Page 1 Model 11049A

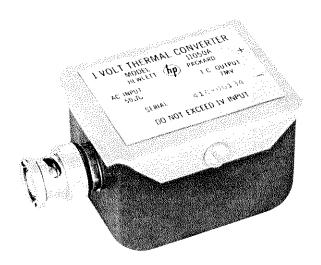


Figure 1. -hp- Medel 11050A Thermal Converter

## 1. GENERAL.

2. The -hp- 11049A, 11050A, and 11051A Thermal Converters accurately convert ac input signals to dc voltages proportional to the rms value of the input. They have essentially a flat response from 5 Hz to 10 MHz, and good frequency response from 10 MHz to 100 MHz. Table 1 shows the frequency response specifications of the thermal converters.

## 3. SPECIFICATIONS.

## MAXIMUM INPUT VOLTAGE:

11049A: 3 volts rms 11050A: 1 volt rms 11051A: 0.45 volt rms

INPUT IMPEDANCE:  $50 \Omega \pm 0.15 \Omega$  to 10 MHz

OUTPUT IMPEDANCE: less than 10  $\Omega$ 

## OUTPUT VOLTAGE FOR FULL SCALE INPUT:

Nominal 7.5 mV

Table 1. Calibration Accuracy

Frequency Range	With Reference to Standard	Measurement Uncertainty
5 Hz to 20 Hz 20 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 1 MHz 1 MHz to 10 MHz 10 MHz to 30 MHz 30 MHz to 60 MHz 60 MHz to 100 MHz	within $\pm 0.05\%$ within $\pm 0.01\%$ within $\pm 0.01\%$ within $\pm 0.01\%$ within $\pm 0.05\%$	$\begin{array}{c} \pm 0.12\% \\ \pm 0.02\% \\ \pm 0.03\% \\ \pm 0.06\% \\ \pm 0.12\% \\ \pm 0.25\% \\ \pm 0.50\% \\ \pm 1.50\% \end{array}$

OPTION 01: Includes calibration to 60 MHz and correctional data sheet covering frequency range from 5 Hz to 60 MHz.

OPTION 02: Includes calibration to 100 MHz and correctional data sheet covering frequency range from 5 Hz to 100 MHz.