

$$P = VI = \frac{V^2}{R}$$

$$0.2249174254975232 W = \frac{25 V^2}{R}$$

$$R = \frac{25 \, V^2}{0.2249174254975232 \, W} = 111.151904 \, \Omega$$

Experiment:

Voltage = 5.02V

Current = 42.3mA

Power = 0.2123 W

Error = 0.0126 W

Reflections:

Resistor

The power value calculated is the power used/lost in the voltage drop across a resistor.

This took 1 hour 30 min outside of lectures and labs.