
Technician Question Pool

July 2018 to June 2022

The MORE Project

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



Electronic Components & Circuit Diagrams

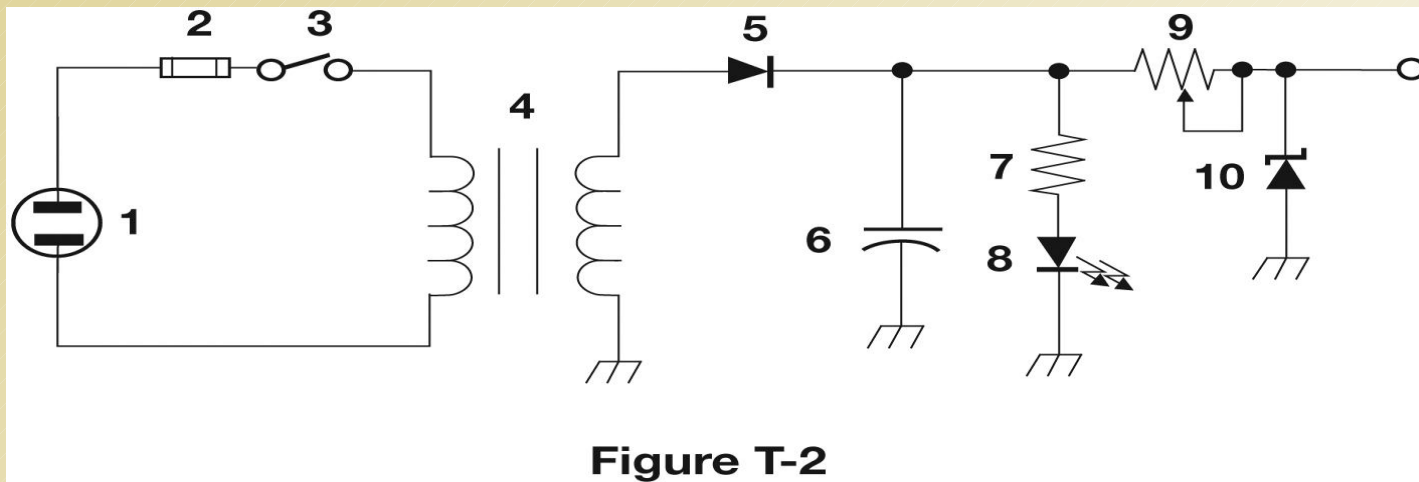
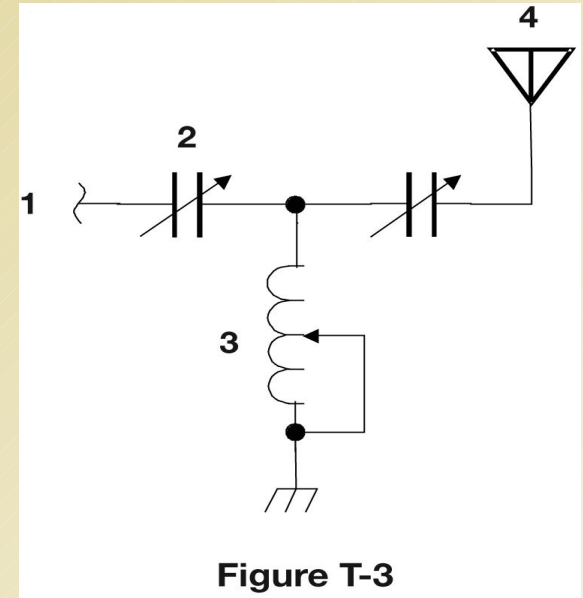
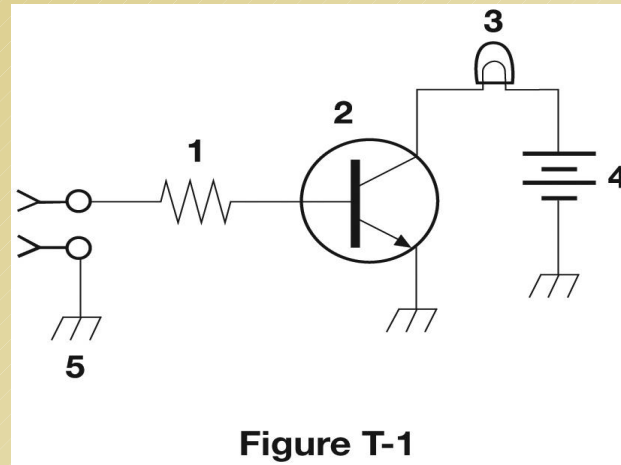
No-Nonsense pages 19 - 22

Circuit diagrams, schematic symbols, component functions

When describing circuits on paper, we draw schematic diagrams that show the components and how they are connected together. The circuit components are represented by symbols that readily identify its type, value or part number.



Figures



T6C01

What is the name of an electrical wiring diagram that uses standard component symbols?

- A. Bill of materials
- B. Connector pinout
- C. Schematic
- D. Flow chart



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T6C01

What is the name of an electrical wiring diagram that uses standard component symbols?

- A. Bill of materials
- B. Connector pinout
- C. Schematic**
- D. Flow chart



T6C12

What do the symbols on an electrical schematic represent?

- A. Electrical components
- B. Logic states
- C. Digital codes
- D. Traffic nodes



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T6C12

What do the symbols on an electrical schematic represent?

- A. Electrical components
- B. Logic states
- C. Digital codes
- D. Traffic nodes



T6C13

Which of the following is accurately represented in electrical schematics?

- A. Wire lengths
- B. Physical appearance of components
- C. The way components are interconnected
- D. All of these choices are correct



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T6C13

Which of the following is accurately represented in electrical schematics?

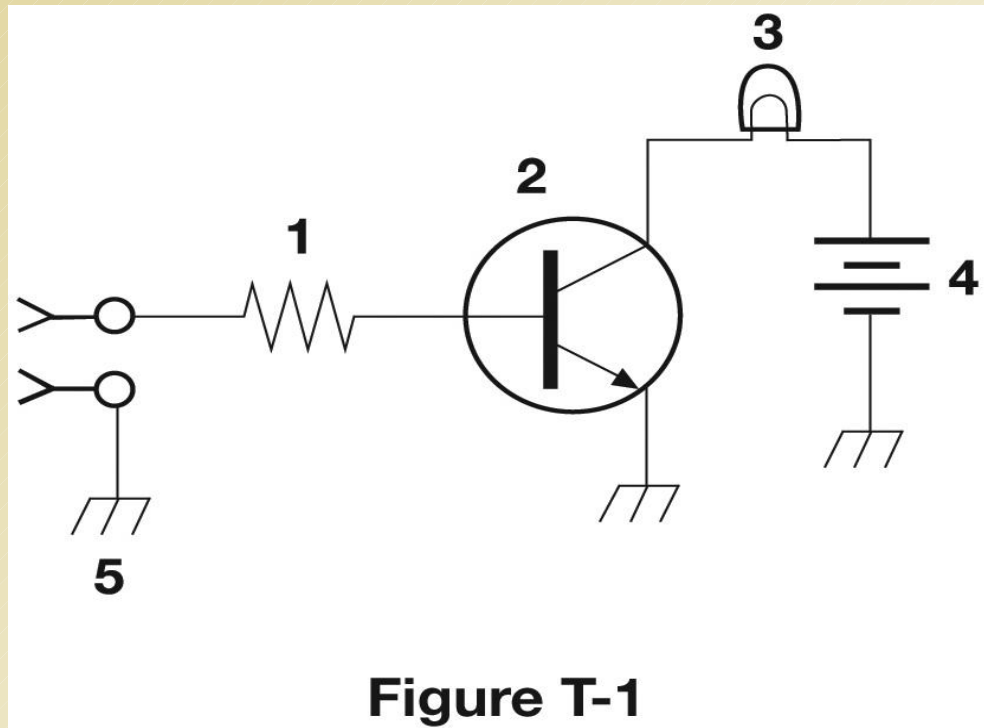
- A. Wire lengths
- B. Physical appearance of components
- C. The way components are interconnected**
- D. All of these choices are correct



T6C02

What is component 1 in figure T1?

- A. Resistor
- B. Transistor
- C. Battery
- D. Connector



T6C02

What is component 1 in figure T1?

- A. Resistor
- B. Transistor
- C. Battery
- D. Connector

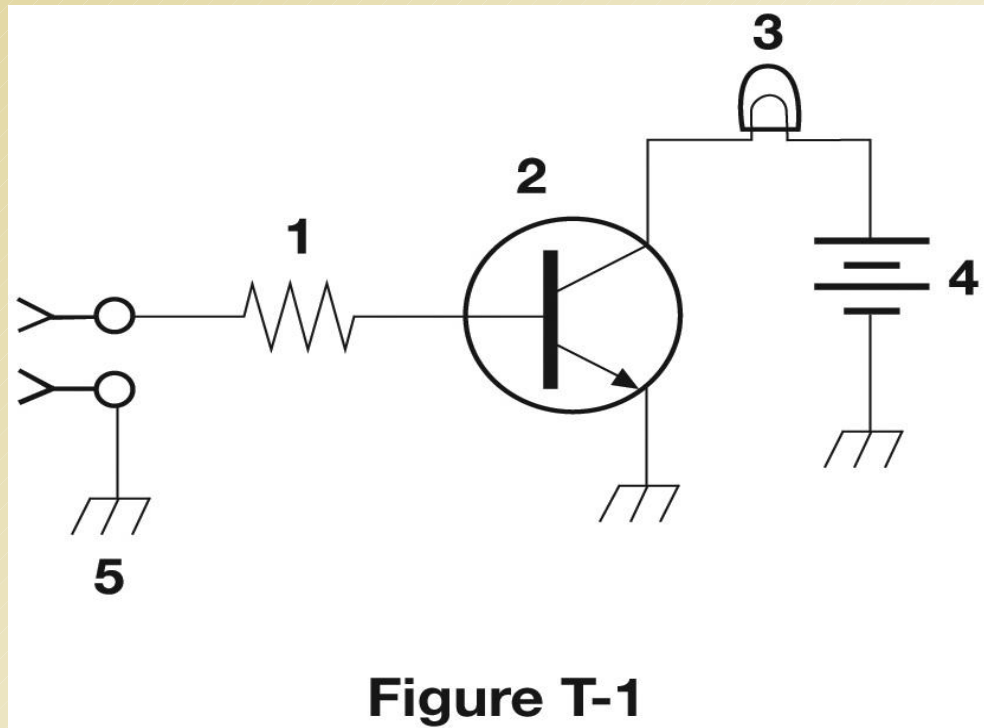


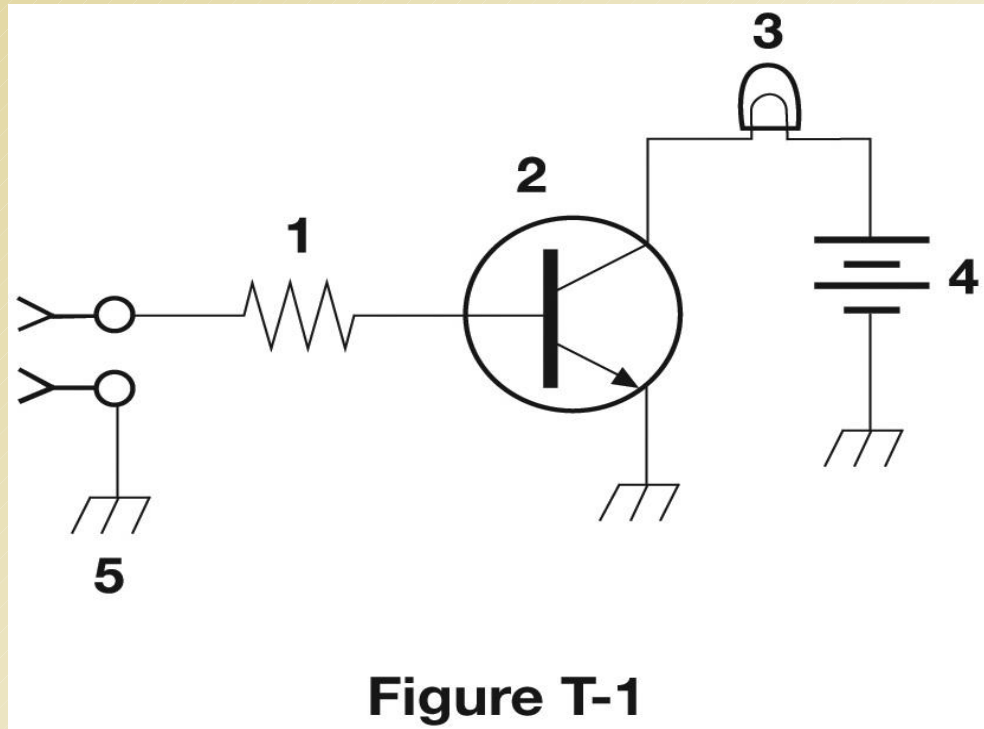
Figure T-1



T6C03

What is component 2 in figure T1?

- A. Resistor
- B. Transistor
- C. Indicator lamp
- D. Connector



T6C03

What is component 2 in figure T1?

- A. Resistor
- B. Transistor**
- C. Indicator lamp
- D. Connector

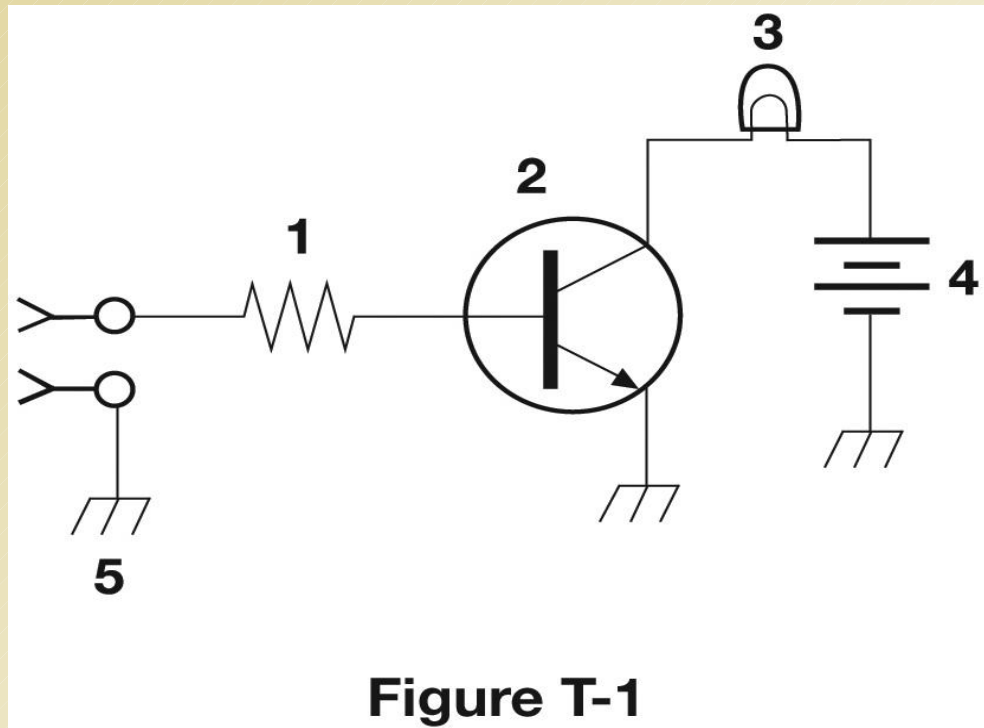


Figure T-1



T6D10

What is the function of component 2 in Figure T1?

- A. Give off light when current flows through it
- B. Supply electrical energy
- C. Control the flow of current
- D. Convert electrical energy into radio waves

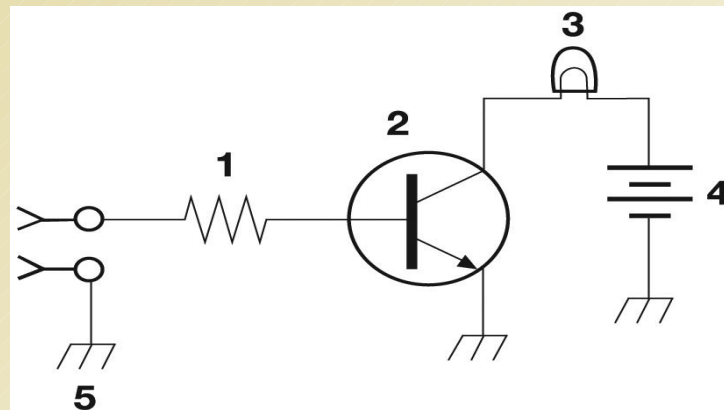


Figure T-1

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T6D10

What is the function of component 2 in Figure T1?

- A. Give off light when current flows through it
- B. Supply electrical energy
- C. Control the flow of current**
- D. Convert electrical energy into radio waves

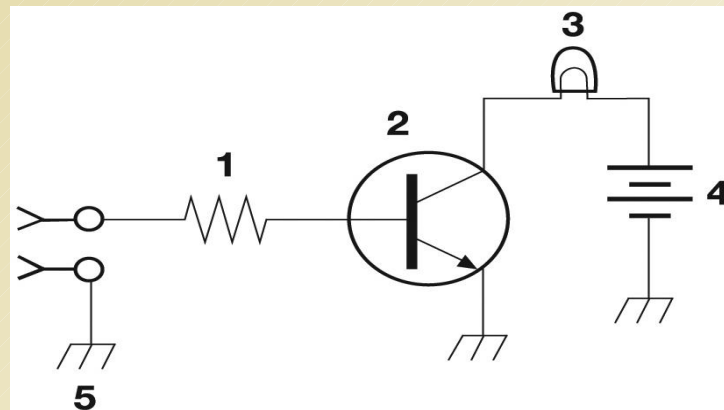


Figure T-1

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T6C04

What is component 3 in figure T1?

- A. Resistor
- B. Transistor
- C. Lamp
- D. Ground symbol

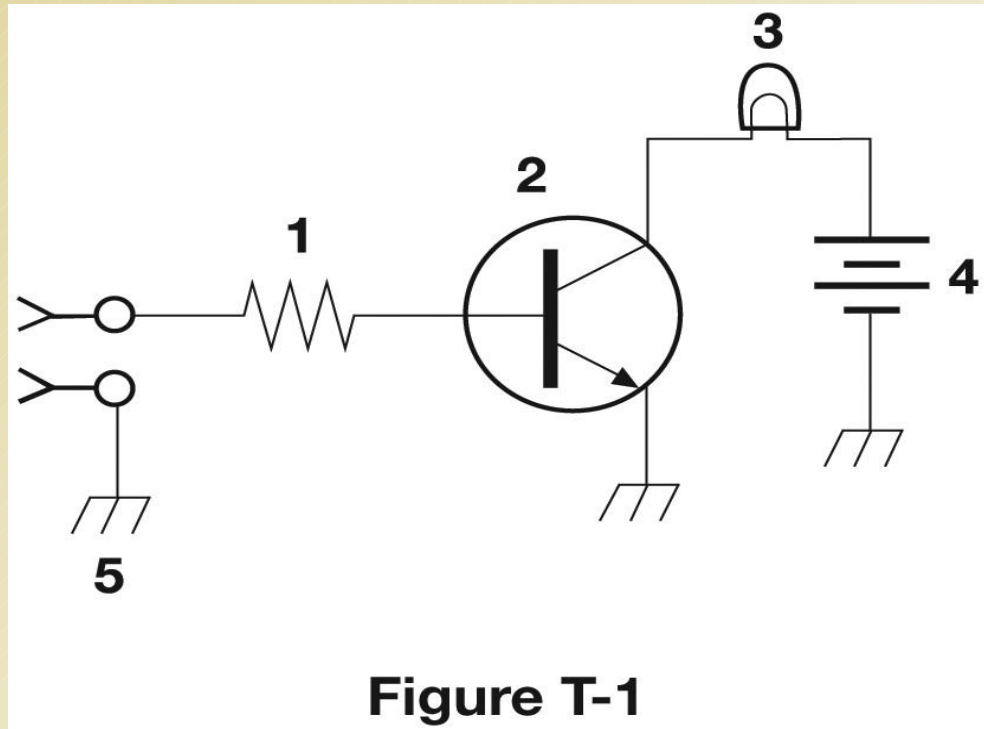


Figure T-1



T6C04

What is component 3 in figure T1?

- A. Resistor
- B. Transistor
- C. Lamp**
- D. Ground symbol

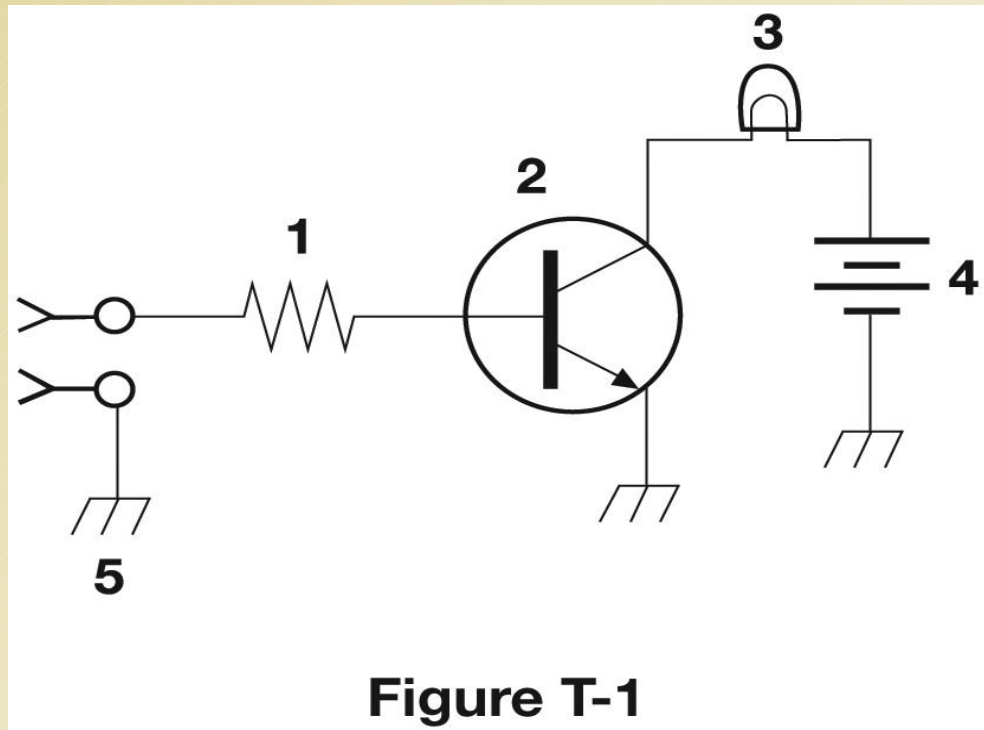


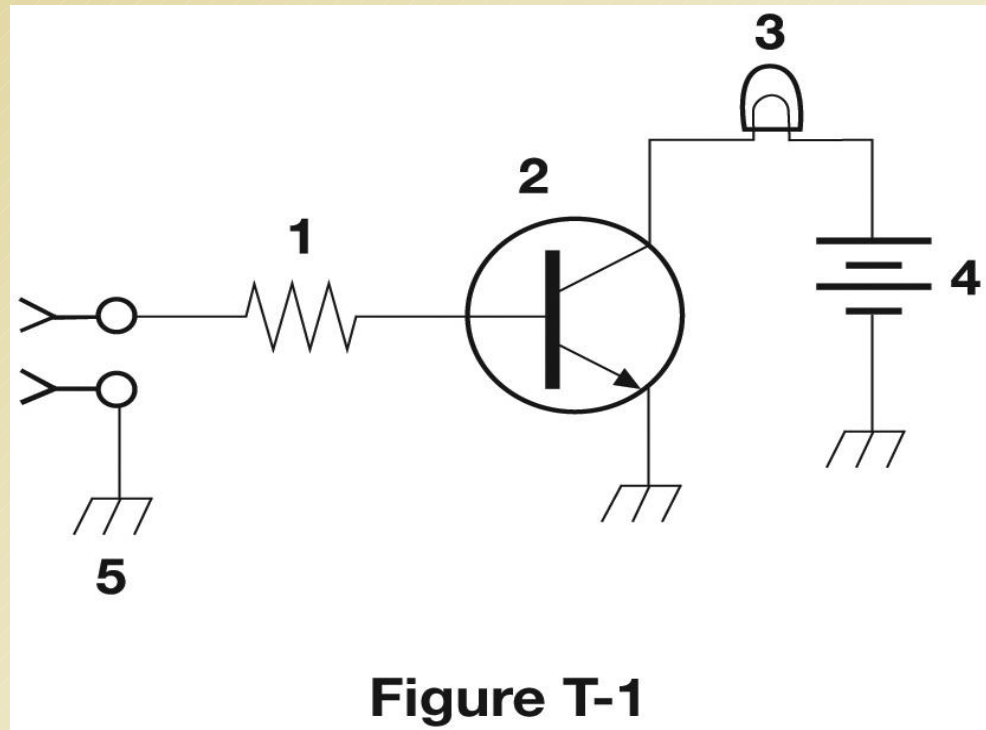
Figure T-1



T6C05

What is component 4 in figure T1?

- A. Resistor
- B. Transistor
- C. Battery
- D. Ground symbol



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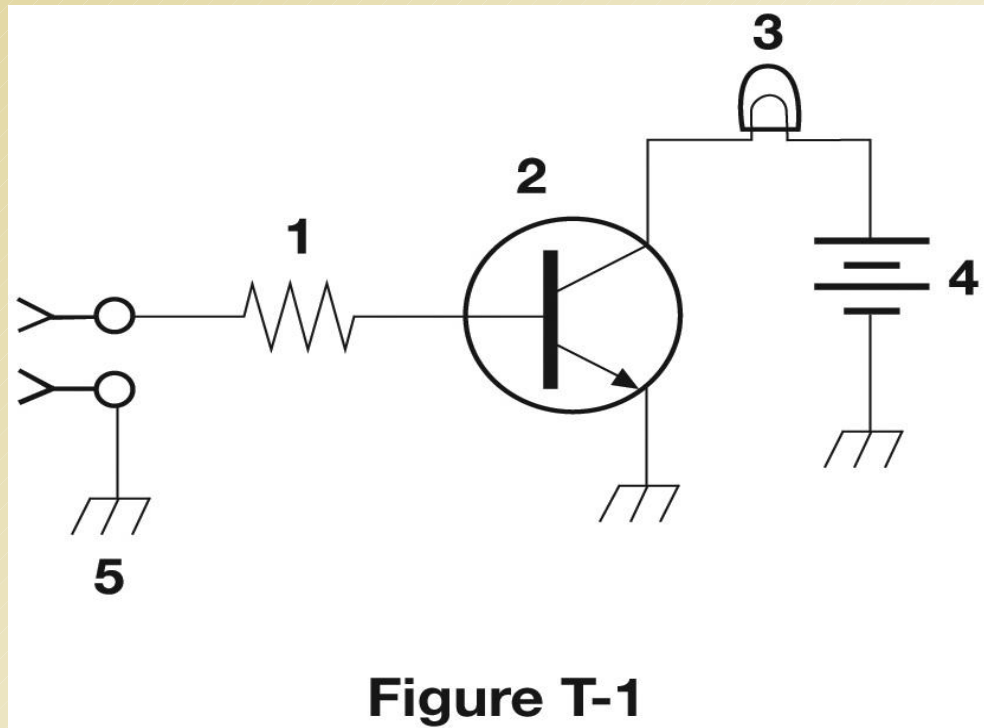
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T6C05

What is component 4 in figure T1?

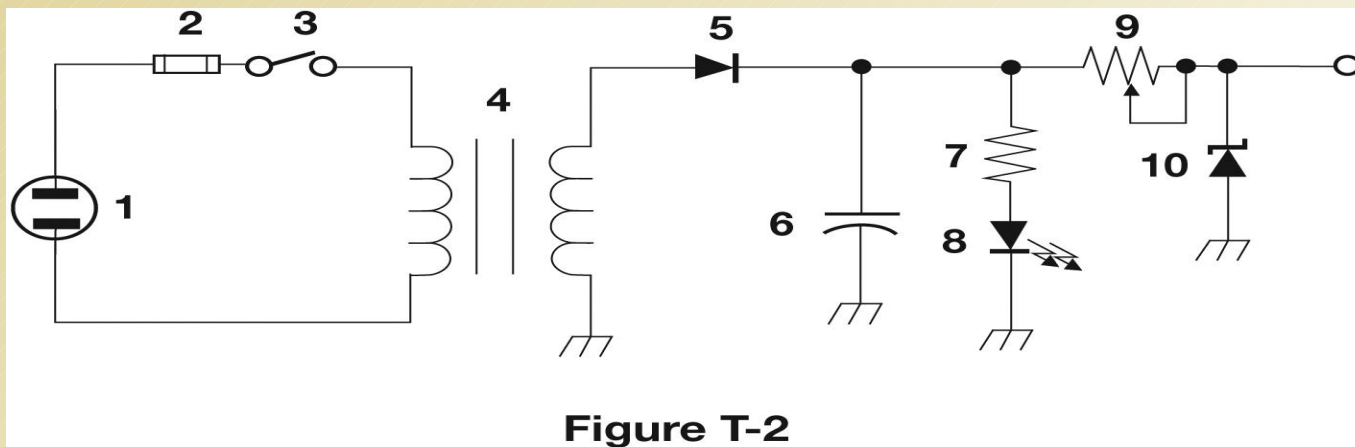
- A. Resistor
- B. Transistor
- C. Battery**
- D. Ground symbol



T6D03

What type of switch is represented by component 3 in figure T2?

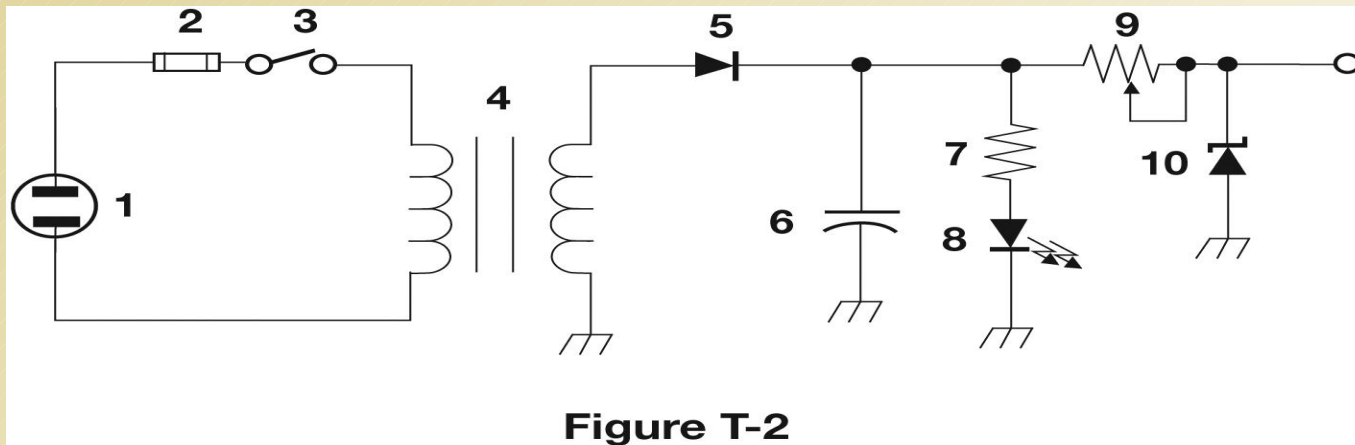
- A. Single-pole single-throw
- B. Single-pole double-throw
- C. Double-pole single-throw
- D. Double-pole double-throw



T6D03

What type of switch is represented by component 3 in figure T2?

- A. Single-pole single-throw
- B. Single-pole double-throw
- C. Double-pole single-throw
- D. Double-pole double-throw



T6C09

What is component 4 in figure T2?

- A. Variable inductor
- B. Double-pole switch
- C. Potentiometer
- D. Transformer

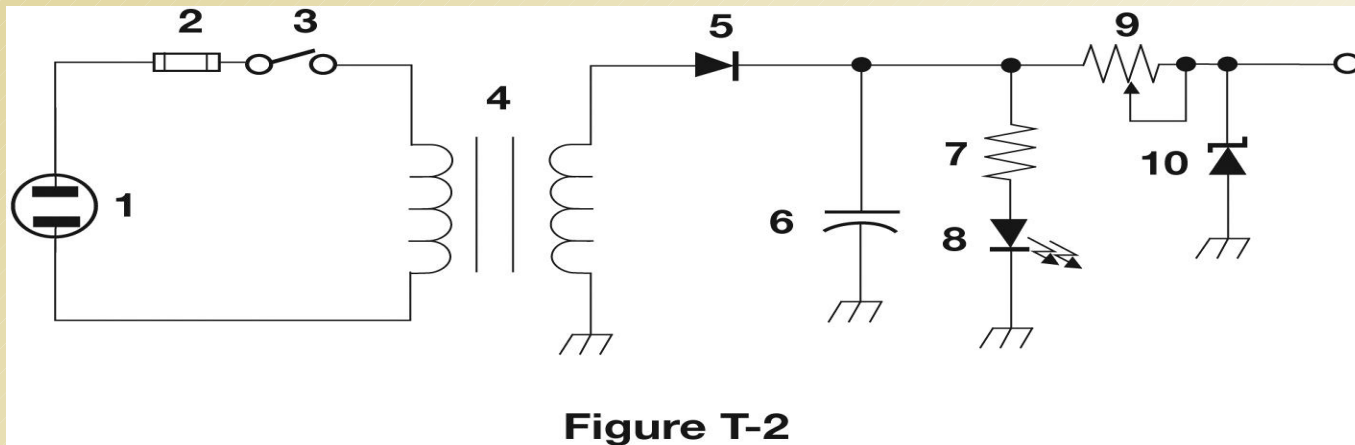


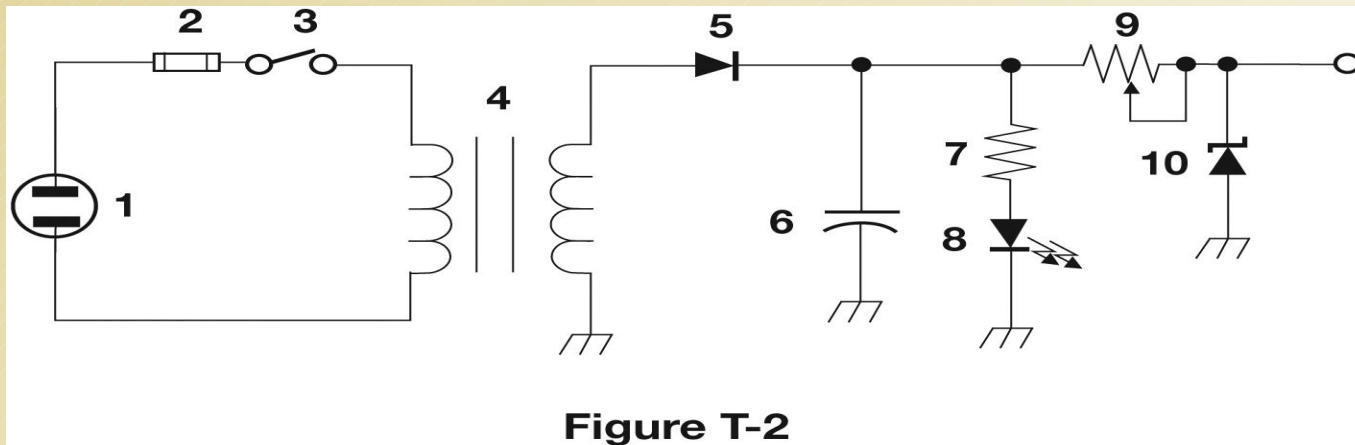
Figure T-2



T6C09

What is component 4 in figure T2?

- A. Variable inductor
- B. Double-pole switch
- C. Potentiometer
- D. Transformer**



T6D06

What component is commonly used to change 120V AC house current to a lower AC voltage for other uses?

- A. Variable capacitor
- B. Transformer
- C. Transistor
- D. Diode



T6D06

What component is commonly used to change 120V AC house current to a lower AC voltage for other uses?

- A. Variable capacitor
- B. Transformer**
- C. Transistor
- D. Diode



T6D01

Which of the following devices or circuits changes an alternating current into a varying direct current signal?

- A. Transformer
- B. Rectifier
- C. Amplifier
- D. Reflector



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T6D01

Which of the following devices or circuits changes an alternating current into a varying direct current signal?

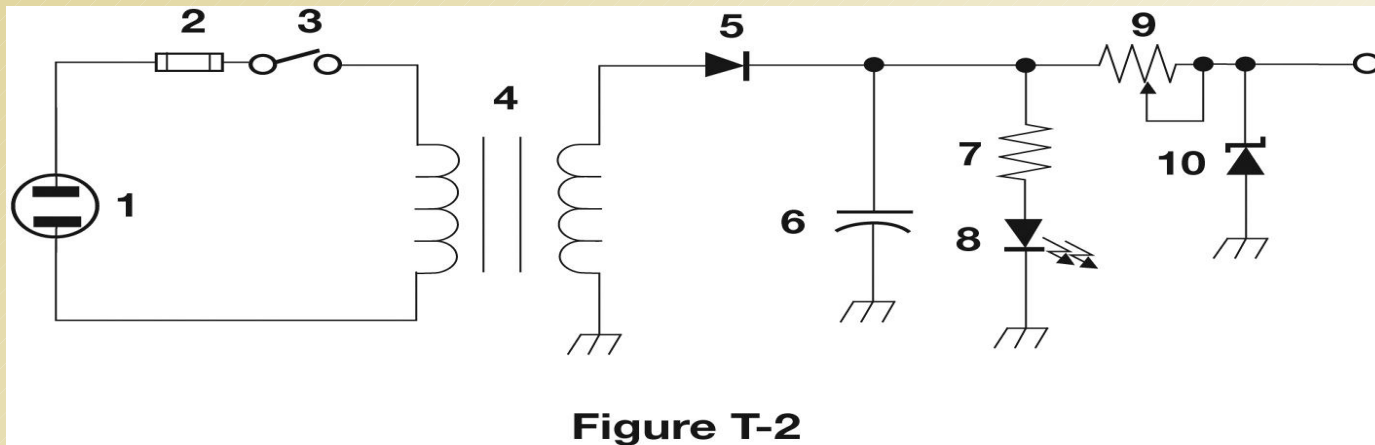
- A. Transformer
- B. Rectifier**
- C. Amplifier
- D. Reflector



T6C06

What is component 6 in figure T2?

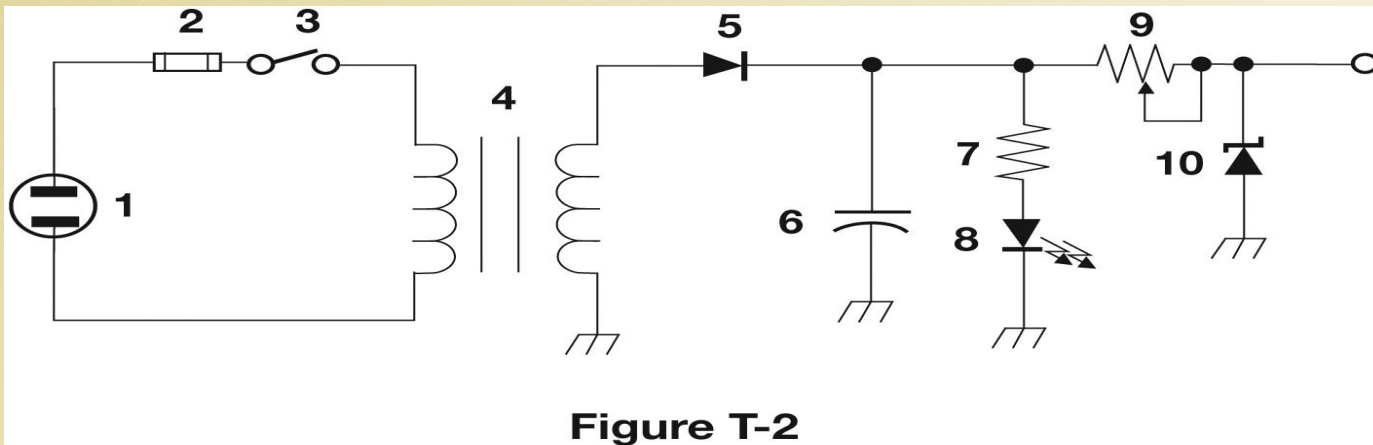
- A. Resistor
- B. Capacitor
- C. Regulator IC
- D. Transistor



T6C06

What is component 6 in figure T2?

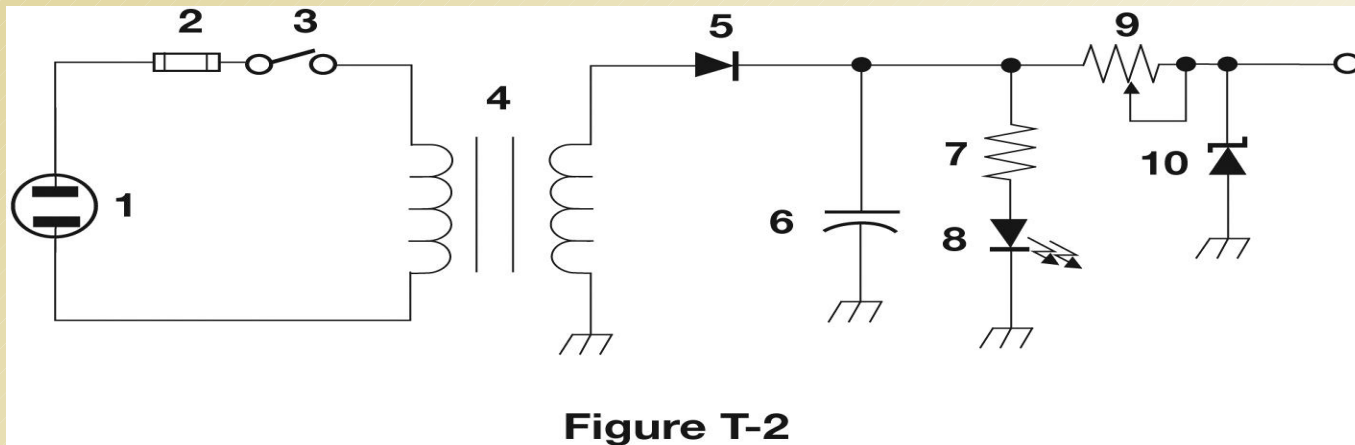
- A. Resistor
- B. Capacitor**
- C. Regulator IC
- D. Transistor



T6C07

What is component 8 in figure T2?

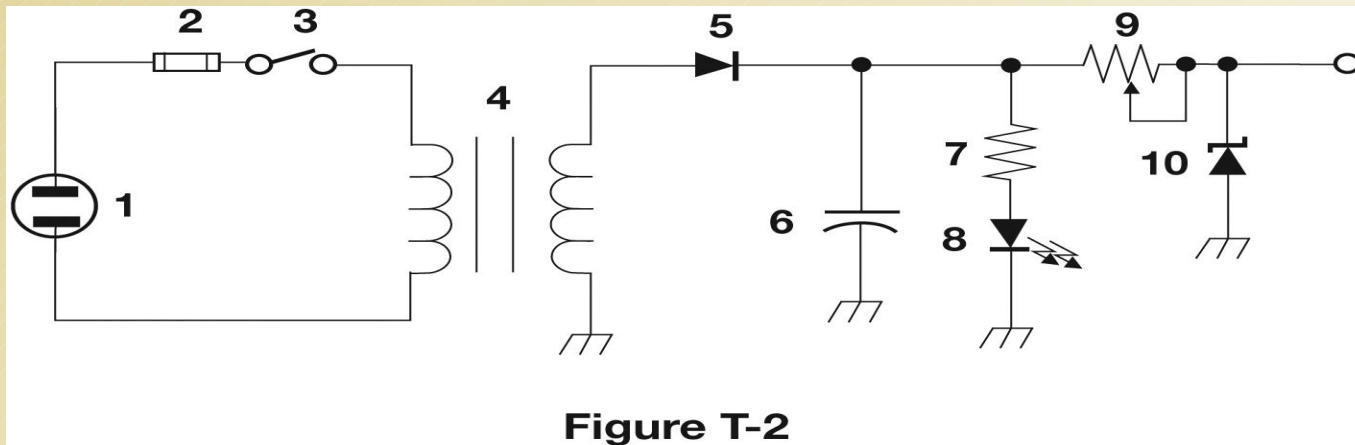
- A. Resistor
- B. Inductor
- C. Regulator IC
- D. Light emitting diode



T6C07

What is component 8 in figure T2?

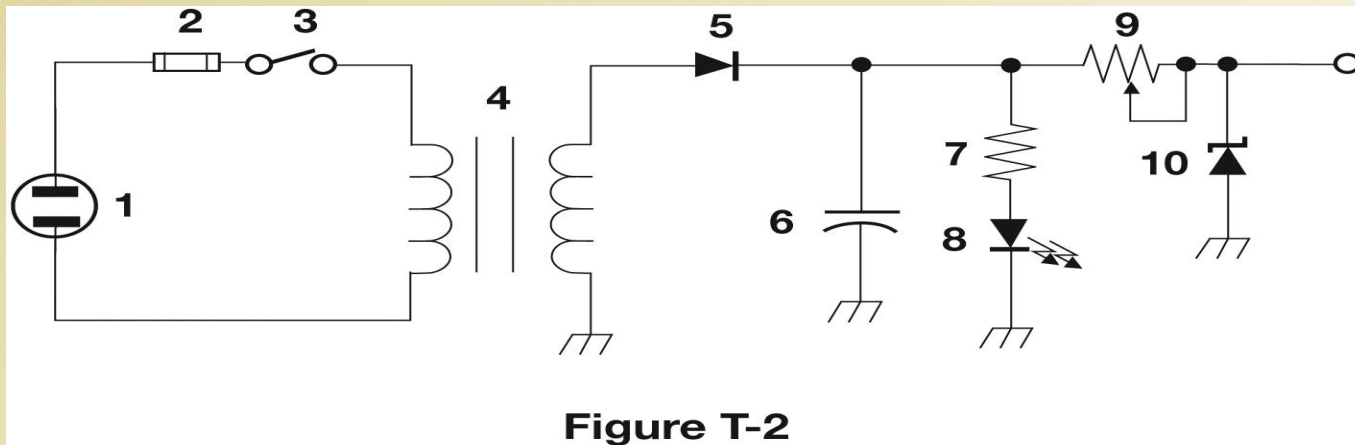
- A. Resistor
- B. Inductor
- C. Regulator IC
- D. Light emitting diode**



T6C08

What is component 9 in figure T2?

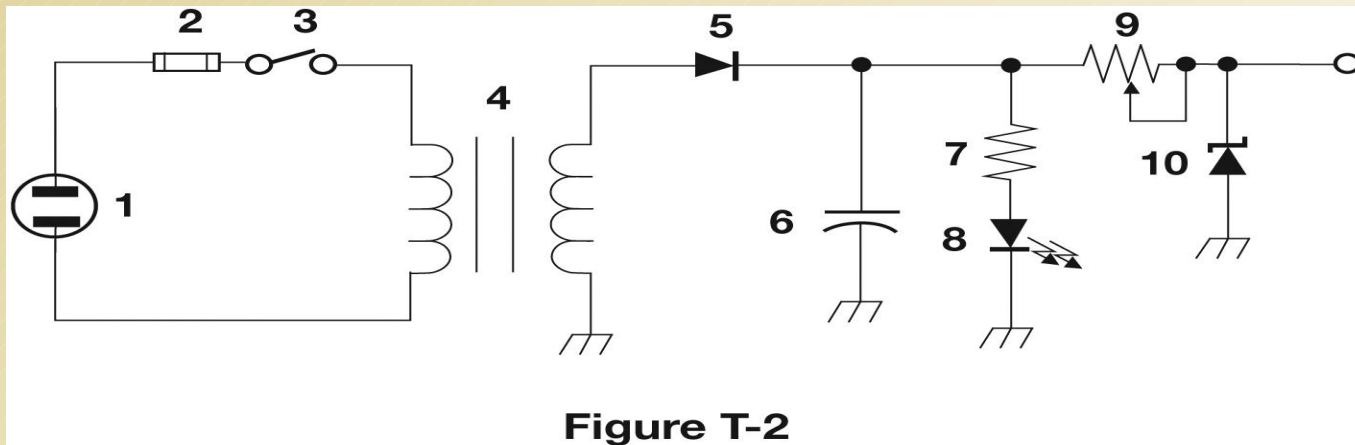
- A. Variable capacitor
- B. Variable inductor
- C. Variable resistor
- D. Variable transformer



T6C08

What is component 9 in figure T2?

- A. Variable capacitor
- B. Variable inductor
- C. Variable resistor**
- D. Variable transformer



T6C10

What is component 3 in figure T3?

- A. Connector
- B. Meter
- C. Variable capacitor
- D. Variable inductor

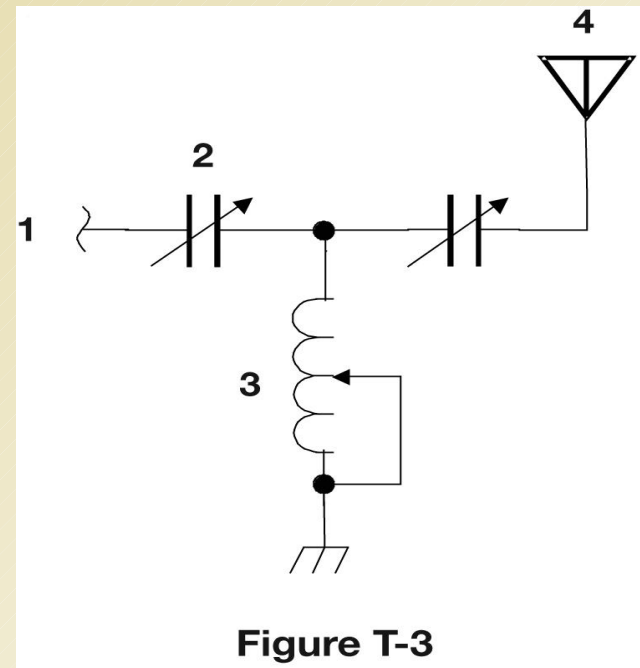


Figure T-3



T6C10

What is component 3 in figure T3?

- A. Connector
- B. Meter
- C. Variable capacitor
- D. Variable inductor**

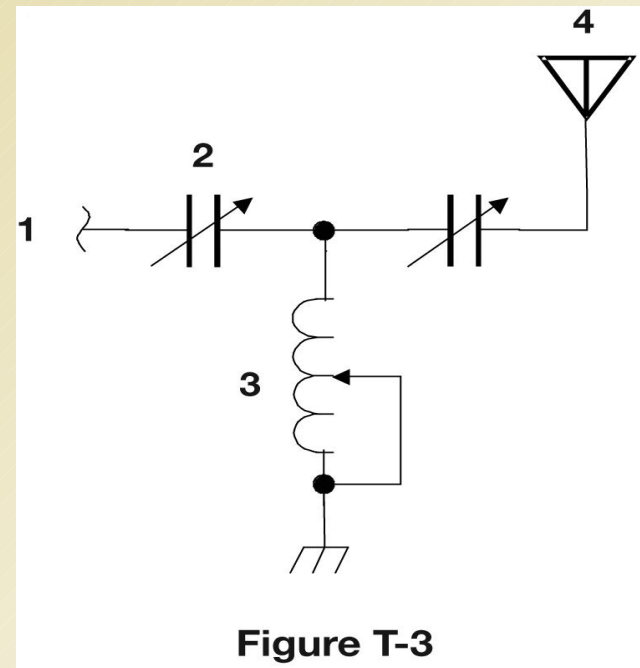


Figure T-3



T6D08

Which of the following is combined with an inductor to make a tuned circuit?

- A. Resistor
- B. Zener diode
- C. Potentiometer
- D. Capacitor



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T6D08

Which of the following is combined with an inductor to make a tuned circuit?

- A. Resistor
- B. Zener diode
- C. Potentiometer
- D. Capacitor**



T6D11

Which of the following is a resonant or tuned circuit?

- A. An inductor and a capacitor connected in series or parallel to form a filter
- B. A type of voltage regulator
- C. A resistor circuit used for reducing standing wave ratio
- D. A circuit designed to provide high-fidelity audio



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T6D11

Which of the following is a resonant or tuned circuit?

- A. An inductor and a capacitor connected in series or parallel to form a filter**
- B. A type of voltage regulator
- C. A resistor circuit used for reducing standing wave ratio
- D. A circuit designed to provide high-fidelity audio



T6C11

What is component 4 in figure T3?

- A. Antenna
- B. Transmitter
- C. Dummy load
- D. Ground

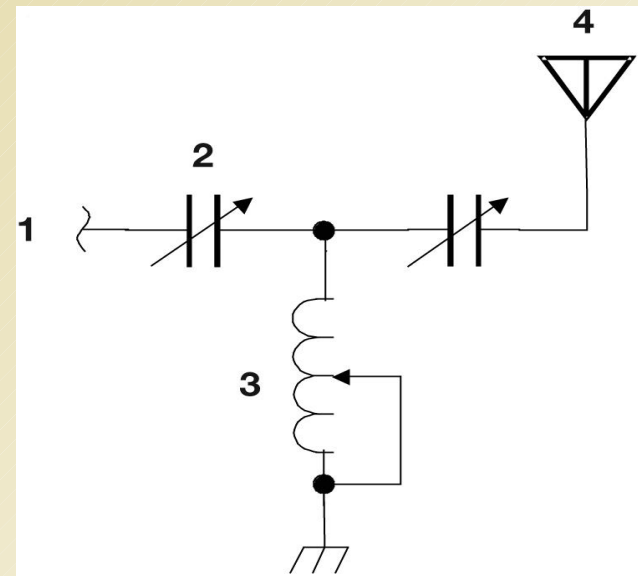


Figure T-3



T6C11

What is component 4 in figure T3?

- A. Antenna
- B. Transmitter
- C. Dummy load
- D. Ground

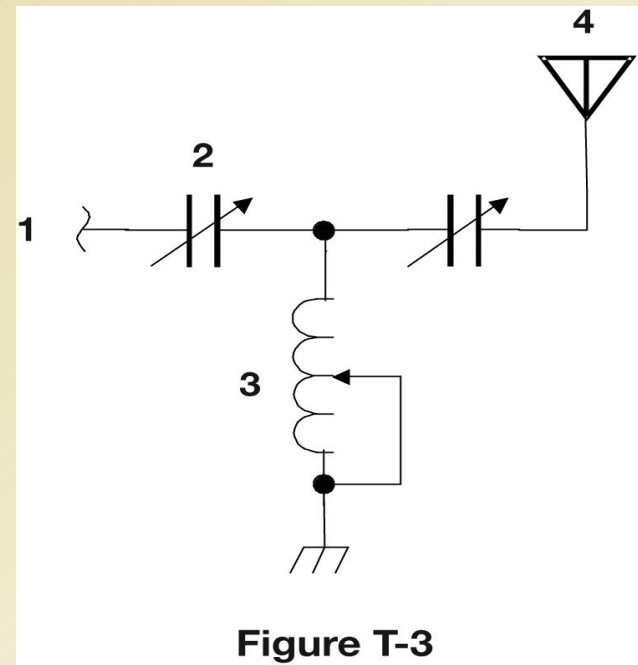


Figure T-3





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



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