

Abstracts

12 GHz Low-Noise MMIC Amplifier Designed with a Noise Model that Scales with MODFET Size and Bias

B. Hughes, J. Perdomo and H. Kondoh. "12 GHz Low-Noise MMIC Amplifier Designed with a Noise Model that Scales with MODFET Size and Bias." 1993 Microwave and Millimeter-Wave Monolithic Circuits Symposium Digest 93.1 (1993 [MCS]): 31-34.

A scalable, bias-dependent FET noise model was developed for MMIC design. A three-stage, 12 GHz, MMIC, low-noise amplifier (LNA) was designed with the model. The LNA has a 1.6 dB noise figure and 25.6 dB gain. Lumped elements were used to design an LNA that was significantly smaller per stage (0.31 mm^2) than previous MMIC LNAs.

[Return to main document.](#)