Abstracts

IMPATT-Diode Power Amplifiers for Digital Communication Systems

S.F. Paik, P.J. Tanzi and D.J. Kelley. "IMPATT-Diode Power Amplifiers for Digital Communication Systems." 1973 Transactions on Microwave Theory and Techniques 21.11 (Nov. 1973 [T-MTT] (Special Issue on Solid-State Microwave Power Amplifiers)): 716-720.

IMPATT-diode amplifiers with a power output of 1.0 W have been developed for use in an 11-GHz digital radio. Two types of amplifiers, a multistage reflection amplifier and a hybrid amplifier containing an injection-locked oscillator stage, have been evaluated by measuring the bit error rate degradation due to the amplifier. System test data show that the stable amplifier introduces little or no errors while the injection-locked oscillator (ILO) often introduces an error-rate floor.

❑ Return to main document.