

Block 03 — Electric Resistance and Power

Student Group

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Conductivity of Matter

Conductor

Charge carriers are freely movable in the conductor.

Examples:

- Metals
- Plasma

Semiconductor

In semiconductors, charge carriers can be generated by heat and light irradiation. Often a small movement of electrons is already possible at room temperature.

Examples:

- Silicon
- Diamond

Isolator

In the insulator, charge carriers are firmly bound to the atomic shells.

Examples:

- many plastics and salts

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