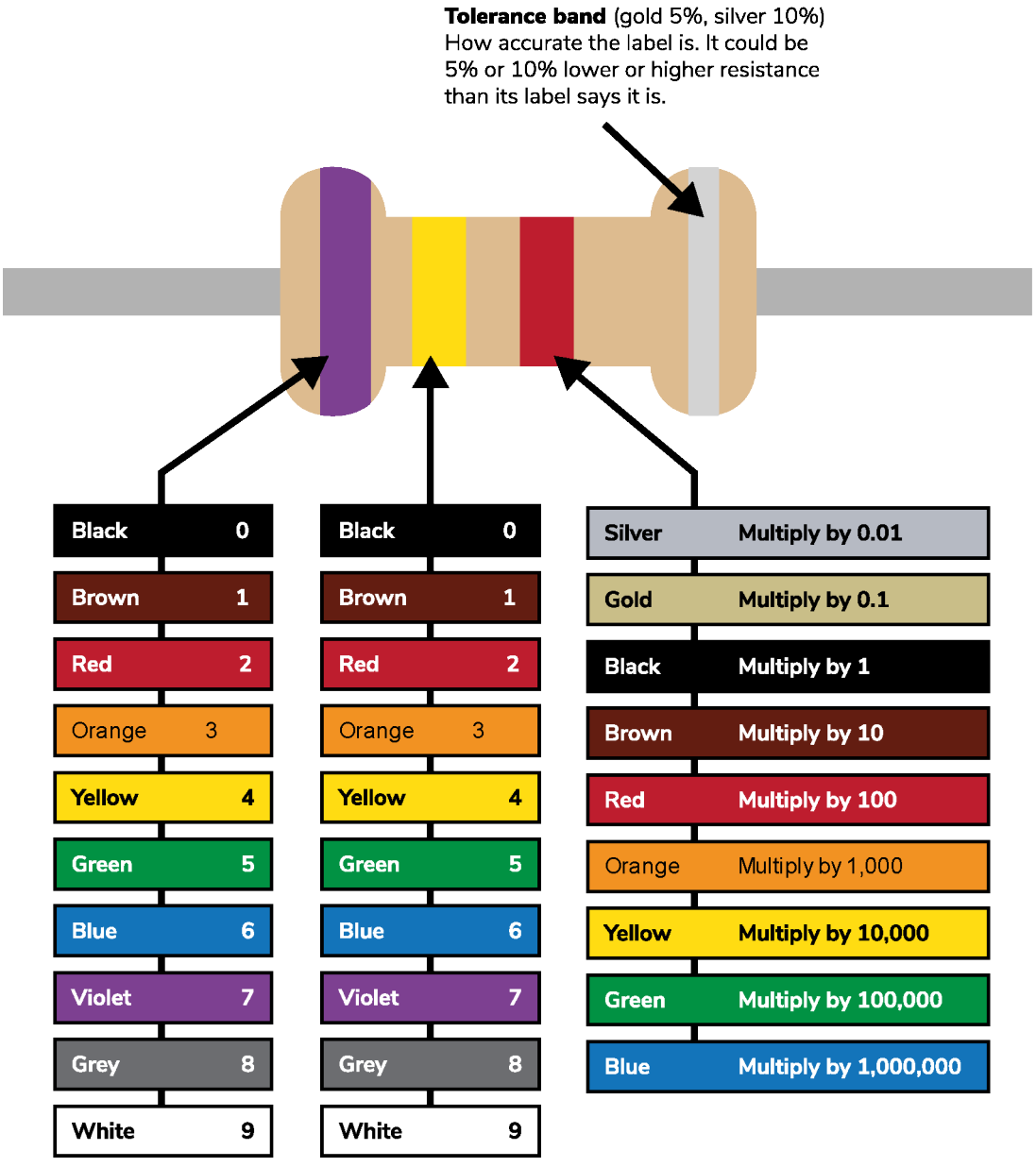
Reading resistors

Use this handy guide to learn how to read these tiny electrical componants.



Most resistors are labelled with four coloured bands.

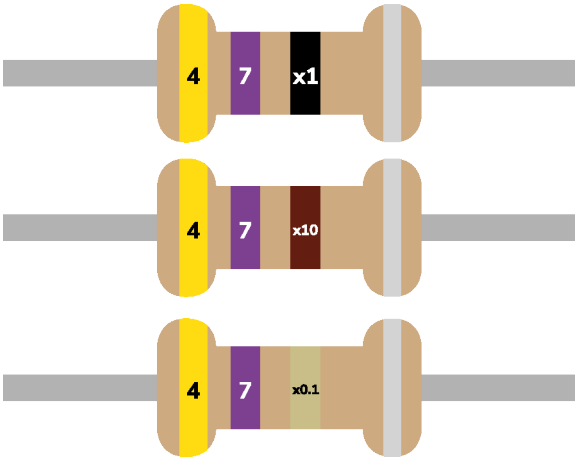
Looking at the resistor with the tolerance band on the right, the other three bands represent the resistance value of the resistor:

- The first band (left-most) represents the first digit of the resistor value.
- The second band represents the second digit of the resistor value.
- The third band is the multiplier of this value.

For example, for a 47Ω resistor, the first band will be yellow (4), the second band will be violet (7) and the third band will be black (x1).

A 470Ω resistor would be represented by yellow (4), violet (7), brown (x10).

A 4.7Ω resistor by yellow (4), violet (7), gold (x0.1) and so on.



Example values

Value	Band 1	Band 2	Band 3
22 Ω	Red	Red	Black
1000 Ω	Brown	Black	Red
10,000 Ω	Brown	Black	Orange
470 Ω	Yellow	Violet	Brown
220 Ω	Red	Red	Brown
56 Ω	Green	Blue	Black
1 Ω	Brown	Black	Gold
3300 Ω	Orange	Orange	Red
560 Ω	Green	Blue	Brown
220,000 Ω	Red	Red	Yellow
1,000,000 Ω	Brown	Black	Green
2,200 Ω	Red	Red	Red
47 Ω	Yellow	Violet	Black
22,000 Ω	Red	Red	Orange
47,000 Ω	Yellow	Violet	Orange
560 Ω	Green	Blue	Brown
100,000 Ω	Brown	Black	Yellow
2.2 Ω	Red	Red	Gold
0.1 Ω	Brown	Black	Silver
4.7 Ω	Yellow	Violet	Gold