Abstracts

Pulsed L-Watt Heterojunction Bipolar Transistors at 35 GHz

M.G. Adlerstein, M.P. Zaitlin, W. Hoke, E. Tong and G. Jackson. "Pulsed L-Watt Heterojunction Bipolar Transistors at 35 GHz." 1993 Microwave and Guided Wave Letters 3.5 (May 1993 [MGWL]): 145-147.

High-peak power-pulsed operation of common emitter AIGaAs-GaAs HBT's at 35 GHz is reported. A 1.0 W peak power with 2.3-dB associated gain and power-added efficiency of 28% is obtained. Small devices gave up to 43% power-added efficiency with 190 mW output at 4.8-dB gain. Pulse length was 300 nS and duty cycle was 33%. The device design, small signal characteristics, and power results obtained are described.

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