Abstracts

Low-noise active recursive MMIC filters

M. Danestig, H. Johansson, A. Ouacha and S. Rudner. "Low-noise active recursive MMIC filters." 1997 MTT-S International Microwave Symposium Digest 2. (1997 Vol. II [MWSYM]): 705-708.

This paper presents a novel design technique that allows the noise figure of active recursive microwave filters to be reduced to a level approaching that of low-noise amplifiers (LNA). The measured noise figure of a MESFET-based 10 GHz first order MMIC filter is 4.3 dB, less than 1 dB higher than that of the LNA included in the filter. The filter is compared to a more conventional recursive filter with respect to noise and power behavior. A fifth-order filter with a simulated noise figure of 5 dB is also presented.

❑ Return to main document.