Abstracts

Low Noise Microwave HIFET Using MOCVD

H. Takakuwa, K. Tanaka, K. Togashi, H. Ohke, M. Kanazawa and Y. Kato. "Low Noise Microwave HIFET Using MOCVD." 1986 Microwave and Millimeter-Wave Monolithic Circuits Symposium Digest 86.1 (1986 [MCS]): 99-102.

Low noise HIFET (Hetero Interface Field Effect Transistor, also known as TEGFET or HEMT) AIGaAs/GaAs heterostructure devices have been developed using Metal Organic Chemical Vapor Deposition (MOCVD). The HIFET's with 0.5-micron long and 200-micron wide gates have shown a minimum noise figure of 0.87 dB with an associated gain of 12.5 dB at 12 GHz at room temperature. A substantial improvement in noise figure was obtained at lower temperatures (-l0°C), especially when compared to GaAs MESFET devices.

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