

RESISTORS - COLOUR CODE

The colours on resistors are used to indicate the nominal value of their resistances, and the permitted tolerance on that value. In the colour band system, the resistor has three or four bands on it. The band at the end of the resistor indicates the first digit, the next band (working towards the centre of the resistor) indicates the second digit while the third band indicates the number of zeros which follow the previous two digits. The fourth band is used to indicate the manufacturer's tolerance.

Some resistors are marked by the body, tip and dot system in which the first digit is indicated by the colour of the body of the resistor, the second digit by the band at one end of the resistor, and the number of zeros, by the band, or dot, in the centre of the resistor.

The colours used are as follows:

0	Black	
1	Brown	
2	Red	
3	Orange	
4	Yellow	
5	Green	For the tolerance band
6	Blue	
7	Violet	20% no band
8	Grey	10% silver
9	White	5% gold

The use of colour codes for resistors is usually limited to carbon composition and similar resistors. Non-inductive wire wound resistors normally have their value written or printed on a plain coloured background.

Most manufacturers produce a range of preferred values. This limits the total number of different values required. The intermediate values are spanned by the tolerance of the resistors.

FUSES - COLOUR CODE

These are often marked by coloured dots on the glass of the fuse. The rating of the fuse is given by the following code:

60	mA	Black	500	mA	Yellow	2.0	A	Purple
100	mA	Grey	750	mA	Green	3.0	A	White
150	mA	Red	1.0	A	Dark Blue			
250	mA	Brown	1.5	A	Light Blue	5.0	A	Black & White