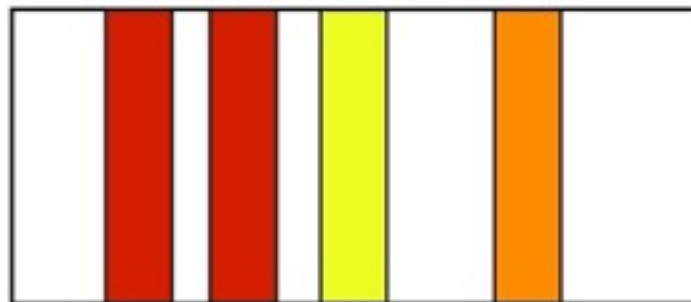


RESISTOR COLOR CODES

Carbon rod type resistors have color bands printed on their covers. These bands are used for representing nominal value of the resistance. Ten colors are used for representing the 10 (Roman) digits (see the table below).

There are 4 color bands on resistors with tolerance 5% or 10%. The first two bands are used for specifying the significant digits of the resistor value, the third band is used for indicating the power of 10 multiplier and the last band is used for showing the tolerance, i. e. the uncertainty in the resistance value. See the example illustrated below:



RED RED YELLOW GOLD
2 2 $\times 10^4$ 5% = $22 \times 10^4 \Omega \pm 5\%$

Color Code

Color	Digit	Color	Digit	Tolerance Band	
Black	0	Green	5	no band	$\pm 20\%$
Brown	1	Blue	6	Silver	$\pm 10\%$
Red	2	Violet	7	Gold	$\pm 5\%$
Orange	3	Gray	8		
Yellow	4	White	9		