This Sheet Has Been Replaced



SEMICONDUCTOR DEVICE AND MANUFACTURING METHOD THEREOF

ABSTRACT OF THE DISCLOSURE

There has been a problem that the manufacturing process is complicated and the number of processes is increased when a TFT with an LDD structure or a TFT with a GOLD structure is formed. In a method of manufacturing a semiconductor device, after low concentration impurity regions (24, 25) are formed in a second doping process, a width of the low concentration impurity region which is overlapped with the third electrode (18c) and a width of the low concentration impurity region which is not overlapped with the third electrode can be freely controlled by a fourth etching process. Thus, in a region overlapped with the third electrode, a relaxation of electric field concentration is achieved and then a hot carrier injection can be prevented. And, in the region which is not overlapped with the third electrode, the off-current value can be suppressed.