

Table 1. Specifications

Frequency Range: 1.8 to 18 GHz.

Impedance: $50\Omega \pm 0.15\Omega$

Load Element Reflection Coefficient: 1.8 to 18 GHz;
0.024 (1.05 SWR, 32.2 dB return loss).

Power Rating: 1 W average, 5 kW peak.

Load Travel: Greater than $1/2$ wavelength at 1.8 GHz.

Length: 44 cm ($17\frac{1}{4}$ inches).

Connectors Supplied: Interchangeable connector bodies and center pins for use with APC-7 and Type N male and female connectors (two of each type pin supplied). The Type N combinations are compatible with Type N connectors whose dimensions conform to MIL-C-39012 or MIL-C-71.

Weight: Net. 196 gm (7 oz.). Shipping 0.91 kg (2 lb).

Accessories Furnished: Carrying case and wrench for changing connector bodies.

1. INTRODUCTION

2. The Hewlett-Packard Model 905A Coaxial Sliding Load is a movable, low-reflection load for use in precision microwave measurements. By moving the load, you can phase the load reflection to separate it from the other reflections in the system. This technique enables you to measure such quantities as the directivity of coaxial directional couplers and the residual SWR of coaxial slotted lines. The low SWR (standing-wave ratio) of the 905A also makes it an excellent fixed termination for the 50 ohm coaxial systems.

3. Equipment Supplied

4. The following equipment is supplied:

- 1 Coaxial Sliding Load complete with load element
- 1 Center conductor with threaded hole to receive center pins (see below)
- 1 Male type N connector shell with 2 screw-on center pins (pointed)