

Abstracts

The Numerical Solution of Rectangular Waveguide Junctions and Discontinuities of Arbitrary Cross Section

C.A. Muilwyk and J.B. Davies. "The Numerical Solution of Rectangular Waveguide Junctions and Discontinuities of Arbitrary Cross Section." 1967 *Transactions on Microwave Theory and Techniques* 15.8 (Aug. 1967 [T-MTT]): 450-455.

A method is described of calculating automatically the performance of junctions of rectangular waveguides including conducting cylinders of arbitrary shape. The only restriction is that the overall problem should be effectively two-dimensional, i.e., the structure be uniform in some cross section. The one basic approximation made (which could be removed) is shown to give useful results for the devices tested, viz., for various shaped irises (inductive and capacitive) and the 4-port H-plane junction.

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