Abstracts

A Monolithic 2-52 GHz HEMT Matrix Distributed Amplifier in Coplanar Waveguide Technology (1994 [MCS])

R. Heilig, D. Hollmann and G. Baumann. "A Monolithic 2-52 GHz HEMT Matrix Distributed Amplifier in Coplanar Waveguide Technology (1994 [MCS])." 1994 Microwave and Millimeter-Wave Monolithic Circuits Symposium Digest 94.1 (1994 [MCS]): 191-194.

This paper discusses design, performance and fabrication of a two stages four sections GaAs monolithic matrix distributed amplifier covering the frequency range from 2 to 52 GHz. The achieved gain is about 9 dB and the return loss is better than 12 dB. The devices we used are 2 x 25 µm, 0.2 µm recessed gate AIGaAs-HEMTs and the coplanar waveguide was the propagation medium for this broadband amplifier. The chip dimensions of the amplifier including the bias networks are 2.0 mm x 2.5 mm.

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