Abstracts

A New Class of Optimized Finline and E-Plane Metal Insert Filters with Improved Characteristics

R. Vahldieck and W.J.R. Hoefer. "A New Class of Optimized Finline and E-Plane Metal Insert Filters with Improved Characteristics." 1985 MTT-S International Microwave Symposium Digest 85.1 (1985 [MWSYM]): 182-184.

A new class of optimized finline and metal insert filters is introduced. In these filters, the ladder-type insert is located in a waveguide section which is either wider or narrower than the embedding standard waveguide. An abrupt step junction at each end forms the transition to the standard waveguide and is included in the analysis. Both filter types provide a better suppression of spurious passbands and have significantly improved stopband attenuation. Filters with enlarged section are useful for design at the lower end of the waveguide band, whereas the narrower version is appropriate for bandend design.

❑ Return to main document.