Abstracts

The Method of Lines Analysis of Striplines with Double-Layered or Suspended Bianisortropic Biaxial Substrates (Short Papers)

Y. Chen and B. Beker. "The Method of Lines Analysis of Striplines with Double-Layered or Suspended Bianisortropic Biaxial Substrates (Short Papers)." 1994 Transactions on Microwave Theory and Techniques 42.5 (May 1994 [T-MTT]): 917-920.

The Method of Lines (MoL) is extended to study propagation properties of microstrip transmission lines printed on double-layered and suspended bianisotropic biaxial substrates. Unlike previous formulations, the MoL presented here is based on coupled governing equations that are expressed in terms of two components of the electric field which are tangential to interfaces between planar isotropic and anisotropic regions. Numerical results presented in this paper show which elements of primitivity and permeability tensors most significantly affect dispersion characteristics of widely used microwave and millimeter-wave integrated circuit (MIC) transmission lines.

❑ Return to main document.