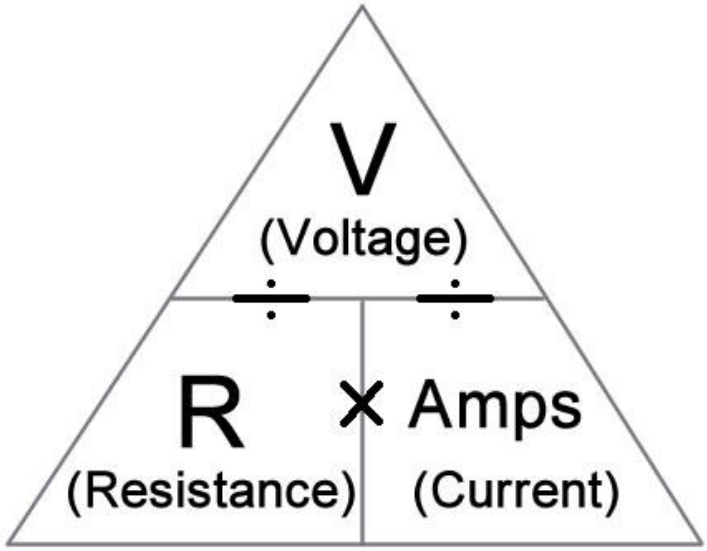
LEDstuff

CALCULATING RESISTOR VALUE TO DRIVE AN LED



R = V ÷ A

E.G.: 12V with an LED with a typical current of 25mA (=0.025 Amps) and a working voltage of 2V, to work out the resistor value as:

= (12 - 2) ÷ 0.025

= 10 ÷ 0.025

= 400 Ohms

(closest is 470Ω)

Or 2x 3.3V 30mA LED's from 12V:

= (12 – (2x3.3)) ÷ 0.03

= (12 – 6.6) ÷ 0.03

= 5.4 ÷ 0.03

= 180 Ohms

(closest is 220 Ω)