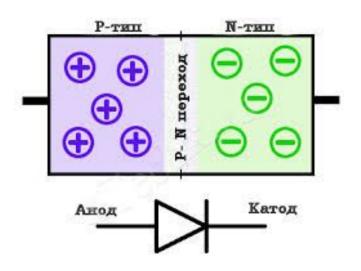


The operation of the diode and the device.

The operation of the diode-General principles of the internal structure



A diode is the simplest semiconductor device with only one p-n junction with two external output anode and cathode.

Classification of diodes

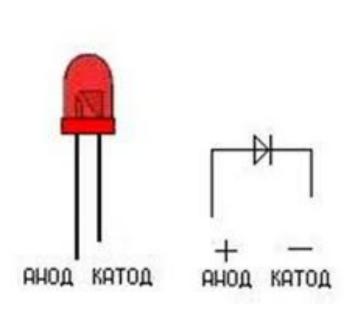


Rectifier diode



Universal diode

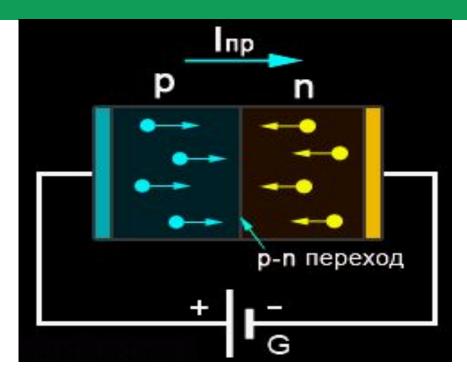
Anode and Cathode



The anode is the positive electrode, it main charge carriers are holes.

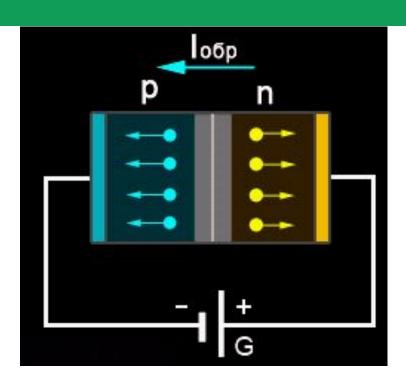
The cathode is the negative electrode, it main charge carriers are electrons

The operation of the diode with the direct inclusion



With the direct inclusion of the electrons from the n region will tend toward the holes in p-region and holes from p to n region

The operation of the diode in the reverse inclusion



Change the polarity of our connection

In this case, the electrons and holes will be pushed away from the p-n junction