# Abstracts

## InGaAs MESFET's Low-Noise for Millimeter-Wave Applications

*G.-W. Wang, R. Kaliski and Y. Chang. "InGaAs MESFET's Low-Noise for Millimeter-Wave Applications." 1991 Microwave and Guided Wave Letters 1.4 (Apr. 1991 [MGWL]): 76-77.*

It is reported that excellent device performance and uniformity can be achieved with 0.25-µm gate InGaAs MESFET's fabricated by the mixed manufacturing technology of MOCVD and ion implantation. An average f/sub t/ of 102 GHz with a standard deviation of 12 GHz is derived from the S-parameter measurements of 139 devices uniformly distributed on a 3-inch-diameter GaAs wafer. Two-stage low-noise amplifiers fabricated by using these InGaAs MESFET's demonstrate a typical noise figure of 3.6 dB with an associated gain of 14.4 dB at 44 GHz.

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