Abstracts

A Highly Stabilized MIC Gunn Oscillator Using a Dielectric Resonator

T. Makino and A. Hashima. "A Highly Stabilized MIC Gunn Oscillator Using a Dielectric Resonator." 1979 Transactions on Microwave Theory and Techniques 27.7 (Jul. 1979 [T-MTT]): 633-638.

An X-band frequency-stabilized MIC Gunn oscillator of a very simple structure using a dielectric resonator is developed. It is studied how the oscillating characteristics can be controlled by circuit parameters, with special attention to the factors affecting the frequency stability with temperature. By optimizing these factors and by selecting the proper temperature coefficient of a newly developed dielectric resonator, the high frequency stability of less than ±100 MHz over the temperature range from -20 to 60°C (2x10 /sup -7/ /°C) was obtained.

❑ Return to main document.