

Advantage of using a diode

- 1) Some electrical devices function only when is provided.
- 2) Those devices may get damage if flows to the terminal of the device.
- 3) flowing in the direction can be prevented by using a
- 4) flows only if it is bias.
- 5) does not flow in bias.
- 6) Therefore the device can be protected.

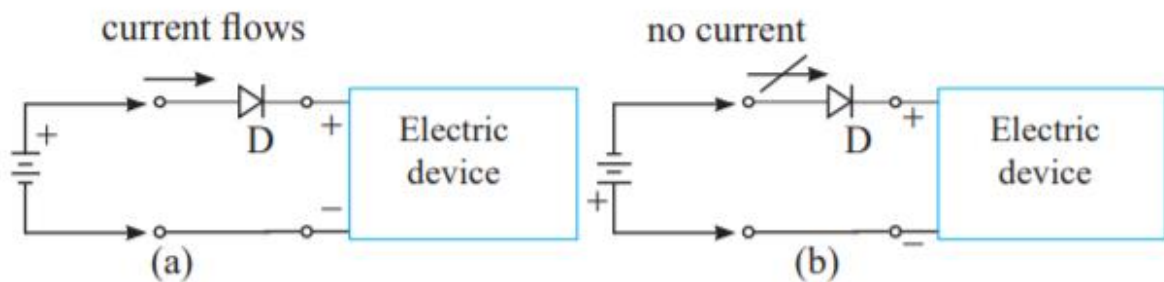


Figure 11.20 - Protecting a device from damage due to incorrectly connected terminals

Light Emitting Diodes (LED)

- 1) When p-n junctions are produced using & and it will produce and emit during bias.
- 2) Therefore these diodes are called
- 3) The terminal is the terminal or the anode.
- 4) The terminal is the terminal or the cathode.
- 5) When the of a LED is pointed towards you the terminal near the cut edge is the
- 6) LEDs emit,,, and also and

Uses of LEDs

- 1) LED TV screens,
- 2) Lighting up homes & streets
- 3) Construction of torches and vehicle bulbs

Advantages of LEDs

- 1) Very low consumption
- 2) (50,000 hours)

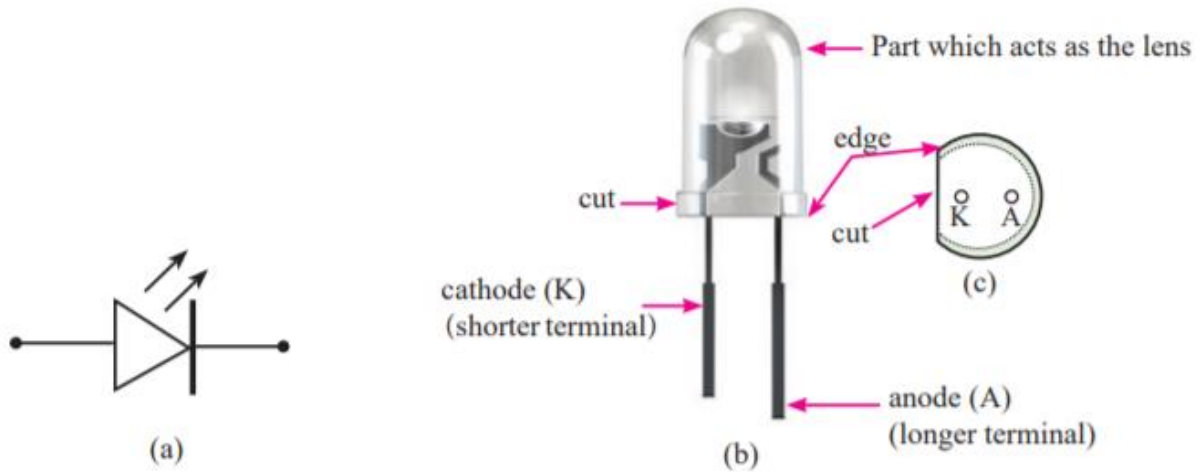


Figure 11.22 - (a) The symbol (b) Outward appearance of a light emitting diode (c) Base diagram cathode (-) is situated at the side with the cut

Solar Cells

- 1) Solar cells are made using
- 2) When sunlight falls on the a small force (voltage) is generated across the
- 3) Since p-n junction diodes are used to generate force, they are called cells.
- 4) Solar cells are arranged and These arrangements are called
- 5) Advantages of solar cells.
 - (i) no daily running

(ii) long

(iii) do not emit substances that are to the environment.

6) Solar cells are also called photovoltaic cells since they directly convert energy into energy.

