Abstracts

Power performance of thermally-shunted heterojunction bipolar transistors

T. Jenkins, C. Bozada, C. Cerny, G. DeSalvo, R. Dettmer, J. Ebel, J. Gillespie, C. Havasy, L. Kehias, K. Nakano, C. Pettiford, T. Quach, J. Sewell, D. Via and R. Anholt. "Power performance of thermally-shunted heterojunction bipolar transistors." 1997 MTT-S International Microwave Symposium Digest 2. (1997 Vol. II [MWSYM]): 949-952.

The effects of layout and thermal shunt configuration on output power, efficiency, and gain of thermally-shunted AlGaAs/GaAs HBT's were investigated. A maximum power density of 16 mW//spl mu/m/sup 2/ at 10 GHz (CW) was observed. The power gain and power-added efficiency (PAE) at this power density were 7.8 dB and 65%, respectively.

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