

Abstracts

Ku-Band 15W Single-Chip HJFET Power Amplifier

K. Matsunaga, Y. Okamoto, I. Miura and M. Kuzuhara. "Ku-Band 15W Single-Chip HJFET Power Amplifier." 1996 MTT-S International Microwave Symposium Digest 96.2 (1996 Vol. II [MWSYM]): 697-700.

This paper describes record power performance of Ku-band power amplifiers fabricated with a 0.45 μ m gate GaAs-based heterojunction FET (HJFET). The developed HJFET amplifier with 25.2mm gate periphery delivered a 41.98dBm (15.8W) output power with 36% power-added efficiency (PAE) and 9.6dB linear gain at 12GHz. This is the highest PAE, gain and output power combination achieved from a single-chip FET power amplifier at Ku-band.

 [Return to main document.](#)