A SEMICONDUCTOR DEVICE FOR HIGH-POWER APPLICATIONS

Abstract

Contemplated is a semiconductor device comprising: a substrate; a group (III)-nitride layer; a metal-group (III)-nitride layer deposited between the substrate and group (III)-nitride layer; and a metal-nitride layer deposited between the substrate and the metal-group (III)-nitride layer. Also a method for making a semiconductor device with the above mentioned structure is contemplated. Furthermore, the substrate can be a silicon on insulator (SOI) substrate; the metal-nitride layer can be an aluminium nitride layer; the metal-group (III)-nitride layer can be an aluminium gallium nitride layer; and the group (III)-nitride layer can be a gallium nitride layer.

(No Suitable Figure)