012, type-N (m)

Option 013, type-N (f)

#### Reflection Coefficient (max):

909F

dc to 5 GHz, 0.0025 (1.005 SWR)

5 to 6 GHz, 0.005 (1.01 SWR)

6 to 18 GHz, 0.07 (1.15 SWR)

typical

Option 012

dc to 2 GHz, 0.0035 (1.007 SWR)

2 to 3 GHz, 0.005 (1.01 SWR)

3 to 6 GHz, 0.01 (1.02 SWR)

6 to 18 GHz, 0.07 (1.15 SWR)

typical

Option 013

dc to 2 GHz, 0.0035 (1.007 SWR)

2 to 3 GHz, 0.005 (1.01 SWR)

3 to 6 GHz, 0.01 (1.02 SWR)

6 to 18 GHz, 0.07 (1.15 SWR)

typical

**Power Rating:** 500 mW avg.;

100 W peak, 10  $\mu$ S/pulse

**Weight:** net—60g (2 oz);

shipping—200 g (8 oz)

#### Environmental

##### Temperature:

Operating: +15° to +35° C

Non Operating: -55° to +75° C

##### Altitude:

Operating: 15,000 ft

Non Operating: 50,000 ft

**Humidity:** Cycling 5 days,

+40° C @ 95% RH

**Vibration:** 0.015", 5-55-5 Hz,

15 min., 3 axes

**Shock:** 100 g, 1-2 ms, 3 times

3 planes

**EMC:** Radiation interference is within the requirements of MIL-STD-461, method RE02, VDE 0871, CISPR Publication 11.



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