

# Abstracts

## Monolithic, W-Band, Voltage-Controlled Oscillator

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*M.J. Vaughan, R.C. Compton, S. Duncan, D. Tu and S. Weinreb. "Monolithic, W-Band, Voltage-Controlled Oscillator." 1996 MTT-S International Microwave Symposium Digest 96.1 (1996 Vol. I [MWSYM]): 337-340.*

A 77 GHz monolithic voltage-controlled oscillator is described. The active element is a "low-noise" pseudomorphic HEMT. Tuning is achieved with a second HEMT in which the source and drain are connected and the gate-channel capacitance forms a varactor diode. The oscillator has a 3 dB tuning bandwidth of 230 MHz and an output power of 300  $\mu$ W.

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