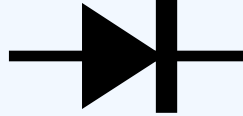
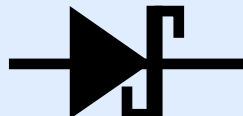
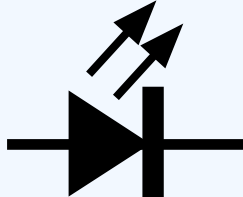
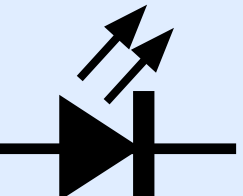
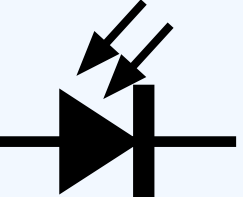
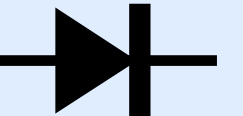

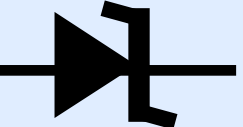


Types of Diode

There are very many different types of semiconductor diode.

This is our summary of the more popular types:

Diode Type	Symbol	Main Application	Details
PN Junction Diode		Rectification	General purpose circuit designs
Schottky Diode		Rectification & detection	Metal silicon junction: low forward voltage, fast recovery, low capacitance
Laser Diode		Coherent light generator	Generates coherent light - used in data storage & recovery,
Light Emitting Diode		Indicators & light sources	Different colours available and have around 2 - 4V voltage drop dependent upon type
Photo-Diode		Fibre optic & other optical data receiver	Can be very fast so often used for high speed optical data reception
PIN Diode		RF switches, photodiodes, etc	Wide depletion area from intrinsic layer gives good isolation & area for photo reception
Varactor Diode		Voltage controlled variable capacitor	Increased voltage widens depletion layer to reduce capacitance
Zener Diode		Stable voltage reference	Reverse breakdown gives stable voltage - used in power supplies, etc