15.3 Relays and Power Transistors

**Transistors:**

- can switch much faster than relays.
- produce less electromagnetic interference.
- last longer than most relays.
- can be used as current amplifiers where the output current varies with the input voltage.

**Relays:**

- provide electrical isolation between the signal circuit and power circuit so the control circuitry is unaffected by the power circuit.
- can switch larger currents in general.
- do not require voltage biasing at the input.
- have minimal on-state resistance and maximum off-state resistance.
- can switch dc or ac power.