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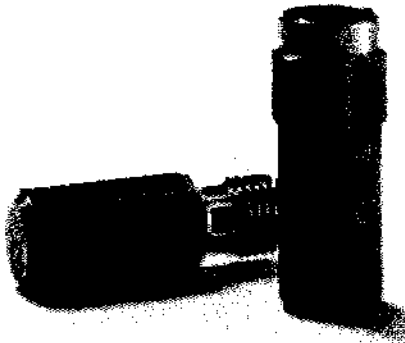
HP 909D

Coaxial Termination

dc- 26.5 GHz



Technical Data



Features and Description

- 26.5 GHz, usable to 34 GHz
- Rugged
- APC-3.5 connector for repeatability
- Low SWR

The HP 909D is a precision, low reflection load for terminating 50Ω coaxial systems in their characteristic impedance. The HP 909C comes with the rugged APC-3.5 connector to provide measurement repeatability even after hundreds of connections.

The performance is specified to 26.5 GHz and tested with an Automatic Network Analyzer. But the HP 909D is useful, mode free to 34 GHz. Based on limited tests, the expected SWR at 34 GHz is in the range of 1.3. What's more, the HP 909D will operate to 39 GHz before higher mode resonances have any significant effect.

Impedance stability with both time and temperature, a key parameter for precision terminations, is achieved by using tantalum nitride on sapphire thin film technology.

Maintenance

Because the HP 909D is used primarily for precise measurements, it is essential that it be kept in top operating form. Hewlett-Packard recommends that the connector be periodically inspected and cleaned if necessary. It is also recommended that the HP 909D be calibrated once a year or after 1000 connections. Because of its simplicity and because there are no field replaceable parts in this product, there is no operating manual.

Specifications

Frequency range:

dc - 26.5 GHz

Impedance: 50Ω

SWR: Standard	Option 040
1.02: dc-3 GHz	dc-4 GHz
1.036: 3-6 GHz	4-6 GHz
1.12: 6-26.5 GHz	6-26.5 GHz

(The typical VSWR is 1.1 at 26.5 GHz. Statistically, 90% of the units produced will meet this performance.)

Power Rating: 2W average at 20°C derated to 1W average at 75°C, 100W peak (10 μs max. pulse width) at 20°C.

Connector: APC-3.5 (m);
Option 011, APC-3.5 (f)

Dimensions:

23 mm x 4 mm diameter.
(0.91" x 0.16" diameter.)

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