

Abstracts

Peak AC Voltage Limitations in Second-Harmonically Tuned IMPATT Diodes (Correspondence)

C.A. Brackett. "Peak AC Voltage Limitations in Second-Harmonically Tuned IMPATT Diodes (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)): 992-993.

The tuned-harmonic mode of IMPATT-diode oscillation is examined under the restriction of a maximum limit to the peak-to-peak voltage swing. It is concluded that if a peak ac voltage limitation is effective in limiting the output power of an IMPATT diode, the maximum output power is achieved under conditions which minimize the harmonic interaction and at an operating frequency equal to the transit-time frequency.

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