

BURIED CONTACT DEVICES FOR NITRIDE-BASED FILMS AND MANUFACTURE THEREOF

ABSTRACT

5 A semiconductor device comprising: a substrate; a first contact; a first layer of doped semiconductor material deposited on the substrate; a semiconductor junction region deposited on the first layer; a second layer of doped semiconductor material deposited on the junction region, the second layer having opposite semiconductor doping polarity to that of the first layer; and a second contact; wherein the second contact is in electrical communication with the
10 second layer and the first contact is embedded within the semiconductor device between the substrate and the junction region and is in electrical communication with the first layer;; and processes for manufacture of an embedded contact semiconductor device.

Figure 2