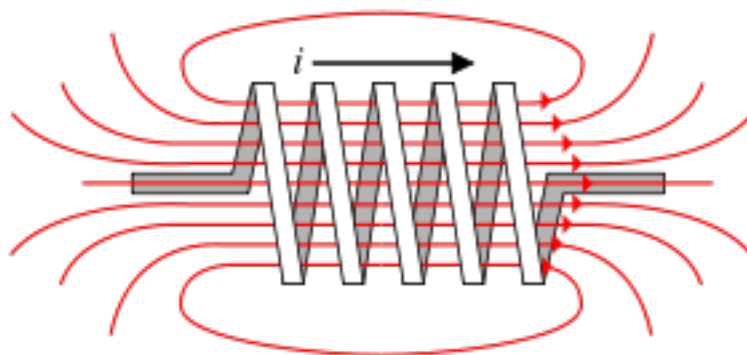


Engineering Technology

Electricity / Electronics

Inductors

An inductor is a passive electronic component that stores energy in the form of a magnetic field. In its simplest form, an inductor consists of a wire loop or coil. The inductance is directly proportional to the number of turns in the coil. Inductance also depends on the radius of the coil and on the type of material around which the coil is wound.



Inductors are used with capacitors in various wireless communications applications. An inductor connected in series or parallel with a capacitor can provide discrimination against unwanted signals. Large inductors are used in the power supplies of electronic equipment of all types, including computers and their peripherals. In these systems, the inductors help to smooth out the rectified utility AC, providing pure, battery-like DC.