

Abstracts

On Spurious Outputs from High-Power Pulsed Microwave Tubes and Their Control

K. Tomiyasu. "On Spurious Outputs from High-Power Pulsed Microwave Tubes and Their Control." 1961 *Transactions on Microwave Theory and Techniques* 9.6 (Nov. 1961 [T-MTT]): 480-484.

Excessive spurious outputs from high-power pulsed magnetrons, klystrons and traveling-wave tubes can cause intolerable interference and deleterious effects in a high-power microwave system. The harmonic output from a klystron may vary appreciably with changes in operating conditions. Harmonic outputs from tubes cannot be eliminated but their radiation can be significantly reduced by using filters. If the parasitic or spurious oscillations are very strong, adverse effects such as amplitude and phase instability of the fundamental frequency output may occur. Some of the spurious outputs may be reduced or eliminated by redesign of the tube or its modulator.

[Return to main document.](#)