Abstracts

Generation and Shaping of Megawatt High-Voltage Pulses by Optoelectronic Technique

H.A. Sayadian, S. Feng, J. Goldhar and C.H. Lee. "Generation and Shaping of Megawatt High-Voltage Pulses by Optoelectronic Technique." 1990 Transactions on Microwave Theory and Techniques 38.5 (May 1990 [T-MTT] (Special Issue on Applications of Lightwave Technology to Microwave Devices, Circuits, and Systems)): 622-628.

A composite miniature structure is used to generate megawatt electrical pulses. Two photoconductive switches (one GaAs and the other Si) are used, along with voltage multiplication and pulse forming lines, to generate over 14 kV pulses from a dc bias of only 9 kV. These megawatt pulses have picosecond synchronization and can vary in width from nanoseconds to picoseconds.

❑ Return to main document.