Formulas

Current (I) (amps)

Parallel	$I_T = I_1 + I_2 + I_3$
Ohms law	$I = V/\Omega$
Individual current of resistor (Series)	$I_T = I_1 = I_2 = I_3$
Individual current of resistor (Parallel)	(Total resistance / individual resistance) x total circuit current

Voltage (V) (Volts)

Voltage drop across each resistor	$V = I \times R$
Voltage across resistros in a circuit (Parallel)	$V_T = V_1 = V_2$

Power (W) (Watts)

Power dissipated by a resistor	$P = I \times V$
Power dissipated by a resistor	$P = I^2 \times \Omega$
Power dissipated by a resistor	$P = V^2 / \Omega$

Resistance (Ω) (Ohms)

Resistance with multiple resistors (Parallel)	$\Omega = (R_1^{-1} + R_2^{-1} + R_3^{-1})^{-1}$

Resistance with multiple resistors (Seiries)	$\Omega = R_1 + R_2 + R_3$
Ohms law	$\Omega = V / I$
Resistivity	resistivity x length (m) / cross sectional area
Resistance at certain temprature	Resistor 1 resitance x (1 + resistance at temprature x (temp 1 - temp 2)

Time constant (τ) (Tou)

1 time constant	τ = Capacitance x Resistance

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