

AVALANCHE PHOTODIODE STRUCTURE

Abstract

An avalanche photodiode structure, to a method of fabricating an avalanche photodiode structure, and to devices incorporating an avalanche photodiode structure. The avalanche photodiode structure comprises a Ge doped region having a first polarity; a GaAs doped region having a second polarity opposite to the first polarity; and an undoped region between the Ge doped region and the GaAs doped region forming a heterojunction; wherein the undoped region comprises Ge and $\text{Al}_x\text{Ga}_{1-x}\text{As}$.

Figure 1(a)