



WORKSHOP CLASS

DEE/DETCE/S2

SMITA UKIL.

## CAPACITOR

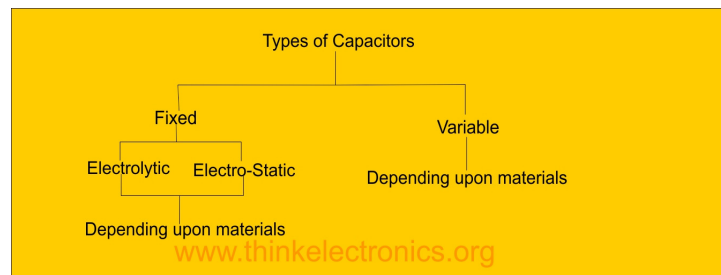
**DEFINITION:** Capacitors are the most widely used passive elements in circuits. Capacitors are the devices which can store electric charge. Unlike a resistor, a capacitor does not dissipate energy. Instead, a capacitor stores energy in the form of an electrostatic field between its plates.

**Capacitance** is the ratio of the change in electric charge of a system, to the corresponding change in its electric potential. ... The SI unit of capacitance is the farad (symbol: F)

**Other units:**  $\mu\text{F}$ , nF, pF

**USE:** Capacitors are used in tuned circuits, timing circuits, filters, amplifier circuits, oscillator circuits and relay circuits.

### CLASSIFICATION OF CAPACITORS:



**Types of Capacitors: Polar and Non Polar Capacitors with Symbols**

**Polar Capacitors** → Electrolytic, Tantalum, SMT

**Non Polar Capacitors** → Electrolytic, Ceramic, Polyester, MKT

**Variable Capacitor**

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**What is the Rule of Capacitors in AC and DC Systems**

# CALCULATION/IDENTIFICATION OF DIFFERENT TYPES OF CAPACITORS

