Abstracts

A High Power On-Wafer Pulsed Active Load Pull System (Dec. 1992 [T-MTT])

D.D. Poulin, J.R. Mahon and J.-P. Lanteri. "A High Power On-Wafer Pulsed Active Load Pull System (Dec. 1992 [T-MTT])." 1992 Transactions on Microwave Theory and Techniques 40.12 (Dec. 1992 [T-MTT] (1992 Symposium Issue)): 2412-2417.

This paper describes a unique on-wafer load pull system that is capable of measuring load pull contours on true high power and large periphery devices. Measurements are made under low duty cycle pulsed dc and RF conditions to minimize the effects of heating due to power dissipation in the on-wafer environment. With the current implementation of the load pull system, any load impedance on the Smith chart can be presented to the output of four Watt devices. The system is fully error corrected for reflection coefficient, transmission coefficient, input power incident, input power delivered, and output power delivered. The system is capable of automatic control and measurement by means of a HP 9000 series workstation. Data taken on C band MMIC power amplifiers and 2 mm GaAs FET's are presented.

❑ Return to main document.