

MODELING THE PROCESS OF DEGRADATION OF GAAS MESFET'S UNDER EXPOSURE OF PULSES WHITH BIG AMPLITUDE

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The effects in MESFET's under exposure of video pulses with big amplitude was presented. The model for calculation base characteristics of degradation of MESFET's was produced. The method of solving models parameters by experimental date was developed. The dependencies of the drain's current is defined by two facts: the effect of short duration under the small positive tail in gate, which augment the drain's current, and increasing of the negative charge in substrate via main negative pulse, that reduce current. The characteristic of the drain's current in time domain in duration of exposure and after it was given. The theoretical results were in good agreement with experimental characteristic.