

# Abstracts

## An Exact Solution for a Six-Cavity Dual-Mode Elliptic Bandpass Filter

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G. Pfitzenmaier. "An Exact Solution for a Six-Cavity Dual-Mode Elliptic Bandpass Filter." 1977 MTT-S International Microwave Symposium Digest 77.1 (1977 [MWSYM]): 400-403.

The paper treats the synthesis and realization of a six-cavity dual-TE/sub 101/-mode bandpass filter exhibiting all four theoretically possible attenuation poles at finite frequencies. A novel arrangement of the cavities in the dual-mode resonators effects the feasibility of an exact elliptic filter taking the place of the well known six-cavity pseudo-elliptic filter, which presents only two attenuation poles at finite frequencies. Measured curves of an example of implementation at 4 GHz show the results to be in good agreement with the theoretical responses.

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