

Abstracts

Improved analytical analysis of noise figures in HEMT mixers

Won Ko and Youngwoo Kwon. "Improved analytical analysis of noise figures in HEMT mixers." 1998 MTT-S International Microwave Symposium Digest 98.3 (1998 Vol. III [MWSYM]): 1631-1634.

An analytical analysis of noise figures in HEMT mixers is presented. Improved method was developed to evaluate the noise correlation. A simplified analytical expression for noise figure of HEMT mixer was also derived. The contribution of each noise source at various frequencies was represented in a phasor form to permit physical understanding of noise mechanism. The modeled noise figure was compared with the measured data, yielding a good agreement.

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