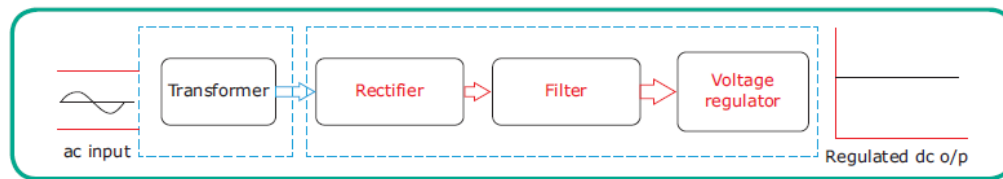


**TRANSFORMERS AND POWER SUPPLIES**

**Transformer:** Transformer is used to step down the AC supply voltage (220 V AC, 50 Hz) as per the requirement of the solid state electronic devices.

**Basic power supply****Rectifier**

Rectifier is a device which converts the sinusoidal AC voltage into either positive or negative pulsating DC. Rectifier output contains unwanted AC components called as ripples. Diodes rectify the signal.

**Filter**

Filter is a device which passes DC components and blocks AC components of the rectifier output. Resistor, capacitor and inductor (passive components) are used for this purpose.

**Regulator**

*Regulator or stabilizer is a device that is used to maintain a constant DC output voltage. Zener diode is used as regulator.*



# TRANSFORMERS AND POWER SUPPLIES