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The invention relates to the semiconductor instrument engineering and may be utilized for the optical signals detection and processing, transmited through the fiber optical communication lines, through the Eearth atmosphere or through other optical media.

The summary of the invention consists in the fact that the selective photodiode is manufactured on the heterostructure base, comprising a substrate n+InP with the length of the forbidden zone Eg0, the active layer Inx1Ga1-x1Asy1P1-y1 with Eg1, the frontal layer p+ Inx2 Ga1-x2Asy2P1-y2 with Eg2 and anti-reflection coating on the face with Eg3, to which Eg1 < Eg2 < Eg0 < Eg3 , characterized by the fact that the p-n transition is formed into the frontal layer in the close proximity to the heteroboundary with the active layer, which is executed with the i- conductance type, and the thickness of the frontal layer is more than the diffusion length of the unbasic charge carriers, generated on the photodiode face.

The technical result of the invention consists in the fact that at the reverse displacement the space charge layer is dilated into the active layer, dividing the generated charge carriers into it.

Claims: 1
Fig.: 4