

# Abstracts

## Efficient computer design of compact planar band-pass filters using electrically short multiple coupled lines

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G.L. Hey-Shipton. "Efficient computer design of compact planar band-pass filters using electrically short multiple coupled lines." 1999 MTT-S International Microwave Symposium Digest 99.4 (1999 Vol. IV [MWSYM]): 1547-1550 vol.4.

The design of high performance, compact, planar band-pass filters using large numbers of coupled, electrically short, microstrip transmission lines, with multiple non-nearest neighbor coupling, is presented. High order frequency dependent lumped elements are used to accurately represent the filter structure, including all intended or parasitic non-nearest neighbor coupling. While generally applicable, this technique is particularly useful for filters manufactured using thin film High Temperature Superconductors (HTS), where small size is required.

 [Return to main document.](#)