Abstracts

Problems in the Realization of Flat Delay, Narrow-Band Surface Wave Filters at UHF and Microwave Frequencies

H. Skeie. "Problems in the Realization of Flat Delay, Narrow-Band Surface Wave Filters at UHF and Microwave Frequencies." 1975 MTT-S International Microwave Symposium Digest of Technical Papers 75.1 (1975 [MWSYM]): 356-358.

Narrow band filters with maximally flat passband and sharp transitions at the band edges require long transducer arrays. Specific problems encountered in the construction of such filters are minimization of the number of taps to avoid excessive attenuation and phase distortion, suppression of multiple echos, implementation of tap weighting to avoid non-uniform coupling, and numerous problems involved in the fabrication of sufficiently accurate transducer patterns. Tentative solutions to these problems are presented and some experimental results on a 500 MHz, 1% bandwidth filter are given.

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