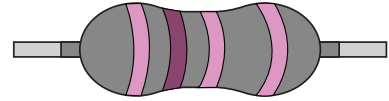
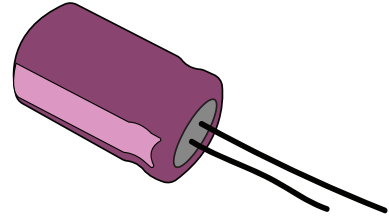


CONCEPT Electronic component identification is the process of recognizing and understanding the function of individual electronic components, such as resistors, capacitors, and diodes. This knowledge is essential for circuit design, troubleshooting, and repair.

Resistor



Capacitor



Diode



BACKGROUND

Circuit design became more prevalent in the mid-1900s with the growth of the electronics industry. The development of integrated circuits allowed for more complex designs in smaller packages. Electronic component identification has evolved alongside these other technologies, with standardized codes and symbols developed to represent different components and their functions. Today, circuit design continues to be an essential skill for those working in the field of electronics.

APPLICATION

Schematics are the map to designing, building, and troubleshooting circuits. Understanding how to read and follow schematics is an important skill for any electronics engineer or telecommunication technician who needs to troubleshoot and/or repair various pieces of equipment. Techs not only have to understand the fundamental components and their operating tolerances, but they need to possess the knowledge and ability to operate testing equipment to ensure proper equipment working conditions. These are key traits utilized by our substation technicians in the field to ensure reliable grid operations.