Abstracts

A Unified Approach to the Design of Wide-Band Microwave Solid-State Oscillators

G.R. Basawapatna and R.B. Stancliff. "A Unified Approach to the Design of Wide-Band Microwave Solid-State Oscillators." 1979 Transactions on Microwave Theory and Techniques 27.5 (May 1979 [T-MTT] (Special Issue on Solid-State Microwave/Millimeter-Wave Power Generation, Amplification, and Control)): 379-385.

Present design techniques for broad-band tunable MESFET and bipolar transistor oscillators are indirect and tedious. We present new technique based on negative resistance concepts and a new theorem herein stated and proven. This technique is developed through two design examples a 5.9-12.4-GHz MESFET oscillator and a 2-8.4-GHz bipolar transistor oscillator.

❑ Return to main document.