

Abstracts

Full-wave equivalent network representation for multiple arbitrarily shaped posts in H-plane waveguide

A. Valero and M. Ferrando. "Full-wave equivalent network representation for multiple arbitrarily shaped posts in H-plane waveguide." 1999 *Transactions on Microwave Theory and Techniques* 47.10 (Oct. 1999 [T-MTT]): 1997-2002.

This paper presents a method for the analysis of arbitrary shape and composition posts in a waveguide. The method segments the problem into regions that are characterized by their generalized admittance matrices. Both an analytical formulation and a boundary integral formulation based on homogeneous wave equation solutions are used in this characterization. Our method is especially fast and suitable for real time computer-aided design tools because only the changing parameters would have to be computed in a design process. This method also makes a simple combination of different numerical techniques possible.

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