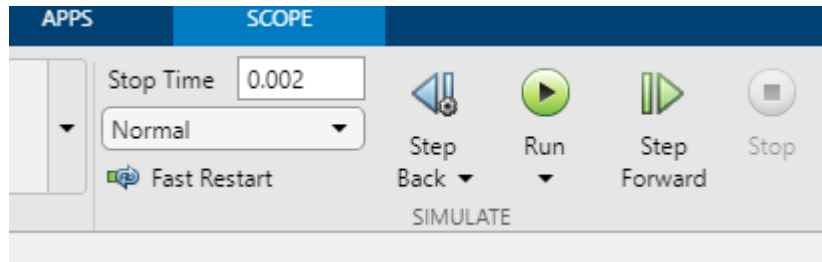


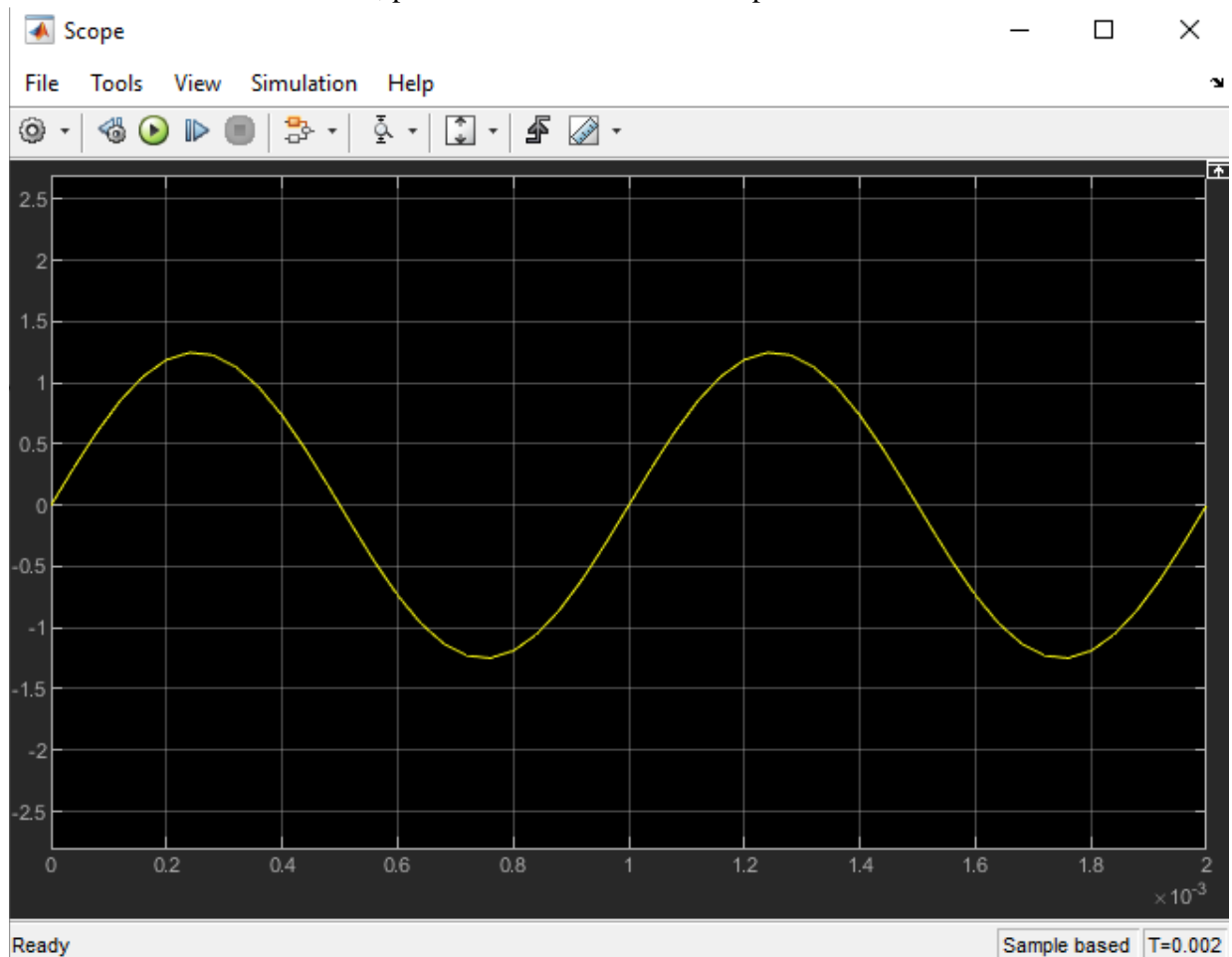


Lecture 8: Introduction to Simulink

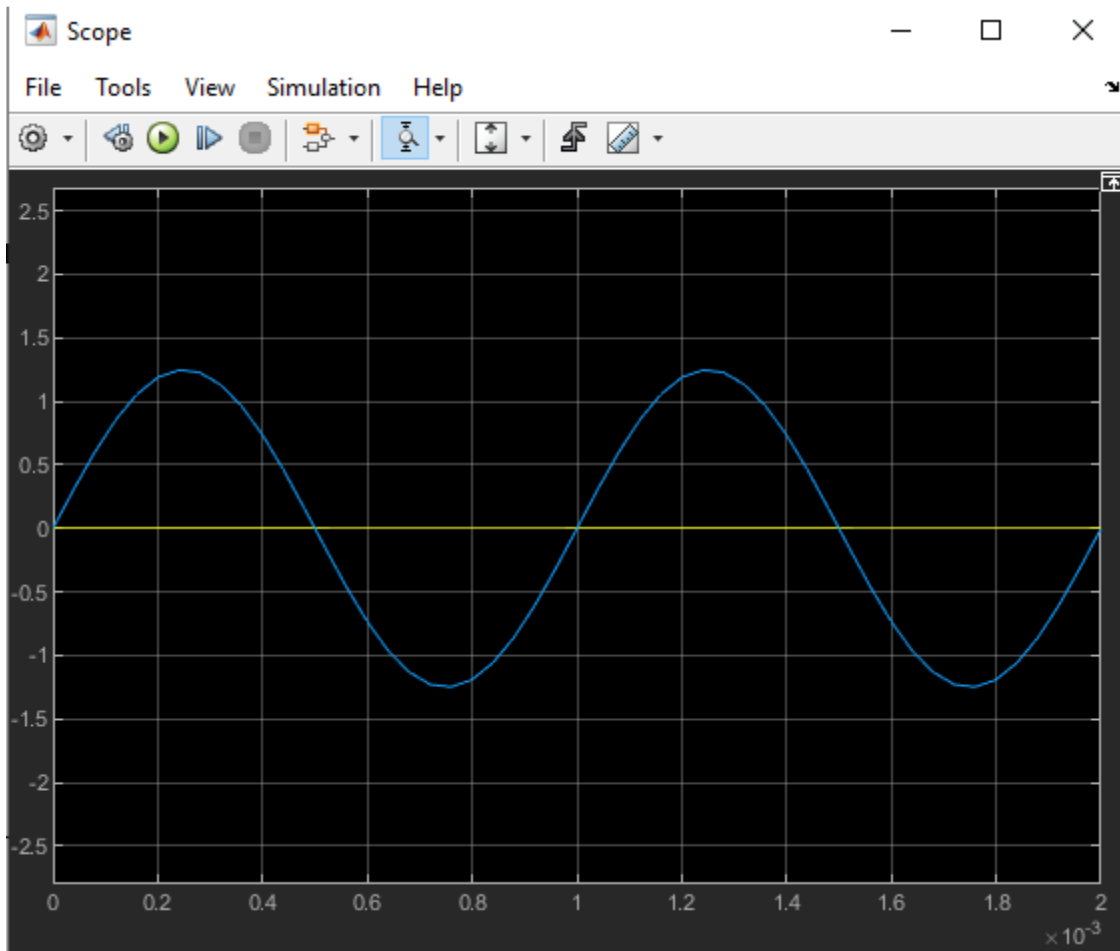
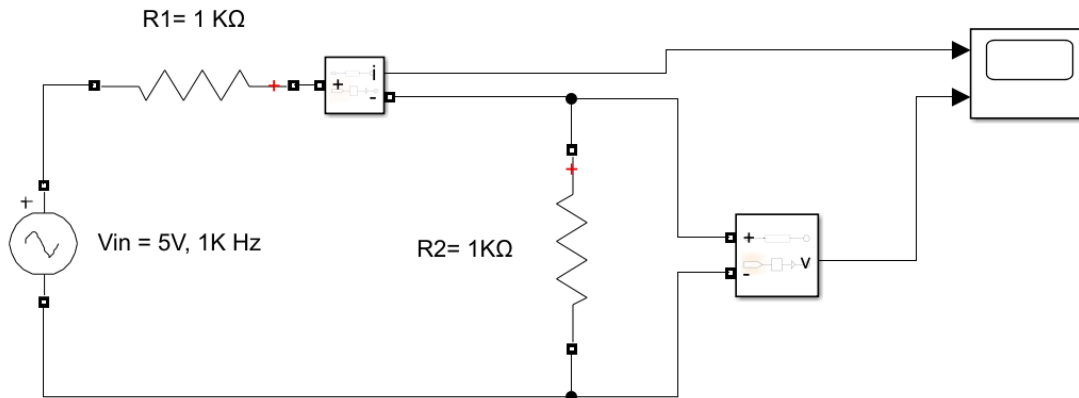
1. Set the value of the time stop (0.002)



2. Press RUN to establish the simulation.
3. To see the simulated results, press double-click on the Scope block.

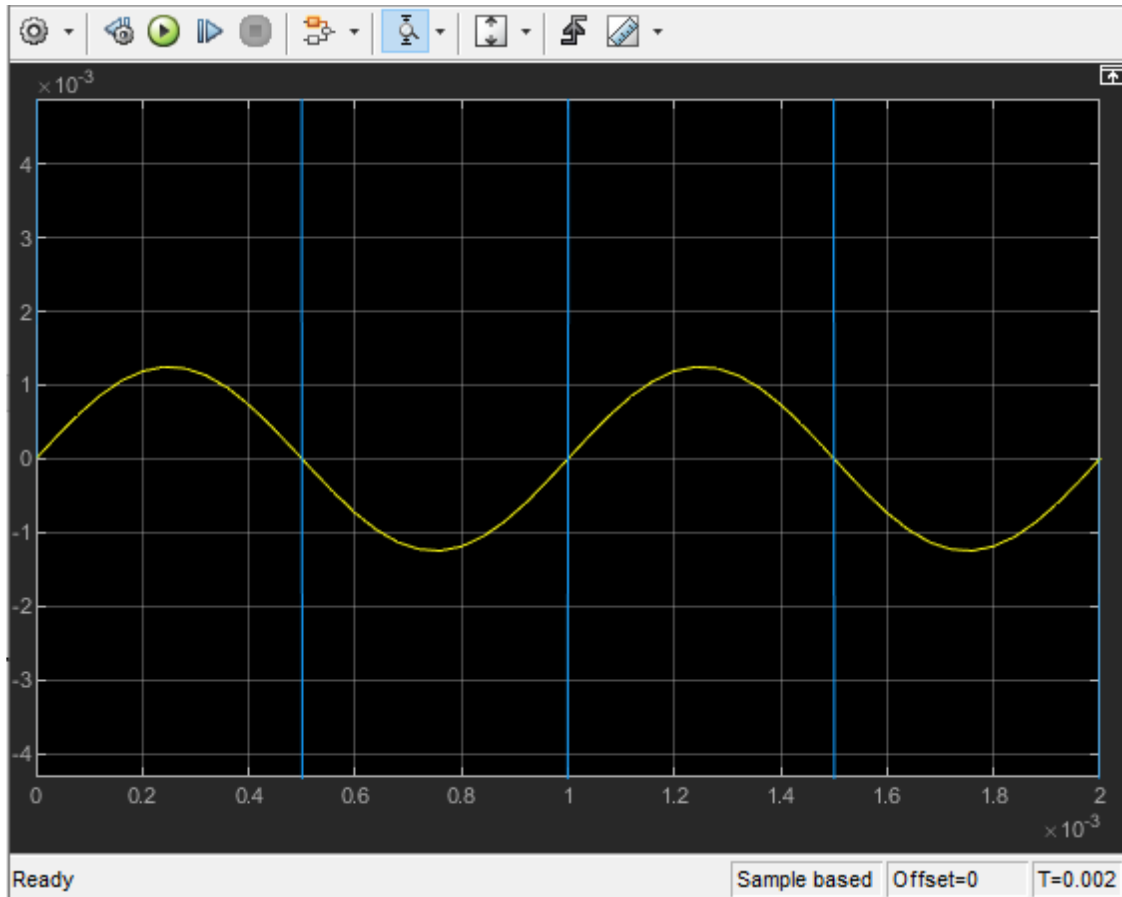


4. To measure the current, we need to connect the “Current Measurement Block” to the circuit in series with the resistor R2 and set a new port on the Scope

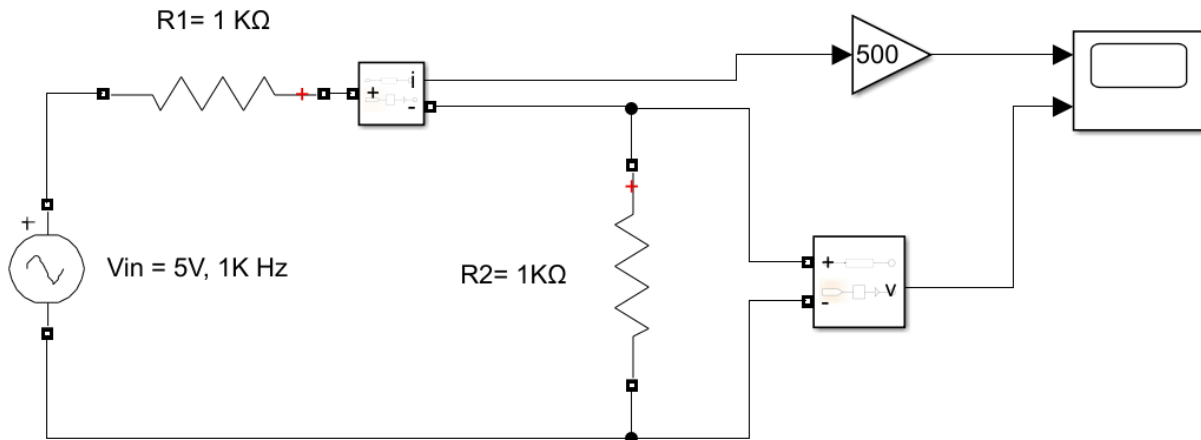


There is no current !!! True?

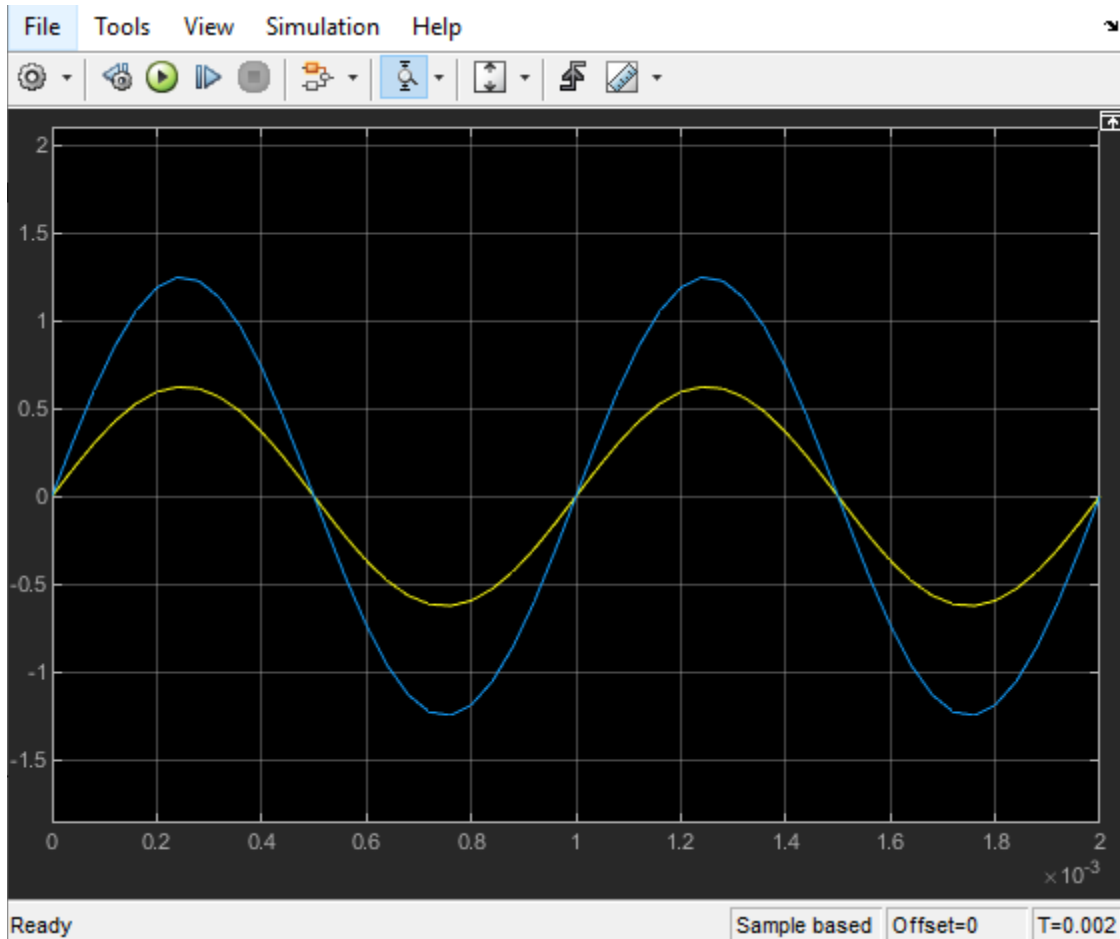
In truth, the amount of the current is very small to be shown in this scale.



5. In order to evaluate the results and see the current and voltage together, we can amplify the current value by adding a Gain block.

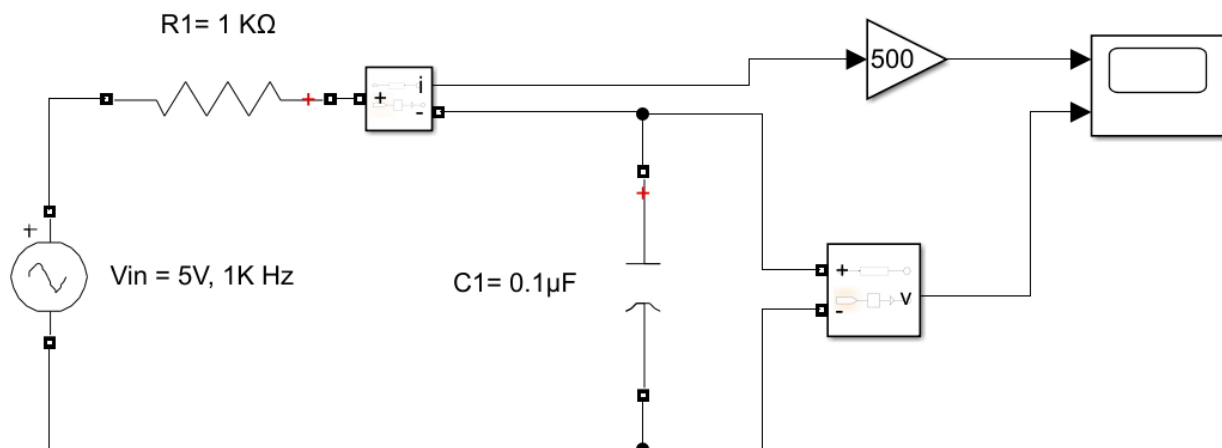


The results will be as shown below:

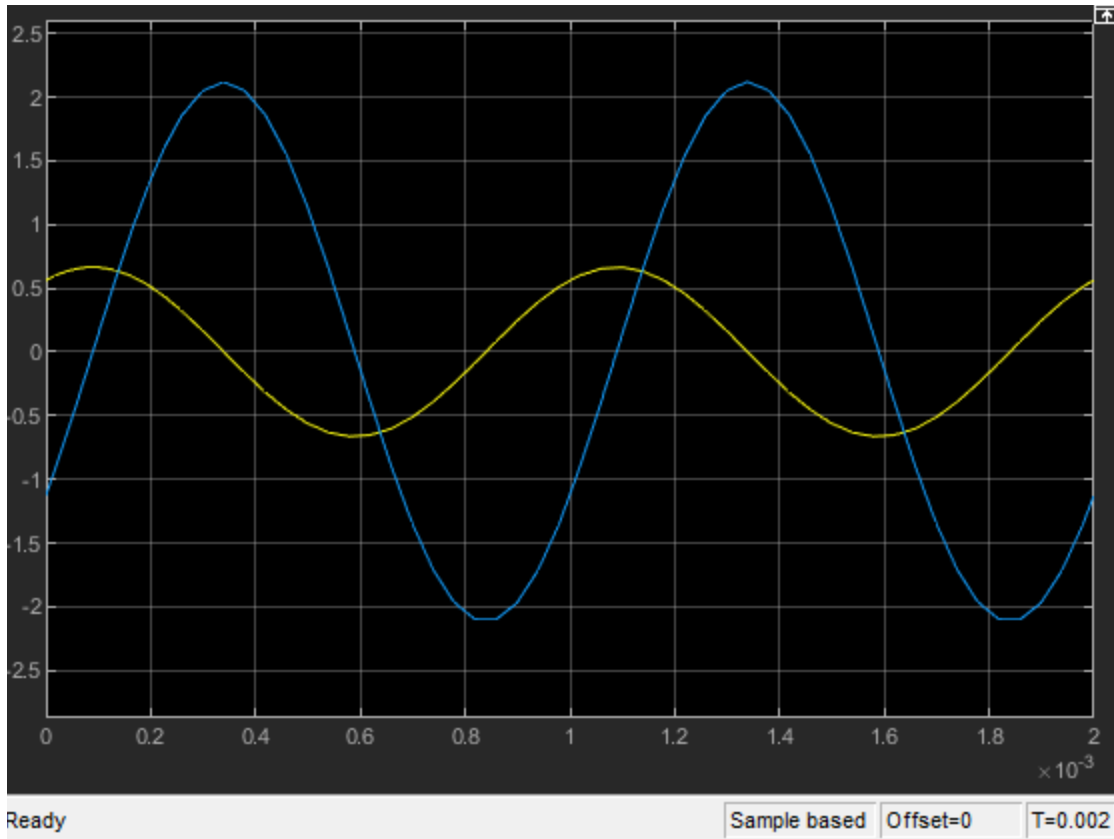


Example2:

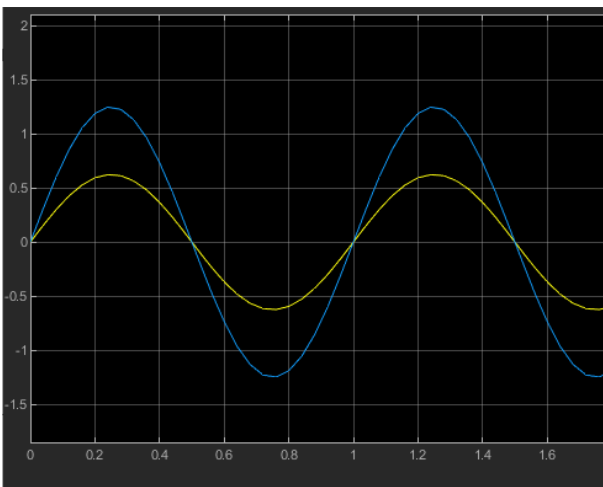
Replace the resistor R_2 with a capacitor ($0.1\mu\text{F}$) and repeat the steps of example 1.



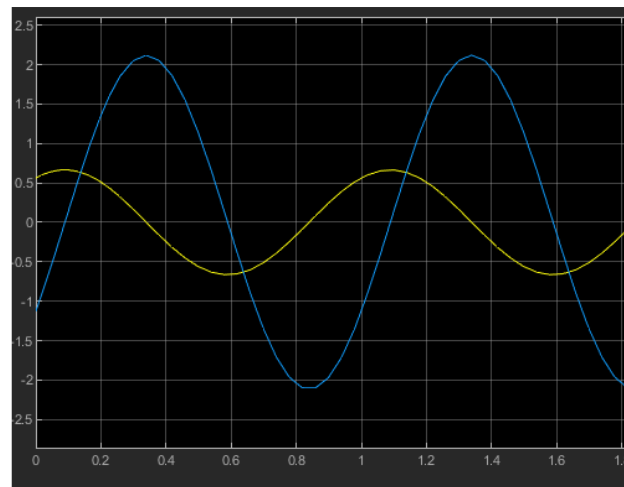
The results will be as shown below:



We may compare the resistive, and capacitive load simulated results as shown below:
 There is a no phase shift 0° in the case of a resistor and 90° phase shift in the case of a capacitor.



Resistive load



Capacitive load