

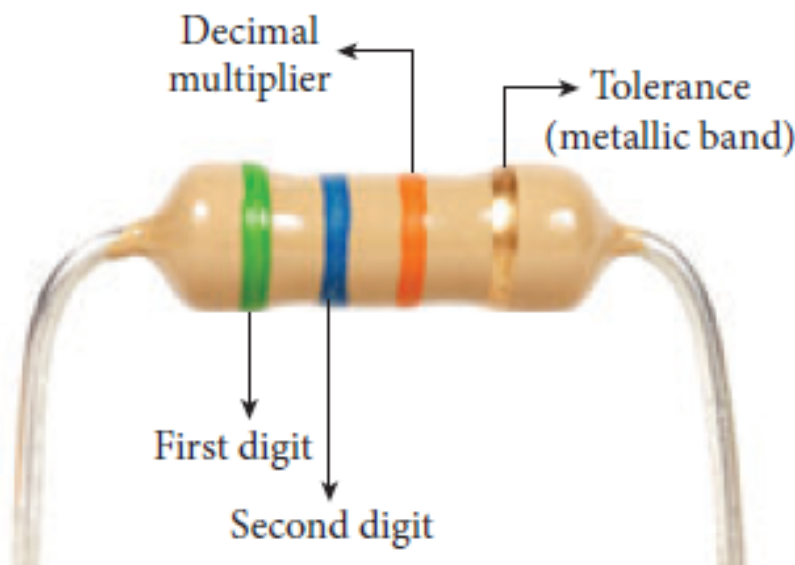
Color code for Carbon resistors

A carbon resistor consists of a ceramic core, on which a thin layer of crystalline carbon is deposited as shown in the following figure.



These resistors are inexpensive, stable and compact in size. Color rings are used to indicate the value of the resistance according to the rules given in the Table.

Three coloured rings are used to indicate the values of a resistor: the first two rings are significant figures of resistances; the third ring indicates the decimal multiplier after them. The fourth color, silver or gold, shows the tolerance of the resistor at 10% or 5% as shown in the following figure .If there is no fourth ring, the tolerance is 20%.



Color Coding for Resistors:

Color	Number	Multiplier	Tolerance
Black	0	1	
Brown	1	10^1	
Red	2	10^2	
Orange	3	10^3	
Yellow	4	10^4	
Green	5	10^5	
Blue	6	10^6	
Violet	7	10^7	
Gray	8	10^8	
White	9	10^9	
Gold		10^{-1}	5%
Sliver		10^{-2}	10%
Colorless			20%

NOTE: While reading the colour code, hold the resistor with colour bands to your left. Resistors never start with a metallic band on the left.