

Figure 1: Si Diode

Max Voltage of rectified waveform is smaller by 0.647V. This is caused by the diode because it takes roughly 0.647V for the diode to turn on.



Figure 2: Si Diode with Capacitor

Less sinusoidal, smooth decrease, useful for when want current to flow only in one direction or bursts of voltage.



Figure 3: Ge Diode



Figure 4: Ge Diode with Capacitor