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(54) SEMICONDUCTOR DEVICE, SEMICONDUCTOR CIRCUIT, AND METHOD OF CONTROLLING SEMICONDUCTOR DEVICE

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(57)**ABSTRACT**

A semiconductor device includes a first conductive portion provided on a part of a second semiconductor layer via a first insulating film, a second conductive portion provided on a part of a third semiconductor layer via a second insulating film, a first main electrode, and a second main electrode. When an ON control signal is input to one of the first conductive portion and the second conductive portion, conduction is established between the first main electrode and the second main electrode by a bipolar operation, and when the ON control signal is input to both the first conductive portion and the second conductive portion, conduction is established between the first main electrode and the second main electrode by a unipolar operation.

