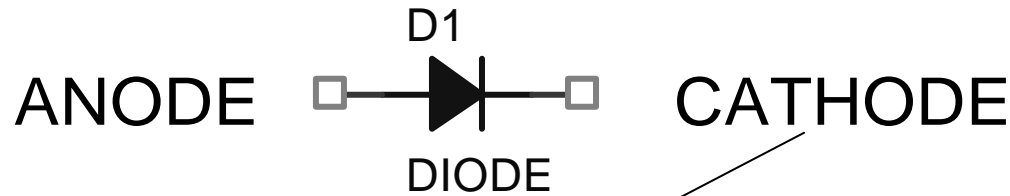


Introduction to Diode

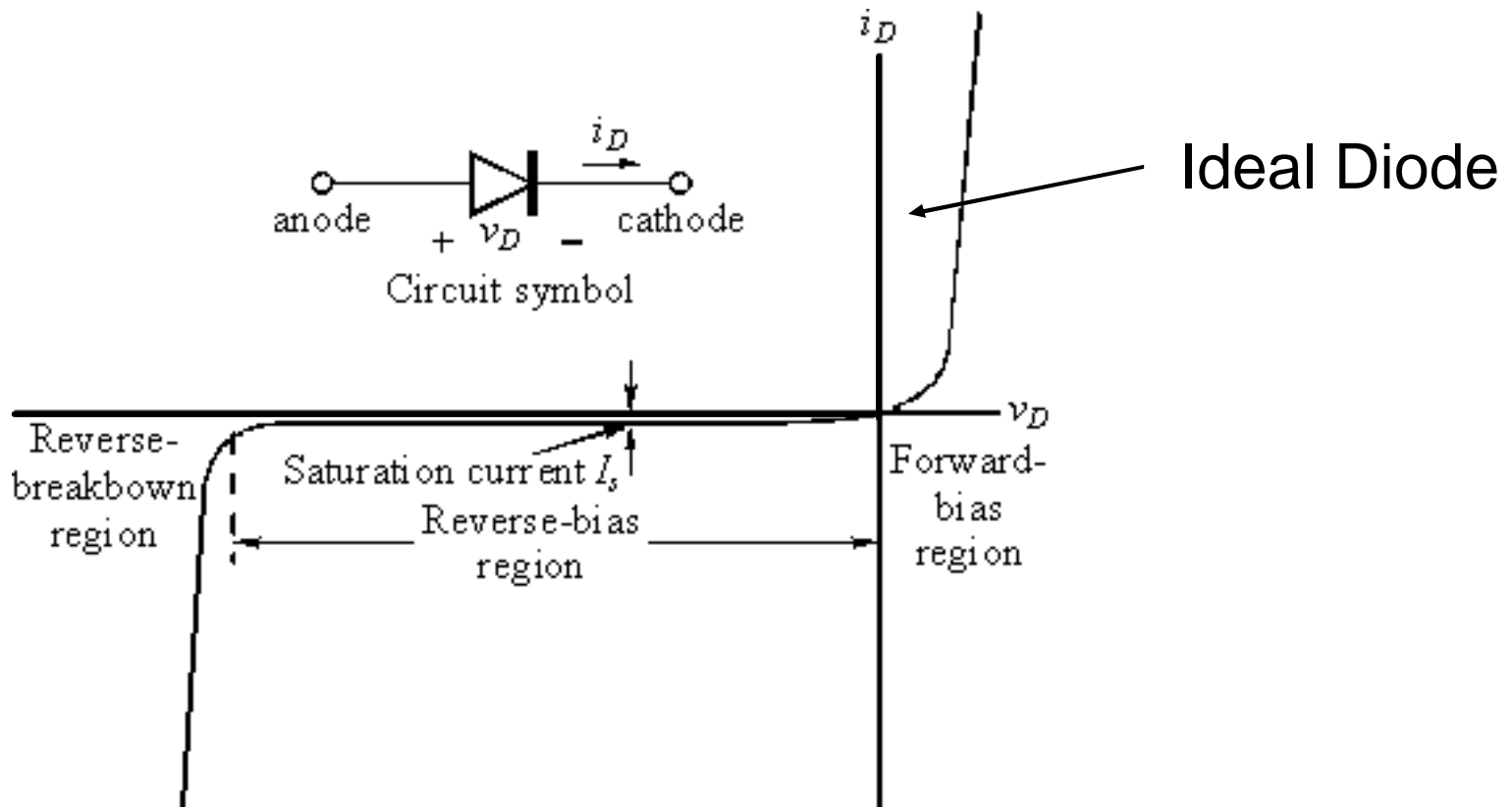
Diodes



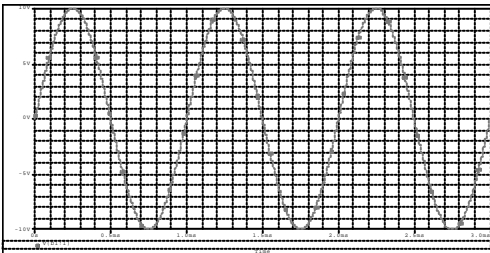
- A diode can be considered to be an electrical one-way valve.
- They are made from a large variety of materials including silicon, germanium, gallium arsenide, silicon carbide ...

Diode V-I Characteristic

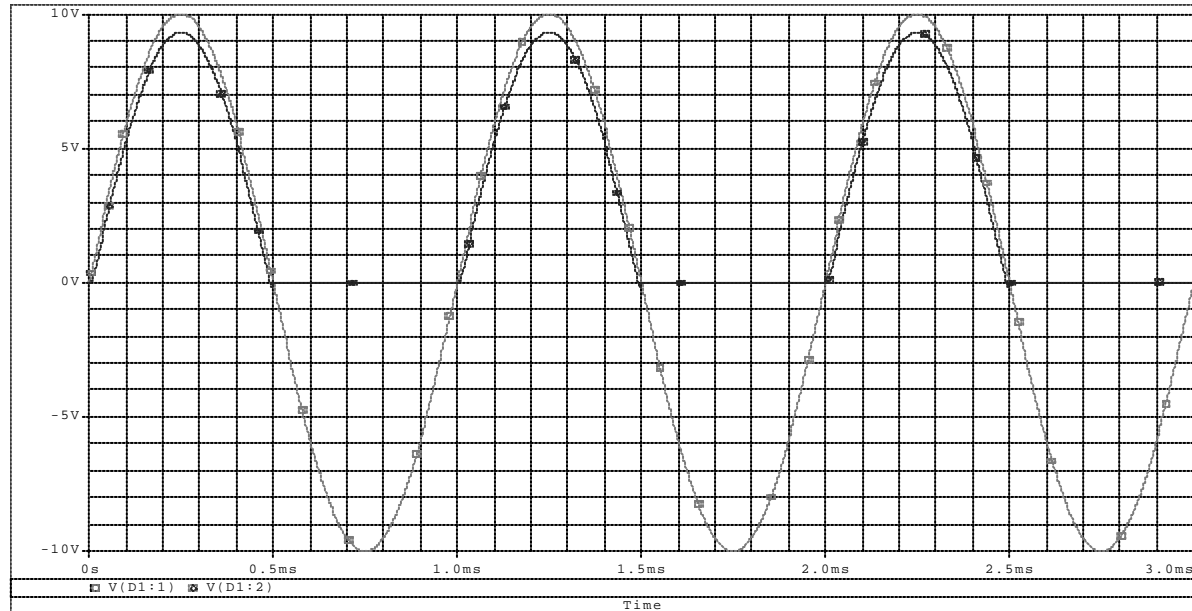
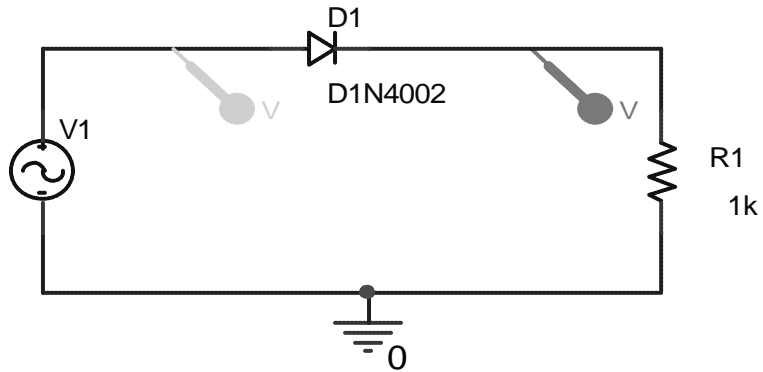
- For ideal diode, current flows only one way
- Real diode is close to ideal



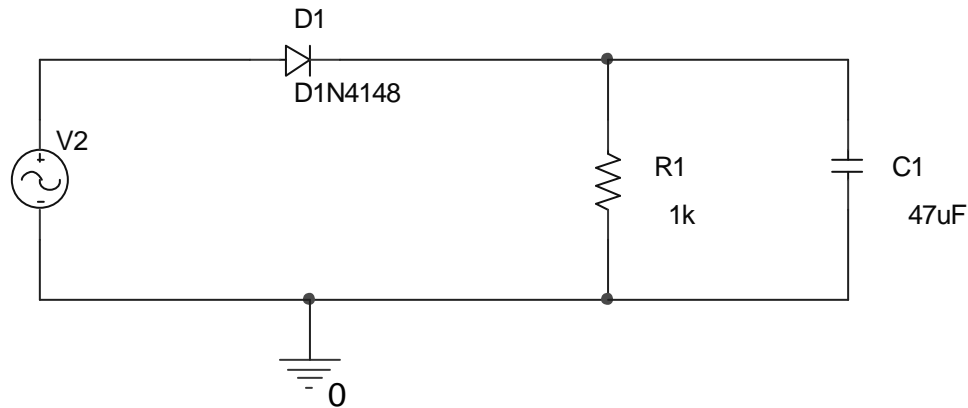
Diode Circuit (I)



VAMPL = 10V
FREQ = 1k



Diode Circuit (II)



- Filtering can be performed by adding a capacitor across the load resistor
- You will see how this looks both with PSpice and experimentally