Abstracts

High-Power Gunn Oscillator Diodes on Type-IIa Diamond Heat Sinks (Correspondence)

M. Migitaka, M. Miyazaki and K. Saito. "High-Power Gunn Oscillator Diodes on Type-IIa Diamond Heat Sinks (Correspondence)." 1970 Transactions on Microwave Theory and Techniques 18.11 (Nov. 1970 [T-MTT] (Special Issue on Microwave Circuit Aspects of Avalanche-Diode and Transferred Electron Devices)): 1004-1005.

Gallium arsenide Gunn diodes were mounted on a type-IIa diamond to reduce the thermal spreading resistance just under the wafer of the diodes. By using the diamond, the total thermal resistance of the diodes was reduced to half the usual resistance. A single-wafer Gunn diode on the type-IIa diamond produced 910 mW at 9.9 GHz with an efficiency of 3.1 percent.

❑ Return to main document.