Abstracts

GaAs Power MESFET Performance Sensitivity to Profile and Process Parameter Variations (Short Papers)

R.J. Trew, J.B. Yan and D.E. Stoneking. "GaAs Power MESFET Performance Sensitivity to Profile and Process Parameter Variations (Short Papers)." 1988 Transactions on Microwave Theory and Techniques 36.12 (Dec. 1988 [T-MTT] (1988 Symposium Issue)): 1873-1876.

Large-signal performance sensitivities are calculated and compared for power GaAs MESFET's fabricated with uniform, ion-implanted, and lo-hi-lo conducting channel doping profiles. The large-signal sensitivities of the RF power and power-added efficiency are determined for the device designs as a function of variations in various process-dependent parameters. It is demonstrated that the channel doping profile design and breakdown voltage have the most significant influence upon large-signal RF performance.

❑ Return to main document.

Click on title for a complete paper.