

Abstracts

The Generation of High Energy Ultra Wide Band Pulses

O. Zucker and I.A. McIntyre. "The Generation of High Energy Ultra Wide Band Pulses." 1992 MTT-S International Microwave Symposium Digest 92.3 (1992 Vol. III [MWSYM]): 1601-1604.

We present a theoretical discussion of the performance of photoconductive switches mounted in a matched transmission line structure, which addresses issues of risetime and power density. In the analysis we define a switch performance parameter, α , which results in a recipe for optimizing the performance of photoconductive switches. We also discuss the limits on α due to materials' properties and conclude with a discussion of experimental life-testing and a comparison between the theory and experimental results.

 [Return to main document.](#)