

## Synthesis of General Asymmetric Singly- and Doubly-Terminated Cross-Coupled Filters (Dec. 1994, Part II [T-MTT])

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R. Levy. "Synthesis of General Asymmetric Singly- and Doubly-Terminated Cross-Coupled Filters (Dec. 1994, Part II [T-MTT])." 1994 Transactions on Microwave Theory and Techniques 42.12 (Dec. 1994, Part II [T-MTT] (1994 Symposium Issue)): 2468-2471.

A new synthesis is given for the realization of cross-coupled filters in the general asymmetric case, which includes singly terminated filters useful in the design of contiguous multiplexers. The result is obtained by formation of the 2-port transfer matrix of the network, enabling circuit element extractions to be performed from both input and output ports, including the direct extraction of cross-couplings. An example is presented of an 8th degree singly-terminated filter having finite frequency and real axis transmission zeros.

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