

Abstracts

V-Band Monolithic IMPATT VCO

B. Bayraktaroglu. "V-Band Monolithic IMPATT VCO." 1988 MTT-S International Microwave Symposium Digest 88.2 (1988 Vol. II [MWSYM]): 687-690.

Integration of a GaAs IMPATT oscillator and a varactor diode was achieved on a single chip. The IMPATT oscillator was in the form of a half-wavelength microstrip resonator excited on both ends symmetrically by a pair of diodes. A third diode was placed close to one end of the resonator and used to control the oscillation frequency of the oscillator through a coupling capacitor. Depending on the value of the coupling capacitor, tuning ranges of up to 1.5 GHz could be obtained at a center frequency of 55 GHz. Typical output powers were in the 100 to 400 mW range.

[Return to main document.](#)