

## **Resonance features of the Josephson junction with ferroelectrical barrier**

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The phase dynamics of Josephson junction with ferroelectric barrier is investigated. The Josephson junction dynamics is described in the framework of RCSJ-model and for description of the ferroelectricity is used Landau-Devonshir theory. The IV-characteristic of Josephson junction with ferroelectric barrier is calculated. It is shown that, due to the resonance between Josephson and polarization oscillations in ferroelectric layer, an increasing of the polarization amplitude and on IV-curve appears resonance branch.

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