

Discovering Max Power

To find your MudWatt's max power output, you'll need to perform a technique called a "Sweep" outlined on the back of this card. With your Sweep data, calculate power for each resistor using Ohm's law (see below). Plot your Power vs. Resistance as shown below to find your MudWatt's max power!

Note: A MudWatt's max power will change over time as your microbe community develops, so track your MudWatt's growth by performing Sweeps throughout its lifetime.

Resistor Color Chart

Match the colors of your resistors here to identify their resistance value. (Ω = Ohms, k = x1000)

47 Ω



100 Ω



220 Ω



470 Ω



1k Ω



2.2k Ω



4.7k Ω



The Power Curve

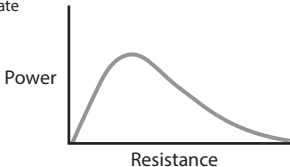
Use Ohm's Law to calculate the power:

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

P = Power (Watts)

V = Voltage (Volts)

R = Resistance (Ohms)



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