SECTION V NOISE SOURCE MODEL 349A

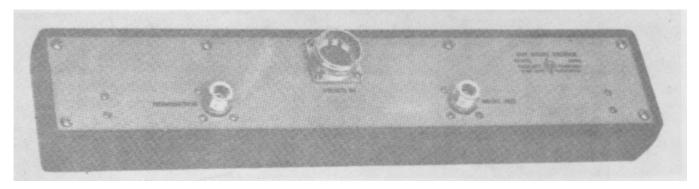


Figure 5-1. Model 349A Noise Source

5-1. INTRODUCTION.

Like other noise sources, the 349A is designed to operate from the internal power of the Models 340A/B or 342A Noise Figure Meters. The j Model 349A is connected to a - noise figure meter and the source current adjusted using the controls and meter provided on the noise figure meter. The source is then ready for operation.

5-2. GENERAL OPERATING INFORMATION. CAUTION

Due to a capacitive effect between plasma and helix, a high voltage pulse appears at both the NOISE OUT and

TERMINATION connectors. This pulse occurs during the noise tube ignition interval. The energy from the pulse may damage fragile devices, such as parametric amplifiers or transistors. To protect equipment from these pulses, a suitable high-pass filter should be utilized.

The Model 349A Noise Source is designed for use with the be Models 340A/B and 342A Noise Figure Meters. The noise source provides a known excess noise power throughout its spectrum. The output of the noise source is fed to the device under test and

Table 5-1. Specifications

FREQUENCY RANGE: 400 to 4000 Mc, wider range with correct EXCESS NOISE 15. 7 0.5 db; 1000 to 4000 Mc 15. 6 0.6 db; 400 to 1000 Mc NOISE GENERATOR: Argon discharge tube RECOMMENDED OPERATING CURREC SWR: <u>Fired</u> Up to 2600 Mc: less than 1.35 2600 to 3000 Mc: less than 1.5 3000 to 4000 Mc: less than 2.0 Source terminated ina coaxial load with 1.05 SWR INPUT POWER:	ENT: 150 n <u>Unfired</u> less than 1. less than I less than 3.	Meters MAXIMUM RF INPUT Voltage: 225 volts peak Power: 1000 wafts peak, . 5 watts average NET WEIGHT: Approximately 3-1/4 lb (1, 5 kg) SIZE: 15 inches (381 mm) long, 3 inches (76 mm) wide, 2 inches (381 mm) high NOISE OUT and TERMINATION Connectors: Type N, terminate one end with a 50-ohm low- reflection coaxial load except it feed-through5-1 applications ACCESSORIES AVAILABLE: 908A Coaxial Termination, 50 ohms
	908A Coaxial Termination, 50 ohms	