

# **Response of the Three-Terminal Voltage Regulator Irradiated by Pulse Neutrons**

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## **Abstract**

The terminal evolution of the output voltage of the three-terminal voltage regulator in the irradiation of pulse neutrons was investigated by the experiments and the circuit simulation in this paper. Experiments were performed at Xi'an Pulsed Reactor and the short-term annealing was observed. The time-dependent effective neutron fluence was developed to simulate the terminal evolution of the output voltage of the three-terminal voltage regulator in the circuit simulator. The simulated result was shown to agree with the experiments.