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The invention relates to the semiconductor engineering, in particular to the semiconductor devices with variable capacitance.

The semiconductor varactor-type device on base of Schottky diode includes a semiconductor body containing a structured region and ohmic contacts. Novelty of the device consists in that the structured region is made porous, with pores oriented perpendicular to the surface, at the same time the ratio of porous region depth to the distance between pores is more than ten.

The process for manufacture of the semiconductor varactor-type device includes etching of the semiconductor body and deposition of the Schottky-type metallic contact and of the ohmic contacts. Novelty of the process consists in that the body etching is carried out by the electrochemical method, and deposition of the Schottky metallic contact is carried out by application of voltage impulses into electrolyte solution.

Claims: 2
Fig.: 4