Abstracts

Canonical Asymetric Coupled-Resonator Filters

H.C. Bell, Jr.. "Canonical Asymetric Coupled-Resonator Filters." 1982 Transactions on Microwave Theory and Techniques 30.9 (Sep. 1982 [T-MTT] (Special Issue on Microwave Filters)): 1335-1340.

A direct (noniterative) procedure is presented for realizing canonical, structurally asymmetric lowpass prototypes for coupled-resonator bandpass filters with "bridge" couplings. An asymmetric prototype is obtained from the canonical symmetric prototype (which is realizable without matrix methods) by applying simple plane rotations to the coupling matrix. The resulting asymmetric prototype may he a more desirable structure, and may have fewer couplings, than the canonical symmetric prototype. The procedure is applicable to filters with symmetric or asymmetric frequency responses.

❑ Return to main document.