

Abstracts

A Finite Difference Method for the Solution of Electromagnetic Waveguide Discontinuity Problems

G. Mur. "A Finite Difference Method for the Solution of Electromagnetic Waveguide Discontinuity Problems." 1974 *Transactions on Microwave Theory and Techniques* 22.1 (Jan. 1974 [T-MTT]): 54-57.

A finite difference method for the numerical solution of electromagnetic waveguide discontinuity problems is presented. The method of boundary relaxation is applied, using finite difference techniques in the nonuniform section of the waveguide and using a modal representation of the field in the uniform sections of the waveguide. To illustrate the process some two-dimensional diffraction problems in an electromagnetic waveguide with rectangular cross section are solved.

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