Abstracts

A Flexible Approach Combining the Spectral Domain Method and Impedance Boundary Condition for the Analysis of Microstrip Lines

C.-W. Kuo and T. Itoh. "A Flexible Approach Combining the Spectral Domain Method and Impedance Boundary Condition for the Analysis of Microstrip Lines." 1991 Microwave and Guided Wave Letters 1.7 (Jul. 1991 [MGWL]): 172-174.

Impedance boundary condition model is incorporated in the spectral domain formulation to calculate the transmission characteristics of microstrip line with lossy conducting strip. Subsectional rectangular pulse functions are used as the basis functions for the surface current distribution because of the finite conductivity of the conducting strip. The approach has the advantage of being more flexible without presuming the edge condition of the surface current distribution and numerically efficient. Numerical results for the phase and attenuation constants of superconducting microstrip line are computed for a comparison.

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