Abstracts

Ka-Band Monolithic Low-Noise Amplifier Using Direct Ion-Implanted GaAs MESFET's

M. Feng, D.R. Scherrer, P.J. Apostolakis, J.R. Middleton, M.J. McPartlin, B.D. Lauterwasser and J.D. Oliver, Jr.. "Ka-Band Monolithic Low-Noise Amplifier Using Direct Ion-Implanted GaAs MESFET's." 1995 Microwave and Guided Wave Letters 5.5 (May 1995 [MGWL]): 156-158.

Ka-band monolithic low-noise amplifiers using low cost direct ion-implanted GaAs MESFET's with 0.25 µm "T"-gates have been developed for use at 27 to 34 GHz. The five stage MMIC amplifier is designed based on 50% Ioss self-biasing using a single power supply. These amplifiers achieved 2-3 dB noise figure with 30 dB associated gain at 33 GHz. These results, using low cost ion implantation techniques, rival the best GaAs p-HEMT MMIC results to date.

❑ Return to main document.