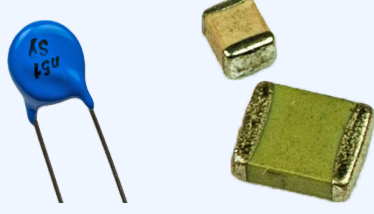
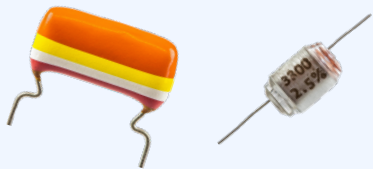
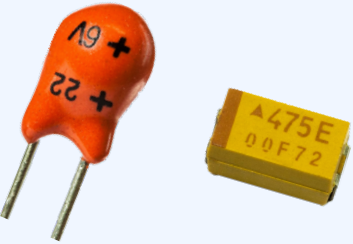
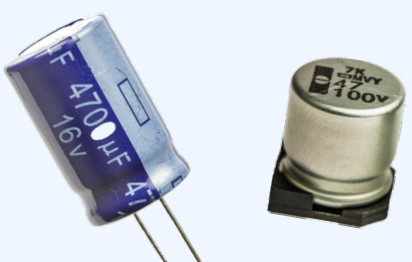



Capacitor Types

Details of some of the more commonly used types of capacitor with a chart of the typical value ranges available.

Type	Typical images	Salient details
Ceramic		Ceramic capacitors are the most widely used. The dielectric is ceramic and different varieties of ceramic provide different properties. These are given different designations, e.g. X7R, Y5V, etc
Plastic film		These capacitors can use one of a variety of different films, some being metallised. Dependent upon the film they offer high levels of stability. They are not normally available in SMT formats
Tantalum		Tantalum capacitors are small high value polarised capacitors used for coupling etc. They cannot withstand high currents or reverse polarity and can explode if mistreated.
Aluminium electrolytic		Aluminium electrolytic capacitors are used for high value capacitance levels. They are polarised and have top operating frequencies around 100kHz, but can often supply high current levels.
Super capacitors		Super capacitors have values in the Farad region - much greater than any other type. They are often used instead of hold-up batteries which can have a shorter working life.

