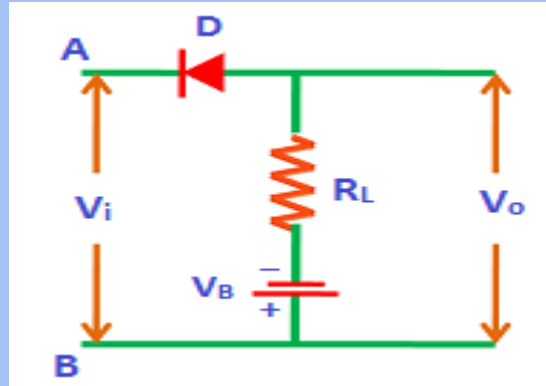


Series Positive Clipper with Negative Bias

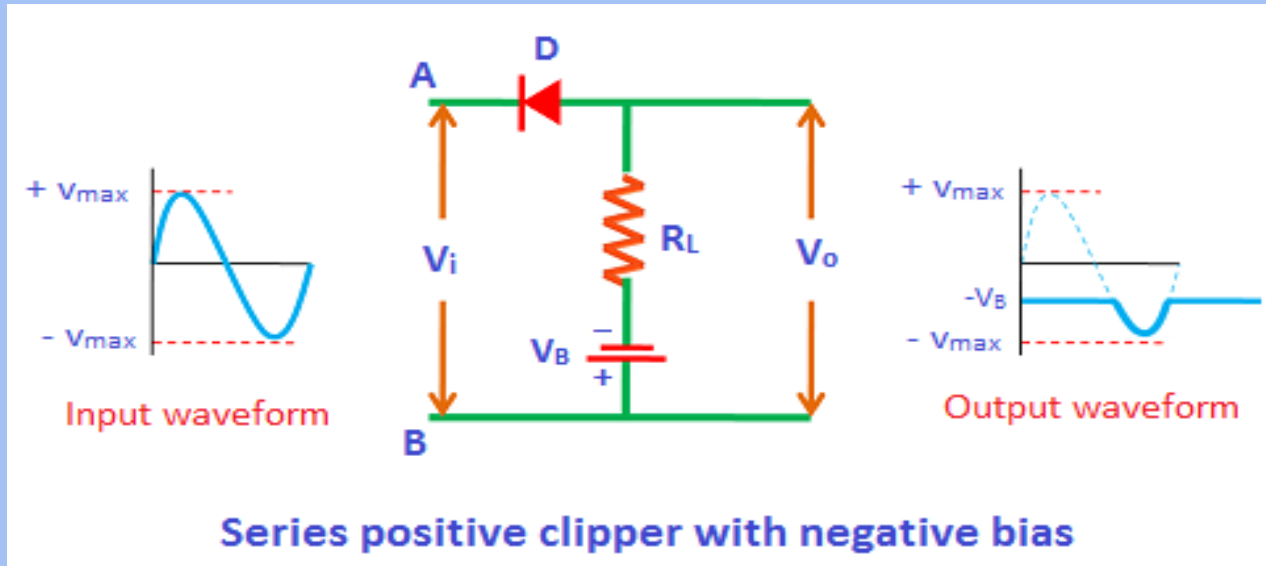
Elementrix Classes

Series Positive Clipper with Negative Bias

- Sometimes it is desired to remove a small portion of positive or negative half cycles. In such cases, the biased clippers are used.
- The construction of the series positive clipper with bias is almost similar to the series positive clipper. The only difference is an extra element called battery is used in series positive clipper with bias.



❖ During positive half cycle:



During the positive half cycle, the diode D is reverse biased by both input supply voltage V_i and battery voltage V_B . So no signal appears at the output during the positive half cycle. Therefore, the complete positive half cycle is removed.

❖ **During negative half cycle:**

During the negative half cycle, the diode is forward biased by the input supply voltage V_i and reverse biased by the battery voltage V_B . However, initially, the battery voltage V_B dominates the input supply voltage V_i . So the diode remains to be reverse biased until the V_i becomes greater than V_B . When the input supply voltage V_i becomes greater than the battery voltage V_B , the diode is forward biased by the input supply voltage V_i . So the signal appears at the output.

पढ़िए और पढ़ाइये

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