Abstracts

A Monolithic Ka-Band HEMT Low-Noise Amplifier (1988 [MCS])

C. Yuen, C. Nishimoto, M. Glenn, Y.C. Pao, S. Bandy and G. Zdasiuk. "A Monolithic Ka-Band HEMT Low-Noise Amplifier (1988 [MCS])." 1988 Microwave and Millimeter-Wave Monolithic Circuits Symposium Digest 88.1 (1988 [MCS]): 139-142.

A monolithic, single-stage HEMT low-noise amplifier has been developed for the 20-40 GHz band. This amplifier includes a single 0.25-µm gate-length HEMT active device with on-chip matching and biasing circuits. A gain of approximately 6 dB from 20 to 38 GHz and a noise figure of approximately 5 dB from 26.5 to 38 GHz were measured. These are the best reported results for a millimeter-wave amplifier over this bandwidth. The chip size is 2.2 mm x 1.1 mm.

❑ Return to main document.

Click on title for a complete paper.