

Distinguish, differentiate, compare and explain what is the Difference between FET BJT and SET. Comparison and Differences.

Difference between FET, BJT, and SET

What is Single Electron Transistor?

These are devices operating at the quantum/nanoscale that have switching properties controlled by the removal or injection of a single electron; a device through which only one electron can be transported at a time.

In FET/BJT, based on its input current (BJT) or input voltage (FET), a transistor allows a precise amount of current to flow through it.

In SET, the single electron transistor is a new type of switching device that uses controlled electron tunneling to amplify current or switch the state. The word single electron means that one electron-precision charge transfer through tunneling, which is based on the Coulomb blockade effect.

Steady Run