

Ques 4:- Explain the working and application of photo diode?

Ans:- A photo diode is a semiconductor device that converts light into an electrical current. The current is generated when photons are absorbed in the photo diode. Photo diodes may contain optical filters, built-in lenses, and may have large or small surface areas. A photo diode is designed to operate in reverse bias.

Application of photo diode:-

- The reason for their use is their linear response of photo diode to a light illumination.
- Photo diodes help to provide a ~~a~~ electric isolation with help of optocouplers.

- Photodiodes are applied in safety electronics like fire and smoke detectors. It is also used in TV units.