Abstracts

High Power Microwave P-I-N Diode Inductive Driving

C.J. Georgopoulos. "High Power Microwave P-I-N Diode Inductive Driving." 1977 MTT-S International Microwave Symposium Digest 77.1 (1977 [MWSYM]): 170-173.

Microwave p-i-n diode in phase shifting applications can be effectively switched to forward-bias by current spiking techniques and to reverse-bias via an energy storing inductor. This paper presents a design and analysis approach based on an inductive discharging circuit and first order p-i-n diode models. Experimental results, which support the theory, are also included, and a comparison is made to those available from conventional circuit investigations. High reverse current provided by external circuitry results in high speed switching, while reverse current provided by an energy storing inductor results in circuit simplifications, economy and higher reliability.

❑ Return to main document.