Abstracts

Full-Wave Design of Spurious Free D.R. TE Mode Band Pass Filters

A. Abdelmonem, J.-F. Liang, H.-W. Yao and K.A. Zaki. "Full-Wave Design of Spurious Free D.R. TE Mode Band Pass Filters." 1995 Transactions on Microwave Theory and Techniques 43.4 (Apr. 1995, Part I [T-MTT]): 744-752.

Analytic full-wave analysis and design of direct-coupled dielectric loaded bandpass filters in rectangular waveguide configuration using the TE/sub 10/ mode with a spurious-free response up to twice the operating frequency is described. The filter has no tuning screws and is small in size. Theoretical design of the filter is supported by the experimental results. Superiority of the filter over the inductive window-coupled filter is presented. Practical issues faced while building the filter are discussed. An alternative folded configuration of the filter that allows the implementation of both the canonical elliptic function as well as the Chebychev response is also presented.

❑ Return to main document.