Abstracts

Impulse Model Design of Acoustic Surface-Wave Filters

C.S. Hartmann, D.T. Bell, Jr. and R.C. Rosenfeld. "Impulse Model Design of Acoustic Surface-Wave Filters." 1973 Transactions on Microwave Theory and Techniques 21.4 (Apr. 1973 [T-MTT] (Special Issue on Microwave Acoustic Signal Processing)): 162-175.

The design of surface acoustic wave bandpass filters which utilize interdigital electrode transducers is reviewed. The impulse-response description of interdigital transducers is extended to allow calculation of transducer input admittance and filter frequency response with much less effort than required by earlier equivalent-circuit model approaches. The application of the impulse model to the straightforward design of VHF and higher frequency bandpass filters is discussed and several examples of high-performance surface-wave bandpass filters are given.

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