Assuming the potential difference across the diode is 0.7V, and the voltage drop across the diode is 0.6V, the equation for the voltage across the capacitor, $V_c$, is:

$$V_c = V_L - V_D = V_L - 0.6V$$

Where $V_L$ is the applied voltage.

In order to make the circuit function properly, the resistor $R = 5k\Omega$ is necessary.

The minimum value of the resistor, $R_{min}$, can be calculated as:

$$R_{min} = \frac{V_{cc} - V_D}{I_D} = \frac{V_{cc} - 0.6V}{I_D}$$

Change in region: Preset in RRP mode.

Proceed with Z2 mode.
\[ \frac{V_n}{\sqrt{m}} = 5 \]

\[ \frac{20\text{ ft}}{0.01\text{ ft}} = 0.1\text{ ft} \]

\[ \frac{2(10\text{ ft})}{0.2(0.1)\sin(0.4\text{ ft})} (1.2 - 0.0.3) \]

\[ C_v = 0.05\text{ ft} \]

\[ C_s = 0.01\text{ m} \]

\[ V_n = 1.2\text{, } V_n = 0\text{, } V = 0.33\text{, } C_v = 0.5\text{, } \text{(from equation)} \]

\[ \frac{V_n}{\sqrt{m}} = \frac{C_v}{\Theta} \]

\[ \phi \]

\[ H_2 \]

\[ w_2 \cos(v - \phi) \]

\[ \phi \]

\[ \Theta \]

\[ V_n\text{ falls slowly} \]

\[ \text{What if } T \text{ falls slowly?} \]