

Study of Electrical Properties of *p*-PbSe/*p*-Si Heterojunction

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Received on: 25/4/2006

Accepted on: 22/1/2007

Abstract

Electrical properties of *p*-PbSe/*p*-Si heterojunction detector have been investigated. The electrical properties under dark condition show a rectifying behaviour with low rectification factor, and exhibits soft breakdown reverse current.

C-V characteristics suggest that the fabricated diode was abrupt type, built in potential determined by extrapolation from $1/C^2$ -V curve to the point (V=0) and it was equal to (0.49V).

Results of I-V characteristics under illumination conditions with reverse bias voltage exhibit linear behavior with no saturation limit.