

Abstracts

3-GHz 15-W Silicon Bipolar Transistors (Dec. 1979 [T-MTT])

I. Uchizaki, S. Hori, Y. Oda and N. Tomita. "3-GHz 15-W Silicon Bipolar Transistors (Dec. 1979 [T-MTT])." 1979 Transactions on Microwave Theory and Techniques 27.12 (Dec. 1979 [T-MTT] (1979 Symposium Issue)): 1038-1042.

Silicon bipolar transistors delivering 15-W CW output power with 4.8-dB gain and 38-percent collector efficiency have been developed at 3 GHz. The transistors have been fabricated by boron ion implantation for base region and arsenic diffusion from doped polysilicon for emitter region. Chemical dry-etching techniques for fine patterning and internal-matching techniques have been applied.

 [Return to main document.](#)