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Difference Between NPN and PNP

There are numerous difference between NPN and PNP transistors. There are applications which make NPN the majority charge carriers are electrons. In a PNP transistor, the majority charge carriers are holes.

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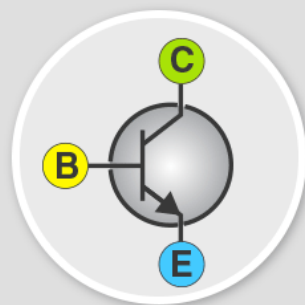
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DIFFERENCE BETWEEN NPN AND PNP TRANS



NPN TRANSISTOR

NPN TRANSISTOR IS THE TYPE OF BIPOLAR TRANSISTOR CONSISTING UP OF P-TYPE SEMICONDUCTOR THAT IS AFFIXED IN BETWEEN TWO N-TYPE SEMICONDUCTORS.



PNP TRANSISTOR

PNP IS THE TYPE OF BIPOLAR TRANSISTOR CONSISTING UP OF N-TYPE SEMICONDUCTOR THAT IS AFFIXED IN BETWEEN TWO P-TYPE SEMICONDUCTORS.

NPN and PNP Transistor

What is the Difference Between NPN and PNP Transistor

PNP switches On by a low signal whereas NPN switches ON by a high signal. It is important to be aware that in PNP transistor, the P represents the polarity of the collector terminal and the N represents the polarity of the base terminal.

In NPN, N represents the negatively charged coating of the material and P represents the positively charged layer.

Difference Between NPN and PNP Transistor

- Archimedes' Principle
- Kirchhoff's Law
- Newton's Laws Of Motion
- Laws Of Reflection

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NPN	PNP
The current flows from collector terminal to emitter terminal.	The current flows from emitter terminal to collector terminal.
One P-type semiconductor is sandwiched between the two N-type semiconductors.	It is made of two P-type layers with an N-type layer between them.
The current flow from the collector is generated by keeping a +ve voltage there.	The current flow from the emitter is generated by keeping a -ve voltage there.
The transistor switches ON with the increase in current in the base terminal.	The transistor switches ON with the decrease in current in the base terminal.
When the current is reduced in the base, the transistor doesn't function across the collector terminal and switches OFF.	When the current is increased in the base, the transistor doesn't function across the collector terminal and switches OFF.

These are some of the NPN and PNP transistor differences. If you want to learn more, download BYJU'S – The Learning App.

! Test your knowledge on PNP and NPN transistor differences

DND

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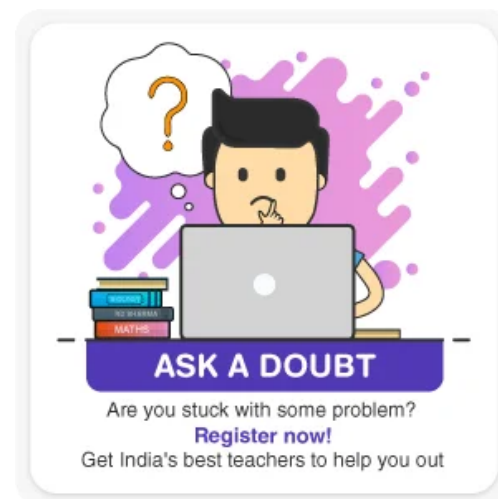
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