

THE VOLTAGE OSCILLATIONS IN THE SILICON STRUCTURE AT COURSE OF EXTREME CURRENTS

Voltage oscillations that arise when high-density currents flow through silicon with dielectric isolation (SDI) structure have been obtained and investigated. The investigations have been conducted in pulsed mode. Volt-ampere characteristics of SDI structure and distinctive parameters of oscillograms for both relaxation and quasi-harmonic oscillations have been studied. We have proposed a model to show how the voltage oscillations have been arising.

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