

Abstracts

Low-Noise Design of Microwave Transistor Amplifiers (Short Papers)

R.S. Tucker. "Low-Noise Design of Microwave Transistor Amplifiers (Short Papers)." 1975 Transactions on Microwave Theory and Techniques 23.8 (Aug. 1975 [T-MTT]): 697-700.

Parameters are derived for circles of constant overall noise figure on the source admittance plane of a preamplifier cascaded with a noisy main amplifier. It is shown that the noise figure and noise measure of an amplifier can be expressed in terms of the scattering parameters of a lossless two-port network connected at the input of the amplifier. Examples are given which demonstrate how this network can be synthesized to meet amplifier noise specifications.

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