Abstracts

Generation of High Power Ultra-Wideband Electrical Impulse by Optoelectronic Technique

C.H. Lee. "Generation of High Power Ultra-Wideband Electrical Impulse by Optoelectronic Technique." 1991 MTT-S International Microwave Symposium Digest 91.1 (1991 Vol. I [MWSYM]): 375-376.

Progress in the application of ultrafast optics and photoconductive switchhg for the generation of high power ultra-wideband electrical impulses is reviewed. Several techniques are described. Megawatt pulses with picosecond rise-and falltimes and variable pulse duration have been obtained. Using photoconductive switch both as a closing and opening switch in an inductive energy storage system the electrical pulse power enhancement of a factor of 50 has been demonstrated for the first time.

❑ Return to main document.