

Abstracts

Impedance Characterization of a Two-Post Mounting Structure for Varactor-Tuned Gunn Oscillators

O.L. El-Sayed. "Impedance Characterization of a Two-Post Mounting Structure for Varactor-Tuned Gunn Oscillators." 1974 *Transactions on Microwave Theory and Techniques* 22.8 (Aug. 1974 [T-MTT]): 769-776.

A lumped equivalent circuit is used to characterize a two-post waveguide mounting structure frequently utilized in varactor-tuned Gunn oscillators. Analytical expressions for the different elements are derived. Comparison with experimental results enabled us to refine the model by the introduction of correction factors which compensate for the simplifying assumptions of the theoretical model. This equivalent circuit would facilitate the optimization of the performance of this type of oscillator.

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