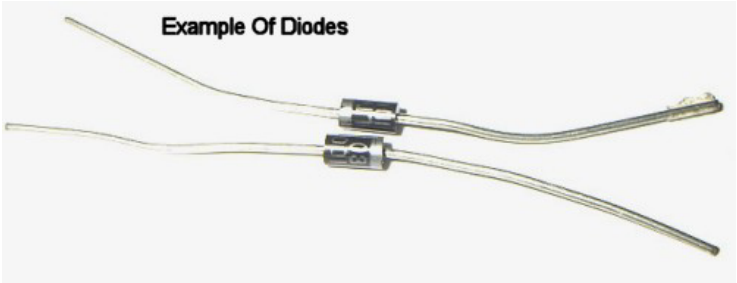
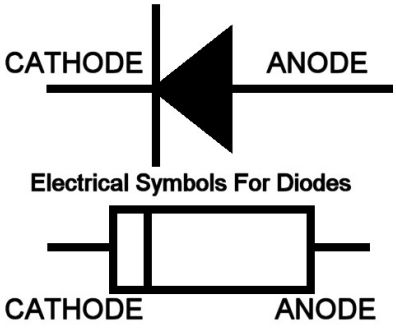
INTRODUCTION TO DIODES

INTRO TO DIODES:

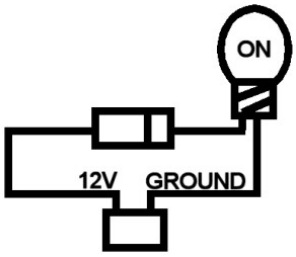
- A diode is a device designed to allow electron flow in one direction only.
- When installing an alarm or remote start, diodes may be required to complete the installation. Diodes are primarily used to isolate independent circuits from each other. Diodes will not be required on every installation, but it is still a good idea to have a pack of 6-amp diodes on hand just in case.



- A diode has two terminals called the anode and cathode. The silver band of the diode indicates the cathode side of the diode. Negative current flows through the cathode and out the anode but will not flow in the opposite direction. Also, positive current flows through the anode side and out the cathode side.



- The concept of diodes is easy to understand with the help of the illustrations below. The first illustration consists of a battery, a light bulb, and a diode. The positive terminal of the battery is connected to the anode side of the diode. When the diode is connected this way, positive current is allowed to flow through the diode. A diode connected to allow positive current to flow is called forward biased. Also, the cathode side of the diode is wired to one terminal of the light bulb and the other terminal of the light bulb is connected to the negative terminal of the battery. This completes the circuit, positive current is allowed to flow through the diode to the light bulb and back to the battery's negative terminal, and the light bulb will illuminate.



- In the second illustration, the diode has been reversed. The positive terminal of the battery is connected to the cathode side of the diode. When the diode is connected this way, positive current is NOT allowed to flow through the diode. A diode connected to block positive current to flow is called reverse biased. This prevents the circuit from being completed and causes an open circuit. This prevents the light bulb from illuminating.