Abstracts

X-Band Diode Limiting (Correspondence)

R.V. Garver and D.Y. Tseng. "X-Band Diode Limiting (Correspondence)." 1961 Transactions on Microwave Theory and Techniques 9.2 (Mar. 1961 [T-MTT]): 202-202.

Broad-band, matched, low power, instantaneous, passive, X--band diode limiting has been demonstrated. The limiter, which uses standard microwave components, is an outgrowth of point contact germanium diode microwave switch research. In fact, the hybrid-tee switch makes a very good narrow-band limiter under the condition of zero bias voltage on the crystals (biasing terminals short circuited). The output power under these conditions is limited to 0.5 mw^2 for incident power up to 30 mw, deduced from Fig. 9 of Garver, et al. However, the bandwidth of the hybrid-tee switch when used as a limiter is insufficient for many applications such as limiting the amplitude of a 0.2-μsec magnetron pulse or flattening a frequency-modulated klystron mode.

❑ Return to main document.