

Abstracts

Multiple-Post Inductive Obstacles in Rectangular Waveguide

P.G. Li, A.T. Adams, Y. Leviatan and J. Perini. "Multiple-Post Inductive Obstacles in Rectangular Waveguide." 1984 Transactions on Microwave Theory and Techniques 32.4 (Apr. 1984 [T-MTT]): 365-373.

A complete analysis of multiple-post inductive obstacles in rectangular waveguide is presented. A moment method solution with exponential ($e^{\sup jn\Theta}$) expansion and weighting functions is used in a Galerkin solution. Post currents are expressed as a Fourier series. As many Fourier series terms ($e^{\sup jn\Theta}$) as desired may be included. All higher order (cutoff) mode interactions between posts are taken into account. The solution is rapid and accurate, and errors may be controlled (specified). Data are given for the triple-post obstacle and for a two-element filter.

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