

SEMICONDUCTOR DEVICE AND MANUFACTURING METHOD THEREOF

ABSTRACT

A semiconductor device, includes a first conductive type first doping area, a second conductive type second doping area, a source region, a drain region, a gate insulating film, and a gate electrode. The first conductive type first doping area is formed in a substrate region. The second conductive type second doping area is formed in the substrate to be spaced apart from the first conductive type first doping area. The source region is formed in the first conductive type first doping area. The drain region is formed in the second conductive type second doping area. The gate insulating film is formed between the source region and the drain region. A thickness of a first end of the gate insulating film is different than a thickness of a second end of the gate insulating film. The gate electrode formed on the gate insulating film.

Fig. 3