



Contribution ID: 883

Type: Poster

5P29 - Triggered gas switches for use in capacitor-switch assemblies for LTD technology

Friday 28 June 2019 13:30 (1h 30m)

Currently, active development of the element base for high-current generators is underway. The previously proposed and implemented new type Capacitor-Switch Assembly - HCEIcsa 160-0.1 required the development of new triggered gas switch. The design of the electrodes determines the largest possible operating voltage, the required pressure and jitter of the CSA, which ultimately affects the output parameters of the whole Ltd generator.

The report shows the test results of our new switches for such type of CSA. The design and calculations of electric fields are presented, experimental data on the dependence of the switching characteristics on the pressure in the spark gap and the parameters of the discharge circuit are given.

The work was supported by the Russian Science Foundation (project No. 17-79-20292)

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Session Classification: Poster - Compact and Explosive Pulsed Power and Pulsed Power Systems

Track Classification: 7.4 Linear Transformer Drivers