Abstracts

Study of Modal Solution Procedures for Microstrip Step Discontinuities

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Single and cascaded microstrip step discontinuity problems are studied. Modal formulations and numerical solution procedures are investigated in an effort to determine computationally efficient techniques for the solution of such problems. The enforcement of a modal orthogonality criterion, the boundary enlargement/reduction concept, and convergence as a function of the number of modes and their accuracy are considered. Theoretical and experimental results are presented for the scattering parameters of several example geometries.

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