

The invention refers to the semiconductor engineering, namely to photodiodes, and may be used in the optoelectronic systems for detection, recording and transduction of optical signals transmitted by optical fibers, atmosphere or other optical media.

Summary of the invention consists in that the selective photodiode with modulated sensibility on base of the compounds III-V heterostructure contains a support with the band-gap energy Eg_0 , onto which there are consecutively applied an active layer having intrinsic conduction with Eg_1 , a frontal layer with Eg_2 , the thickness of which is greater than the diffusion length of the minority carriers wherein on the heteroborder with the active layer it is formed the first p-n junction and an antireflection layer with Eg_3 , moreover $Eg_1 < Eg_2 < Eg_0 < Eg_3$. On the reverse of the support there are consecutively applied the second active layer having intrinsic conduction with Eg_4 , the thickness of which is smaller than the diffusion length of the minority carriers and a layer with Eg_1 , wherein on the heteroborder with the second active layer it is formed a second p-n junction and $Eg_4 < Eg_1 < Eg_2 < Eg_0 < Eg_3$.

Claims: 1

Fig.: 1