

Abstracts

A 1-Watt X-Ku Band HBT MMIC Amplifier with 50% Peak Power-Added Efficiency

F. Ali, M. Salib and A. Gupta. "A 1-Watt X-Ku Band HBT MMIC Amplifier with 50% Peak Power-Added Efficiency." 1993 Microwave and Guided Wave Letters 3.8 (Aug. 1993 [MGWL]): 271-272.

A broad-band, high-efficiency MMIC power amplifier has been developed using AlGaAs-GaAs heterojunction bipolar transistors (HBT's). At 7-V collector bias, the fully matched monolithic amplifier produced 31 dBm CW peak output power with 9.2-dB peak gain and 50% peak power-added efficiency in the 8-15-GHz band. Several amplifiers from five different wafers have been successfully tested.

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