

Diode Clippers, Clampers & Voltage Multipliers

1. A circuit that removes positive or negative parts of waveform is called
 - a. clamper
 - b. clipper
 - c. diode clamp
 - d. limiter

2. A circuit that adds positive or negative dc voltage to an input sine wave is called
 - a. clamper
 - b. clipper
 - c. diode clamp
 - d. limiter

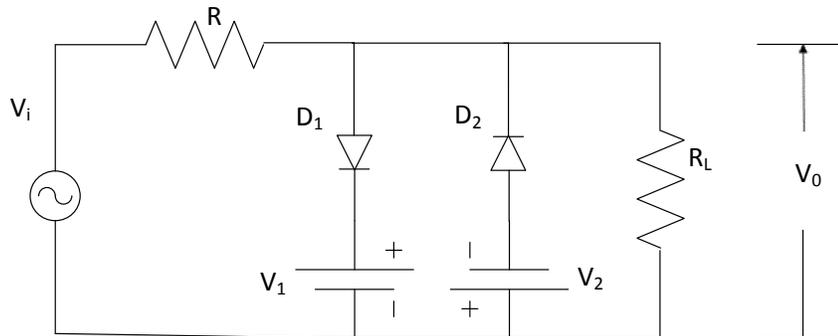
3. Voltage multipliers are circuits best used to produce
 - a. low voltage and low current
 - b. low voltage and high current
 - c. high voltage and low current
 - d. high voltage and high current

4. Half wave voltage multiplier can provide any degree of voltage multiplication by cascading diodes and capacitors.
 - a. only doubler
 - b. only tripler
 - c. any multiplication
 - d. none of the above

5. Consider the following statements:
A clamper circuit
 1. adds or subtracts a dc voltage to a waveform
 2. does not change the waveform
 3. amplifies the waveformWhich are correct?
 - a. 1, 2
 - b. 1, 3
 - c. 1, 2, 3
 - d. 2, 3

6. The circuit given in the figure is:

- a. positive clipper
- b. negative clipper
- c. dual clipper
- d. either (a) or (b)



7. In the above figure D_1 turns on when

- a. V_i is more positive than V_1
- b. V_i is less than V_1
- c. V_i is between V_1 and V_2
- d. none of the above

8. In the given Figure D_2 turns on when

- a. V_i is more positive than V_1
- b. V_i is less positive than v_1
- c. V_i is more negative than V_2
- d. V_i is less negative than V_2

9. A voltage tripler circuit uses

- a. 2 diodes and 2 capacitors
- b. 3 diodes and 3 capacitors
- c. 2 diodes and 3 capacitors
- d. 3 diodes and 2 capacitors

10. A voltage doubler circuit is fed by a voltage $V_m \sin \omega t$. The output voltage will be nearly $2 V_m$ only if

- a. load resistance is small
- b. load resistance is large
- c. load resistance neither small nor large
- d. either (a) or (c)

Answers

- 1. (b)
- 2. (a)
- 3. (c)
- 4. (c)
- 5. (a)
- 6. (c)
- 7. (a)
- 8. (c)
- 9. (b)
- 10. (b)