

Abstracts

Active Filters for UHF and Microwave Frequencies

D.K. Adams and R.Y.C. Ho. "Active Filters for UHF and Microwave Frequencies." 1969 Transactions on Microwave Theory and Techniques 17.9 (Sep. 1969 [T-MTT]): 662-670.

A technique is described for using transistors directly as high-Q inductors at microwave frequencies. Several experimental band-pass filters have been built and tested to verify usefulness of the inductive transistor circuit. Stable filters with unity insertion loss have been realized at UHF. Observations made during temperature cycling show that environmental stabilization can also be achieved. Analysis has been made of noise figure and nonlinear distortion, and supporting experimental data are provided. The inductive transistor circuit is expected to be practical for a variety of small-signal filtering and multiplexing applications.

 [Return to main document.](#)