

- Chy G

Consider the following circuit. The voltage step is an "ideal" pulse going from 0 V TO 4 V and then back to 0 V; The pulse width is 5 microseconds wide.

What is the voltage across the resistor, $v_R(t)$, 7 microseconds after the rising edge of the input pulse?

Note: {Time measures in \mus (microseconds)}

$$4\left[u(t)-u(t-5)\right] + 51 \text{ k}\Omega > v_R(t)$$

- a. between 0.1 V and 1 V
- b. between 0 V and -1 V
- c. between 1.1 V and 2 V
- d. between -1.1 V and -2 V