Abstracts

Multilayer Planar Structures for High-Directivity Directional Coupler Design (Dec. 1986 [T-MTT])

M. Horno and F. Medina. "Multilayer Planar Structures for High-Directivity Directional Coupler Design (Dec. 1986 [T-MTT])." 1986 Transactions on Microwave Theory and Techniques 34.12 (Dec. 1986 [T-MTT] (1986 Symposium Issue)): 1442-1449.

One of the problems that appears in the directional couplers designed with nonhomogeneous coupled transmission lines (CTL's) is their inherently poor directivity, due to the difference between the mode phase velocities. In order to overcome this defect, several multilayer configurations for high-directivity coupler design are proposed and studied in this paper. The analysis has been achieved by means of variational techniques in the spectral domain. A computer program to generate optimum design curves has been written, and several examples for certain dielectric materials are included. On the basis of these curves, various directional coupler designs are presented and discussed.

❑ Return to main document.