

Abstracts

Impedance Modeling of a Whisker Mounted in a Rectangular Waveguide

J. Xu and A. V. Raisanen. "Impedance Modeling of a Whisker Mounted in a Rectangular Waveguide." 1993 Microwave and Guided Wave Letters 3.3 (Mar. 1993 [MGWL]): 58-60.

Theoretical impedance modeling of metal whisker, which is extensively used in millimeter- and submillimeter-wave Schottky diode mixers and frequency multiplier circuits, is presented. The moment method with Galerkin's technique is employed to analyze this structure with the help of the dyadic Green's function in a rectangular waveguide. Effects of whiskers with various types of shape on the embedding impedance are investigated. Theoretical results show good agreement with related results published before.

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