Abstracts

Some Measurements of Traveling-Wave Tube Attenuators at 2000 MC (Correspondence)

C.H. Dix. "Some Measurements of Traveling-Wave Tube Attenuators at 2000 MC (Correspondence)." 1960 Transactions on Microwave Theory and Techniques 8.1 (Jan. 1960 [T-MTT]): 121-122.

Saturation in traveling-wave tube amplifiers, that is, the failure of the output to continue to rise as the input power is increased, can occur in several ways. The limit may arise through heating of the RF circuit, or if the circuit can be so made that this does not occur, the ultimate limit is provided by the amount of power that can be carried on the beam; large signal calculations of the behavior under these conditions have been made by several investigators. It has also been observed, however, that the saturation limit is a function of the amount and distribution of loss in the attenuator, and recent calculations, for example by Rowe, include the study of the limiting power output for various values of the loss parameter d.

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