

SEMICONDUCTOR DEVICE

ABSTRACT

A semiconductor device with an enhanced semiconductor characteristics that is useful for power devices. A semiconductor device including: a semiconductor region; a barrier electrode arranged on the semiconductor region; and two or more adjustment regions of barrier height that are on a surface of the semiconductor region and arranged between the semiconductor region and the barrier electrode, the adjustment regions are configured such that barrier height at an interface between the adjustment regions and the barrier electrode is higher than barrier height at an interface between the semiconductor region and the barrier electrode.

FIG. 13