Abstracts

Large-Signal, Dynamic, Negative Conductance of Gunn Devices in Sharpless Flanges

M.R. Lakshminarayana and L.D. Partain. "Large-Signal, Dynamic, Negative Conductance of Gunn Devices in Sharpless Flanges." 1983 Transactions on Microwave Theory and Techniques 31.3 (Mar. 1983 [T-MTT]): 265-271.

A good agreement between actual, Iarge-signal Gunn device operation and a first principles model has been achieved in terms of descriptive device parameters. An injection-locking technique was used to measure the variations of device conductance and capacitance with RF voltage amplitude. The equivalent circuits developed allow optimization of Gunn oscillator circuits.

❑ Return to main document.