

Chapter 12

CURRENT ELECTRICITY

Heating effect of electric circuit:

If an electric circuit is purely resistive, the source of energy continually get dissipated entirely in form of heat. This is known as heating effect of electric circuit.

Heat,

$$H = I^2 R t$$

Joules

Joule's Law:

$$H \propto I^2$$

$$H \propto R \text{ and } H \propto t$$

$$H = I^2 R t$$

Where, H = Heat

I = Current

t = Time

R = Resistor