Abstracts

Complementary HBT Push-Pull Amplifier by Selective MBE

K.W. Kobayashi, D.K. Umemoto, J.R. Velebir, A.K. Oki and D.C. Streit. "Complementary HBT Push-Pull Amplifier by Selective MBE." 1992 Microwave and Guided Wave Letters 2.4 (Apr. 1992 [MGWL]): 149-150.

Microwave performance results are presented of the first monolithically integrated GaAs-AlGaAs complementary HBT push-pull amplifier fabricated using selective molecular beam epitaxy and a merged HBT process. The push-pull amplifier integrates four n-p-n transistors with one p-n-p transistor on the same GaAs chip. The amplifier has a sharp dc characteristic curve with no cross-over offset, a voltage swing of 6.3 V using a 9 V supply, and a linear voltage gain of 20. The bandwidth is dc to 2.5 GHz, with a saturated output power of 7.4 dBm at 2.5 GHz.

❑ Return to main document.