Abstracts

Modeling Resonance in Waveguide-to-Microstrip Junctions by Unilateral Fin Line Resonators

T. Kezai and A.V. Vorst. "Modeling Resonance in Waveguide-to-Microstrip Junctions by Unilateral Fin Line Resonators." 1994 Transactions on Microwave Theory and Techniques 42.2 (Feb. 1994 [T-MTT]): 223-226.

A method for the rigorous calculation of the resonant frequencies observed in waveguide-to-microstrip transitions is developed. The method is general and includes all types of waveguide-to-microstrip junctions. The resonant parts are modeled as unilateral tin line resonators with similar shapes. The resonance frequencies are determined by using the Spectral Domain Approach with appropriate basis functions. Measurements were made. They are in good agreement with the data computed from the model.

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