Abstracts

Low noise metamorphic HEMT devices and amplifiers on GaAs substrates

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Excellent noise (0.41 dB minimum noise figure with 11.5 dB associated gain at 18 GHz) and linearity (third order intercept point of 37.6 dBm at 42.5 mW DC power giving a linearity figure of merit (LFOM) of 137) have been obtained for InAlAs-InGaAs metamorphic HEMTs on a GaAs substrate. These devices have been used to design and fabricate microwave and millimeter wave amplifiers. Amplifier results are presented.

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