

Modeling of Generalized Coaxial Probes in Rectangular Waveguides

H.-W. Yao and K.A. Zaki. "Modeling of Generalized Coaxial Probes in Rectangular Waveguides." 1995 Transactions on Microwave Theory and Techniques 43.12 (Dec. 1995, Part II [T-MTT] (1995 Symposium Issue)): 2804-2810.

A rigorous approach combining the orthogonal expansion method for modeling cylindrical posts in rectangular waveguides and the extension of the three short plane technique is introduced to obtain the S-matrix for a general coaxial probe in a rectangular waveguide. A cascading procedure is applied to solve the problem of a probe near a waveguide discontinuity and to obtain the response of a probe-excited band pass filter. The computed results are in excellent agreement with the measured results showing the usefulness of this method.

 [Return to main document.](#)