

# Abstracts

## Gunn Oscillator as a Frequency Memory Device (Correspondence)

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*J. Magarshack. "Gunn Oscillator as a Frequency Memory Device (Correspondence)." 1968 *Transactions on Microwave Theory and Techniques* 16.12 (Dec. 1968 [T-MTT]): 1055-1057.*

A new application using a Gunn oscillator is described, in which it is placed in a multimode X-band cavity with resonant frequencies spaced about 200 MHz apart. It is found that for a given bias there are several stable frequencies at which a sample can oscillate with little residual oscillation at other frequencies. If the oscillator is first synchronized to a pilot, and the pilot is switched to another of the stable frequencies, the Gunn oscillator follows and continues to oscillate at that frequency when the pilot is removed. The switching can sometimes be performed by sending pulses on the bias. A tentative explanation is given.

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