

## GaAs Power MESFET's: Design, Fabrication, and Performance

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*J.V. DiLorenzo and W.R. Wisseman. "GaAs Power MESFET's: Design, Fabrication, and Performance." 1979 Transactions on Microwave Theory and Techniques 27.5 (May 1979 [T-MTT] (Special Issue on Solid-State Microwave/Millimeter-Wave Power Generation, Amplification, and Control)): 367-378.*

This paper reviews the state of the art of power GaAs MESFET's. Items that will be covered are the operating principles of the device from a material and geometric point of view, the design, fabrication sequences, and material structures used by various laboratories, the factors identified as important to power by workers in the field the performance of the device in terms of frequency effects, power per unit gate-width effects, scaling from small to large gate-width devices, and voltage effects. In addition, the circuit applications of GaAs FET's will be briefly discussed.

 [Return to main document.](#)