

PHOTO SENSOR AND METHOD FOR FORMING THE SAME

ABSTRACT OF THE DISCLOSURE

A semiconductor photosensitive element comprises a first and a second photosensitive regions and the first photosensitive region is different from the second photosensitive region in its structure and thereby the first photosensitive region has photoelectric conversion characteristic and frequency characteristic which are different from those of the second photosensitive region. A method for forming a semiconductor photosensitive element comprises steps of forming a high concentration impurity region of a first conductivity type and an element isolation region on a semiconductor of the first conductivity type, forming a semiconductor layer of a second conductivity type on the semiconductor substrate and high concentration impurity region, thereby to form a first photosensitive region formed of the high concentration impurity region 10 formed on the semiconductor substrate and the photoelectric conversion layer consisting of the semiconductor layer and a second photosensitive region formed of the photoelectric conversion layer consisting of the semiconductor layer formed on the semiconductor substrate.

Figure 2