Abstracts

Quasi-static finite-element analysis of a skewed microstrip crossover

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In this work, we present a quasistatic analysis of a microstrip crossover on a dielectric substrate. The microstrips are located at different planes and may cross at an arbitrary angle. Capacitances and inductances are calculated from scalar potentials. For magnetostatic formulation, the boundary conditions for scalar potential are introduced by means of partitioning surfaces. The use of the adaptive finite element method provides the required flexibility with respect to the analyzed geometry, optimal discretization and good efficiency.

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