

Modeling double Blumlein with variable duration and polarity using orcad PSpice

Abstract

Double Blumlein generator is an excellent technique in generating high voltage short pulsed power with fast rise time signal. However properties of fixed pulse duration and polarity of Blumlein configuration limits the generator flexibility and efficiency. A modeling of double Blumlein with double switching configuration with controlled delay is proposed in this paper to solve the limitation problem. The circuit is modeled in PSpice environment and the result successfully showed double output pulse voltage of flat top square waveform with adjustable duration and polarity.

Keywords

Blumlein; PSpice; Short pulsed power