Abstracts

Multiple Arbitrary Shape Via-Hole and Air-Bridge Transitions in Multilayered Structures (Dec. 1996, Part II [T-MTT])

M.-J. Tsai, C. Chen, N.G. Alexopoulos and T.-S. Horng. "Multiple Arbitrary Shape Via-Hole and Air-Bridge Transitions in Multilayered Structures (Dec. 1996, Part II [T-MTT])." 1996 Transactions on Microwave Theory and Techniques 44.12 (Dec. 1996, Part II [T-MTT] (1996 Symposium Issue)): 2504-2511.

A methodology for the design of multiple via-hole and air-bridge transitions of arbitrary shape in multilayered multiport microstrip circuits is presented in this paper. Application of multiple via holes to the design of microstrip filters and other devices will be discussed. To properly describe the current along the vertical post, the simple pulse function with a triangular cross section is used in the moment method analysis. Circularly and rectangularly shaped vertical transitions are analyzed for several practical applications. Comparisons of numerical results with experimental and available analytical data show good agreement.

❑ Return to main document.