Technician Question Pool July 2022 to June 2026

The MORE Project

http://n2re.org/m-o-r-e-project



Electronic Components & Circuits No-Nonsense pages 29 - 30

Transistors

Transistors are semiconductor components that control the flow of current through them. Typically have 3 leads, with one of these used as the control pin. Transistors are often used as switches or amplifiers. The ratio of output current to input current is called the gain of the transistor.



FCC Tech 7/22 to 6/26 Semiconductors

Which of these components can be used as an electronic switch?

- A. VaristorB. PotentiometerC. Transistor
- **D.** Thermistor



FCC Tech 7/22 to 6/26 Semiconductors



Which of these components can be used as an electronic switch?

- A. Varistor
 B. Potentiometer
 C. Transistor
- D. Thermistor



FCC Tech 7/22 to 6/26 Semiconductors ECCD3 A1 of 7

What is the term that describes a device's ability to amplify a signal?

- A. GainB. Forward resistanceC. Forward voltage drop
- D. On resistance



FCC Tech 7/22 to 6/26 Semiconductors ECCD3 Q2 of 7

What is the term that describes a device's ability to amplify a signal?

A. Gain

- **B.** Forward resistance
- C. Forward voltage drop
- D. On resistance



FCC Tech 7/22 to 6/26 Semiconductors ECCD3 A2 of 7

Which of the following can provide power gain?

A. Transformer B. Transistor

- C. Reactor
- D. Resistor



FCC Tech 7/22 to 6/26 Semiconductors ECCD3 Q3 of 7

Which of the following can provide power gain?

A. Transformer
B. Transistor
C. Reactor
D. Resistor



FCC Tech 7/22 to 6/26 Semiconductors ECCD3 A3 of 7

Which of the following components can consist of three regions of semiconductor material?

- A. Alternator
- **B.** Transistor
- C. Triode
- D. Pentagrid converter



FCC Tech 7/22 to 6/26 Semiconductors ECCD3 Q4 of 7

Which of the following components can consist of three regions of semiconductor material?

A. Alternator
B. Transistor
C. Triode
D. Pentagrid converter



FCC Tech 7/22 to 6/26 Semiconductors ECCD3 A4 of 7

What are the names of the electrodes of a bipolar junction transistor?

A. Signal, bias, power
B. Emitter, base, collector
C. Input, output, supply
D. Pole one, pole two, output



FCC Tech 7/22 to 6/26 Semiconductors ECCD3 Q5 of 7

What are the names of the electrodes of a bipolar junction transistor?

A. Signal, bias, power
B. Emitter, base, collector
C. Input, output, supply
D. Pole one, pole two, output



FCC Tech 7/22 to 6/26 Semiconductors ECCD3 A5 of 7

What does the abbreviation FET stand for?

A. Frequency Emission Transistor
B. Fast Electron Transistor
C. Free Electron Transmitter
D. Field Effect Transistor



FCC Tech 7/22 to 6/26 Semiconductors ECCD3 Q6 of 7

What does the abbreviation FET stand for?

A. Frequency Emission Transistor
B. Fast Electron Transistor
C. Free Electron Transmitter
D. Field Effect Transistor



FCC Tech 7/22 to 6/26 Semiconductors ECCD3 A6 of 7

What type of transistor has a gate, drain, and source?

A. Varistor
B. Field-effect
C. Tesla-effect
D. Bipolar junction



FCC Tech 7/22 to 6/26 Semiconductors ECCD3 Q7 of 7

What type of transistor has a gate, drain, and source?

A. Varistor
B. Field-effect
C. Tesla-effect
D. Bipolar junction



FCC Tech 7/22 to 6/26 Semiconductors ECCD3 A7 of 7



A non-profit initiative by the IEEE and ARDC to increase the numbers of youth (12-18) and non-males in Amateur Radio. Participants earn FCC licenses and receive free 2-way radios.

For MORE information: n2re.org/m-o-r-e-project Dr. Rebecca Mercuri, Grant Administrator, rtmercuri@ieee.org

