Abstracts

A High Q Cavity Stabilized Gunn Oscillator at 94 GHz

H. Barth. "A High Q Cavity Stabilized Gunn Oscillator at 94 GHz." 1986 MTT-S International Microwave Symposium Digest 86.1 (1986 [MWSYM]): 179-182.

The set up and the performance of a 94 GHz second harmonic Gunn oscillator that is cavity stabilized at its fundamental frequency is described. The cavity has a quality factor of about 7000 and reduces the phase noise by nearly 40 dB. The oscillator generates an output power of 40 mW, sufficient to drive low noise balanced mixers, to synchronize Impatt oscillators or to operate as a reference source in coherent radar systems.

❑ Return to main document.