USES. These attenuators can be used as pads to reduce the VSWR of a generator or load. Figure 2 shows the input VSWR obtained when a pad is inserted ahead of a load of a given VSWR. The same effect will be produced on the source impedance of a generator or oscillator.

The attenuators can also be used to reduce the signal level by a known amount. The attenuation characteristics of each attenuator are shown in Figure 1. The attenuation indicated is that produced in a matched 50-ohm system. If the system is not matched, the insertion loss will not necessarily be the same as the attenuation produced in a matched 50-ohm system. If either the source or the load is matched, the insertion loss will be equal to the indicated attenuation.

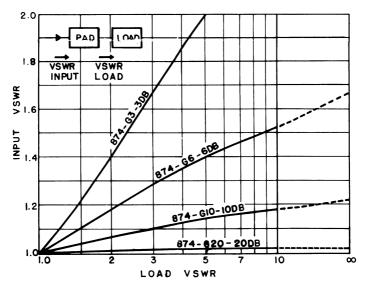


Figure 2. Effectiveness of pads in reducing the VSWR of sources or loads. These curves do not include the VSWR introduced by the pads alone at the higher frequencies. (See Figure 1 and Specifications.)

SPECIFICATIONS

Dc Resistance: 50 ohms ±1% when terminated in 50 ohms.

VSWR: Less than 1.1 to 1000 Mc, 1.2 to 3000 Mc for all units; less than 1.4 to 4000 Mc for 874-G3 and -G6, 1.35 to 4000 Mc for 874-G10, and 1.30 to 4000 Mc for 874-G20.

Accuracy of Attenuation in 50-ohm system: ±1.5% of nominal attenuation at dc; ±0.2 db from value indicated on curve to 1000 Mc, ±0.4 db to 2000 Mc, ±0.6 db to 4000 Mc.

Temperature Coefficient: Less than 0.0003 db/°C/db.

Maximum Power: 1 watt continuous, 3000 watts peak. Physical Length: 3-1/2 inches (90 mm) over-all.

Net Weight: 874-G - 3 ounces (85g)

874-GL - 4 ounces (115g).

Patent No. 2,548,457

GENERAL RADIO COMPANY WEST CONCORD, MASSACHUSETTS