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Review of: "bipolar transistors (pMOS) have a state voltage connected (Von) around Y to Y volts"

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Potential competing interests: No potential competing interests to declare.

This electronic component is a bipolar transistor that uses a Mosfet at its input, and it is actually a combination of bipolar transistors (pMOS) and (Mosfet) and by combining the advantages of the two, it is an electrical element. An industry has been created with high switching speed and low input current. bipolar transistors (pMOS) are able to turn on and off much faster, but their conduction losses are higher.

bipolar transistors (pMOS) is a transistor that has the advantages of BGT and MOSFET together, such as: high input impedance like MOSFET, which causes It can be switched to connected state with little energy. (voltage drop and low losses like BJT) such as BJTs have a small on-state (connected) voltage, for example in a device with Nominal 1000V connected state voltage (Von) is around 2 to 3 volts. The names of the bases are also chosen from the same names as before, G from MOSFET and E, C from BJT transistors. As a result, with this simple combination, you use the element that has high gate impedance and high voltage tolerance. The switching speed of this type is limited, for example, 1 KHz to 50 KHz, which is generally between two types of BJT and MOSFET. Because of its very high input impedance, it is very sensitive and is mostly used in induction furnaces to amplify the voltage range, and in general, this type of bipolar transistors (pMOS) is used. It is more for starting high power elements. The most important and almost the only function of bipolar transistors (pMOS) switching The currents are high. (pMOS) It is a fast transistor in operation, its switching and connecting time is about 1 microsecond. Because the recovery time in this transistor is very short, as a result, this transistor has good performance at high frequencies.

The first grade is used as an electronic switch that is used in new devices for high efficiency and fast switching. This electrical switch is used in many modern appliances, including electric cars, trains, refrigerators, treadmills, air conditioners, and even stereo systems and amplifiers. It is also used in making all kinds of inverters, welding transformers and UPS.

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