Abstracts

A 7 to 11 GHz AlInAs/GaInAs/InP MMIC Low Noise Amplifier

S.E. Rosenbaum, C.S. Chou, C.M. Ngo, L.E. Larson, T. Liu and M.A. Thompson. "A 7 to 11 GHz AlInAs/GaInAs/InP MMIC Low Noise Amplifier." 1993 MTT-S International Microwave Symposium Digest 93.2 (1993 Vol. II [MWSYM]): 1103-1104.

Two-stage Monolithic Microwave Integrated Circuit (MMIC) low-noise amplifiers (LNAs) have been fabricated using 0.15 µm gatelength InP-based AlInAs/GaInAs High Electron Mobility Transistors (HEMTs). The LNAs showed less than 1.2 dB noise figure and 21 to 22 dB gain over the 7 to 11 GHz band. While discrete devices have shown comparable or lower noise figures at spot frequencies, these results are believed to be the best reported to date for a broadband MMIC amplifier at these frequencies.

❑ Return to main document.