1.2 PERFORMANCE SPECIFICATIONS

POWER RANGE

Seven 11dB ranges with full-scale readings of 10mW, 1mW, 100uW, 10uW, 1uW, 100-nW, 10nW, and an eighth range covering -40 to +10dBm.

ACCURACY (See Figure 1-1, below)

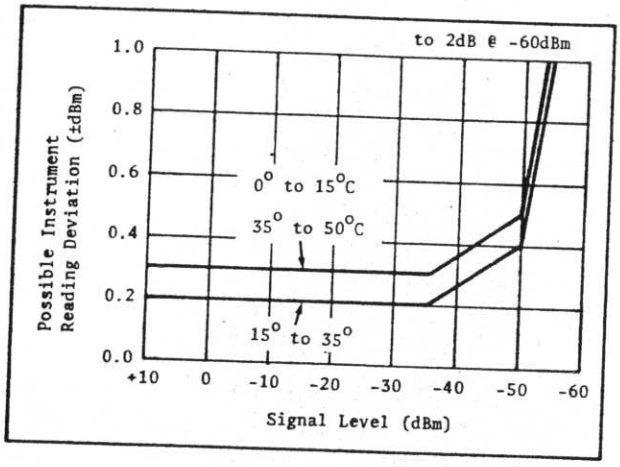

Figure 1-1. Model 1034A Detector Measurement Accuracy from 1MHz to 10GHz. (Add 0.2dB to the above for frequencies from 10GHz to 18GHz. The curve includes uncertainty due to detector non-linearity, but not mismatch or efficiency calibration errors. Not applicable to -40 to +10dBm range.)

ZERO CARRYOVER

Included in the accuracy specifications.

NOISE

Less than 0.05dB p-p for signal levels greater than -40dBm. Less than 0.2dB p-p for signal levels greater than -50dB, as observed on the meter.

ZERO DRIFT

At -50dBm, less than 1dB/hour. Proportionately less as the input signal increases (constant 25°C temperature, after 1/2 hour stabilization).

DRIFT WITH TEMPERATURE CHANGE

At -50dBm, less than 0.5dB/°C. Proportionately less as the input signal increases.

CALIBRATION OUTPUT

Calibrator output is 10mW (+10dBm) with an uncertainty of 1.5%. Nominal frequency is 30MHz. Output impedance is 50 ohms. Source VSWR better than 1.04. Drift is less than 0.04dB over a three month period. Temperature coefficient is better than 0.001dB/°C.

ANALOG OUTPUT

1.1V for full-scale reading with a coefficient of 100mV/dB. Output impedance is approximately 10K ohms. Noise is less than 0.1dB p-p at -20dBm.

METER

Taut band 1mA movement with mirror-backed scale. Milliwatt scale length is 4 1/2 inches.

POWER REQUIREMENT

115/230Vac ±10%, 50 - 400Hz, 10VA

OPERATING TEMPERATURE RANGE

0 to 50°C (+32 to +122°F)

WEIGHT

3.4 kg (7.5 lbs) (without battery)
3.86 kg (8.5 lbs) (with battery)

OVERALL DIMENSIONS (H x W x D)

191 x 152 x 229 mm
(7 1/2 x 6 x 9 in)

BATTERY POWER SUPPLY (Option 01)

Battery provides more than 10 hours of continuous operation. Full charge is obtained after 16 hours of charging time. Input line voltage range is 90 to 130 and 180 to 260Vac, 50 to 400 Hz. (This option obviates Option 04.)