

**PHYSICS****RESISTANCE**RESISTANCE**Definition:****Resistors:** -

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- Examples:

OHM'S LAW

The voltage between any two points in a conductor varies directly as the current between the two points. This can be written as ...

$$R = \frac{V}{I}$$

R -

V -

I -

Ex: Find the resistance of an electric light bulb if there is a current of 0.6 A when the voltage to the bulb is 120 V.

**PHYSICS****RESISTANCE**FACTORS AFFECTING RESISTANCE

1. Conductors

- Examples of good conductors are:

- Examples of poor conductors are:

2.

3.

4.

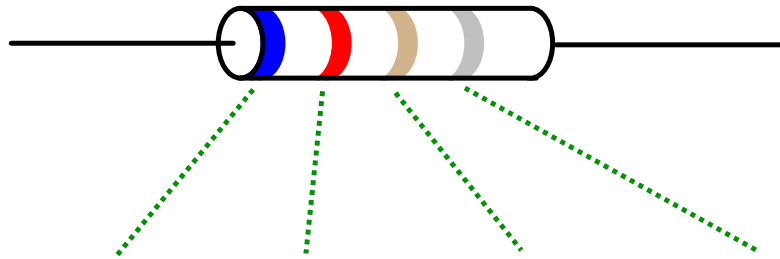


PHYSICS

RESISTANCE

DETERMINING RESISTANCE (COLOUR CODE)

When looking at a resistor you will notice a series of coloured rings. The rings are to tell the user the potential resistance a resistor possesses.



First Digit	Second Digit	Number of Zeros	Tolerance
Black	0		
Brown	1		
Red	2		
Orange	3		Gold: ±5%
Yellow	4		Silver: ±10%
Green	5		None: ±20%
Blue	6		
Violet	7		
Grey	8		
White	9		

Ex: What is the resistance of the resistor shown above?



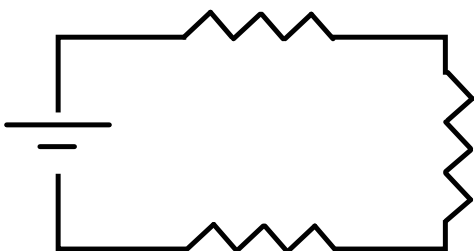
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ADDING RESISTORS - "Equivalent Resistance"

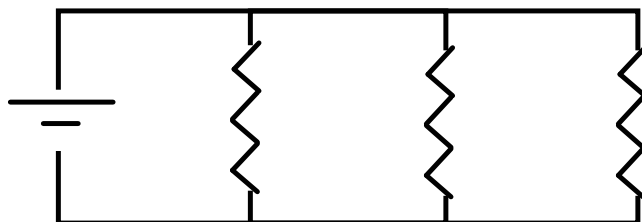
Resistance in a SERIES Circuit

In a series circuit, resistance is



Resistance in a PARALLEL Circuit

In a parallel circuit, resistance is





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HOMEWORK

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