Abstracts

A Model of the Coupling Between Posts in Waveguides Using Equivalent Transmission Lines

In this paper we show that the model for the coupling between posts in waveguides orignally proposed by Joshi and Cornick, has an equivalent version that uses transmission lines for each mode pair. With this model, the problem is solved based on traveling waves and may be useful for the solution of problems with multiple posts without the necessity of having to obtain a Green's function that would include all boundaries. We also show that we may reduce by one half the number of terms of the expansion of the current density induced in the post, as suggested by Eisenhart and Khan.

❏ Return to main document.