

Conventional photodiode is simple semiconductor diode in which is possible to exposure of optical radiation on the p-n- junction. At equilibrium, when the radiation flux is completely absent, the carrier concentration, the potential distribution and the energy band diagram of a conventional photodiode is fully comply p-n structure. If we radiate in a direction perpendicular to the plane of the p-n junction we will have result in absorption of photons with energy larger than the bandgap in the n-region, we will have an electron-hole pair.

Below, you can see typical energetic diagram of photodiode:

