



Figure 7. VSWR introduced in a flat line by the insertion of a Type 874-GAL Adjustable Attenuator.

## SPECIFICATIONS

**Calibrated Range:** 120 db (relative attenuation) with input line terminated in 50 ohms; 129 db with input line terminated in adjustable stub to minimize the electric field at the coupling point (scale reads -9 to 120 db).

**Insertion Loss** (from input connector to end of output cable at 1 Gc, when signal source impedance is 50 ohms):

With input line terminated in 50 ohms, and scale set at 0 db,  $33 \pm 2$  db; set at -9 db,  $18 \pm 2$  db (settings below 0 are not accurate).

With input line terminated in adjustable stub (which extends the range over which the calibration is accurate to the -9 db scale setting), 20  $\pm$  2 db minimum.

(Insertion loss is approximately inversely proportional to frequency up to 1 Gc.)

**Insertion Loss Directly Through Tee:** Negligible.

### Accuracy of Attenuation:

**Stub-terminated input,**  $\pm$ (0.01 times difference in attenuation reading +0.2) db, direct reading.

**50-ohm terminated input,**  $\pm$ (0.015 times difference in attenuation reading + 0.2) db, when corrected.

**VSWR Introduced into Line:** Less than 1.03 at 1 Gc; less than 1.12 between 1 and 4 Gc.

**VSWR of Output:** Less than 4 at 1 Gc, less than 5 to 4 Gc.

**Maximum Power:** Input power inversely proportional to square root of frequency, and should not exceed 300 watts at 1 Gc. Output power should not exceed  $\frac{1}{2}$  watt.

**Frequency Range:** 100 Mc to 4 Gc.

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