An Analytic Approach to Optimum Oscillator Design Using S-Parameters

An analytic approach to the design of microwave FET oscillators for maximum power output into a given load is presented. By the use of FET S-parameters, characterized as a function of incident input powers, design information can he obtained for any standard topology. By means of this technique, an experimental 5.3-GHz oscillator has been demonstrated which delivers 245 mW at 35-percent efficiency into a 50-Omega load.

❑ Return to main document.