Abstracts

Deterministic Approach to Full-Wave Analysis of Discontinuities in MIC's Using the Method of Lines

Z. Chen and B. Gao. "Deterministic Approach to Full-Wave Analysis of Discontinuities in MIC's Using the Method of Lines." 1989 Transactions on Microwave Theory and Techniques 37.3 (Mar. 1989 [T-MTT]): 606-611.

A deterministic approach to the full-wave analysis of discontinuities in MIC's using the method of lines is described. Arbitrarily shaped one-port and in-line two-port discontinuities in any quasi-planar configurations can be analyzed by this "one step" method. Using the hybrid homogeneous boundary conditions, this approach simplifies the calculation, with psi/sup e/ and psi/sup h/ being discretized only in and near the discontinuity regions. Illustrative examples of S-parameter calculation are given. Computed results are compared with measured data and with the published results of other authors.

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