

38 Lecture - PHY301

Important Mcqs

What is the purpose of a parallel clipper circuit?

- A. To clip both positive and negative portions of the input signal
- B. To clip only the positive portion of the input signal
- C. To clip only the negative portion of the input signal
- D. None of the above

Answer: A

What is the main component used in a parallel clipper circuit?

- A. Resistor
- B. Capacitor
- C. Diode
- D. Inductor

Answer: C

In a parallel clipper circuit, when the input signal is above the clipping level, what happens to the output signal?

- A. It remains unchanged
- B. It is clipped at the positive voltage level
- C. It is clipped at the negative voltage level
- D. It is clipped at both the positive and negative voltage levels

Answer: D

What is the voltage drop across a diode when it is forward biased?

- A. 0 volts
- B. 0.6 volts

- C. 1 volt
- D. 2 volts

Answer: B

What is the function of the capacitor in a parallel clipper circuit?

- A. To charge and discharge the diode
- B. To smooth out the output signal
- C. To provide a path for the input signal to ground
- D. None of the above

Answer: C

What is the main disadvantage of a parallel clipper circuit?

- A. It is difficult to implement
- B. It can introduce distortion in the output signal
- C. It is only effective for low frequency signals
- D. It requires a high voltage power supply

Answer: B

What is the difference between a series clipper and a parallel clipper circuit?

- A. In a series clipper, the diode is in series with the input signal, while in a parallel clipper, the diode is in parallel with the input signal
- B. In a series clipper, the diode is in parallel with the input signal, while in a parallel clipper, the diode is in series with the input signal
- C. There is no difference between a series clipper and a parallel clipper circuit
- D. None of the above

Answer: A

What is the clipping level in a parallel clipper circuit?

- A. The voltage at which the diode becomes forward biased
- B. The voltage at which the diode becomes reverse biased

C. The maximum voltage that the output signal can reach

D. The minimum voltage that the output signal can reach

Answer: A

What is the purpose of a load resistor in a parallel clipper circuit?

A. To limit the current through the diode

B. To provide a path for the output signal to ground

C. To provide a voltage drop across the output signal

D. None of the above

Answer: B

How can the clipping level in a parallel clipper circuit be changed?

A. By changing the value of the resistor in series with the diode

B. By changing the value of the capacitor in parallel with the diode

C. By changing the value of the load resistor

D. By changing the bias voltage of the diode

Answer: D