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Introduction To Modern Electronics – Lesson 6: The Diode

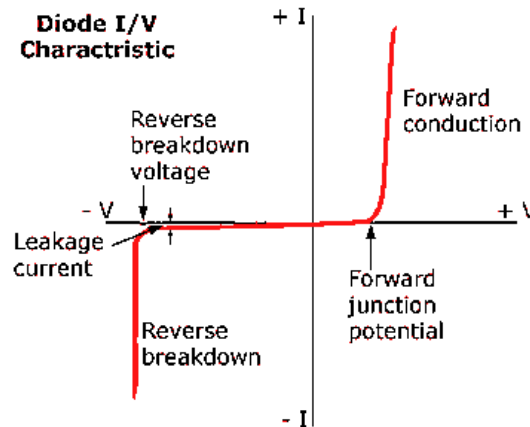
FORMULAS

The following formulas and information are meant to go with the online lesson found here:
<http://www.pyroelectro.com/edu/basics/diode/>

THE DIODE IV CURVE

As you saw in the lesson, diodes have specific on and off states. A mathematical description of these two different states can be seen in the form of an Electrical Current vs. Electrical Voltage graph, or an IV curve.

The IV curve seen below is common for most diodes. When the positive voltage (in the V+ region) reaches a certain point (the forward junction potential) the diode begins to turn on until it reaches fully on (the forward conduction state).



Diodes also have a breakdown state that you can see in the graph above. When enough negative voltage is applied to a diode, it can be forced on and allow electrical current to flow in the opposite direction; however this will most likely end with the diode being damaged.

ADDITIONAL INFORMATION

If you have any questions about the formulas or information found in this document, please feel free to head on over to the forums and ask us some questions!

<http://www.pyroelectro.com/forums/viewforum.php?f=22>