

Abstracts

Finline and Metal Insert Filters with Improved Passband Separation and Increased Stopband Attenuation

R. Vahldieck and W.J.R. Hoefer. "Finline and Metal Insert Filters with Improved Passband Separation and Increased Stopband Attenuation." 1985 Transactions on Microwave Theory and Techniques 33.12 (Dec. 1985 [T-MTT] (1985 Symposium Issue)): 1333-1339.

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. A 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 stop-band attenuation. Filters with enlarged sections are useful for design at the lower end of the waveguide band, whereas the narrower version is appropriate for bandend design.

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