Abstracts

A Note on the Application of Edge-Elements for Modeling Three-Dimensional Inhomogeneously-Filled Cavities

J.-F. Lee and R. Mittra. "A Note on the Application of Edge-Elements for Modeling Three-Dimensional Inhomogeneously-Filled Cavities." 1992 Transactions on Microwave Theory and Techniques 40.9 (Sep. 1992 [T-MTT]): 1767-1773.

The application of edge-elements for modeling three-dimensional inhomogeneously-filled cavities is presented in this paper. Explicit representations for ‘the two element matrices, [S]/sub e/ and [T]/sub e/, are provided in order to facilitate the implementation of the FEM formulation. Also included are the results of a numerical experiment that investigates the rate of convergence of the computation of the dominant resonance frequency of a rectangular cavity when the edge-element formulation is employed.

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