Abstracts

Wide-Band Gallium Arsenide Power MESFET Amplifiers

R.E. Neidert and H.A. Willing. "Wide-Band Gallium Arsenide Power MESFET Amplifiers." 1976 Transactions on Microwave Theory and Techniques 24.6 (Jun. 1976 [T-MTT] (Special Issue on Microwave Field-Effect Transistors)): 342-350.

The performance, with emphasis on wide bandwidth, that can be expected of linear medium power GaAs microwave MESFET (metal semiconductor field-effect-transistor) amplifiers is discussed. It starts with measured scattering parameters of devices and proceeds through computer-optimized device modeling, to amplifier circuit designs and performance results. It shows computed and measured octave bandwidth performance and reveals that decade bandwidth is feasible. It discusses single-ended and balanced amplifier design approaches. Some practical designs with performance results are presented, with circuit topologies which are easily realizable in microstrip.

❑ Return to main document.