

## Electrical & Electronic Components

Electrical and electronic components are essential elements used in the design, assembly, and operation of electrical systems and electronic devices. These components ensure the functionality, control, and safety of various systems across multiple industries, such as consumer electronics, household appliances, communication systems, and industrial machinery.

### Common Components:

#### 1. Resistors

- **Function:** Control the flow of electric current in a circuit.
- **Usage:** Found in nearly every electronic device to protect circuits from excessive current.
- **Price:** \$0.05 each.

#### 2. Capacitors

- **Function:** Store and release electrical energy.
- **Usage:** Used in power supplies, signal processing, and filters.
- **Price:** \$0.10 each.

#### 3. Transistors

- **Function:** Amplify or switch electronic signals.
- **Usage:** Found in computers, audio equipment, and many other devices.
- **Price:** \$0.20 each.

#### 4. Diodes

- **Function:** Allow current to flow in one direction only.
- **Usage:** Used in rectifiers for converting AC to DC power.
- **Price:** \$0.15 each.

#### 5. Connectors

- **Function:** Establish electrical connections between circuits.
- **Usage:** Found in electrical devices like home appliances, machines, and power supplies.
- **Price:** \$0.50 each.

#### 6. Power Supplies

- **Function:** Provide electrical power to various systems and circuits.
- **Usage:** Essential for powering computers, industrial machines, and communication equipment.
- **Price:** \$15.00 each.

