

Abstracts

Long-Line Effect and Pulsed Magnetrons

W.L. Pritchard. "Long-Line Effect and Pulsed Magnetrons." 1956 Transactions on Microwave Theory and Techniques 4.2 (Apr. 1956 [T-MTT]): 97-110.

A simplified theory of long-line effect is developed leading to expressions for maximum tolerable line length and vswr. The theory is verified experimentally and photographic evidence of the deleterious effect of long-line behavior is presented. The prevention of long-line effect by various methods, including decoupling the magnetron, attenuation, phase shifter, and ferrite isolators, is discussed.

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