Abstracts

Highly Stable, Low Noise Millimeter-Wave IMPATT Oscillator (Technical Notes) (Aug. 1978 [T-MTT])

H. Okamoto, M. Ikeda, S. Kodaira and K. Miyazawa. "Highly Stable, Low Noise Millimeter-Wave IMPATT Oscillator (Technical Notes) (Aug. 1978 [T-MTT])." 1978 Transactions on Microwave Theory and Techniques 26.8 (Aug. 1978 [T-MTT] (Special Issue on Microwaves in Medicine, with Accent on the Application of Electromagnetics to Cancer Treatment)): 627-628.

A highly stable and low noise IMPATT oscillator at 75 GHz is realized by using the parametric injection locking technique along with an AFC circuit in which a crystal oscillator is used as a reference. Noise level of this oscillator is lower by 25 dB compared with that of the free-running IMPATT oscillator, and the frequency stability is as good as 10/sup -8/ °C.

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