Abstracts

Two-branch microwave channelized active bandpass filters

C. Rauscher. "Two-branch microwave channelized active bandpass filters." 2000 Transactions on Microwave Theory and Techniques 48.3 (Mar. 2000 [T-MTT]): 437-444.

The realization of small highly selective microwave filters has emerged as a prominent issue in the design of miniaturized high-frequency systems. In this paper, a new way to implement channelized active bandpass filters is presented that deals with the impasse. The concept involves a two-branch configuration, which yields filter circuits that are more compact and offer lower noise figures than earlier three-branch versions, while still retaining all the advantages of channelized feedforward operation. The practicability of the technique is demonstrated with two 10 GHz bandpass filters of different design, whose assessed performance characteristics include signal distortion and noise properties.

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