

Abstracts

Voltage-Frequency Update for Nonlinear Analysis of Free-Running and Injection-Locked Multiple Device Oscillators

H.D. Foltz, J.H. Davis and T. Itoh. "Voltage-Frequency Update for Nonlinear Analysis of Free-Running and Injection-Locked Multiple Device Oscillators." 1991 MTT-S International Microwave Symposium Digest 91.1 (1991 Vol. 1 [MWSYM]): 103-106.

The standard voltage update algorithm is modified for use in oscillator problems in which the frequency may be unknown and the embedding circuit is a high-impedance resonant circuit. The method is then applied to large-signal steady-state analysis of strongly coupled power combining oscillator circuits under free-running and externally injection-locked conditions. Tunability, power output, locking, and sensitivity to device parameters are examined.

[Return to main document.](#)