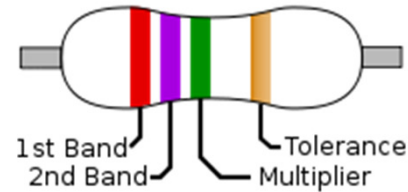
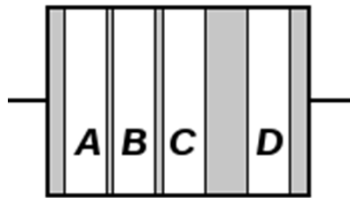


Colour	Significant digits	Multiplier	Capacitance tolerance	Characteristic	DC working voltage	Operating temperature	EIA/vibration
Black	0	1	±20%	—	—	-55 °C to +70 °C	10 to 55 Hz
Brown	1	10	±1%	B	100	—	—
Red	2	100	±2%	C	—	-55 °C to +85 °C	—
Orange	3	1 000	—	D	300	—	—
Yellow	4	10 000	—	E	—	-55 °C to +125 °C	10 to 2000 Hz
Green	5	—	±0.5%	F	500	—	—
Blue	6	—	—	—	—	-55 °C to +150 °C	—
Violet	7	—	—	—	—	—	—
Grey	8	—	—	—	—	—	—
White	9	—	—	—	—	—	EIA
Gold	—	—	±5%*	—	1000	—	—
Silver	—	—	±10%	—	—	—	—

\*or ±0.5 pF, whichever is greater.



To distinguish left from right there is a gap between the C and D bands.

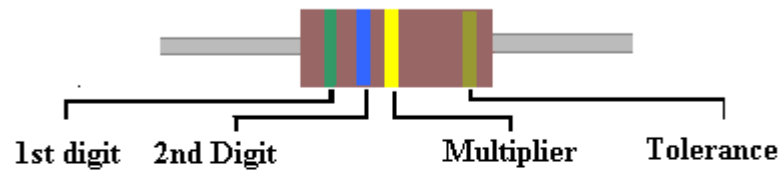
For example, a resistor with bands of yellow, violet, red, and gold will have first digit 4 (yellow in table below), second digit 7 (violet), followed by 2 (red) zeros: 4,700 ohms. Gold signifies that the tolerance is  $\pm 5\%$ , so the real resistance could lie anywhere between 4,465 and 4,935 ohms.

Resistors manufactured for military use may also include a fifth band which indicates component failure rate (reliability); refer to MIL-HDBK-199 for further details.

Tight tolerance resistors may have three bands for significant figures rather than two, or an additional band indicating temperature coefficient, in units of ppm/K.

All coded components will have at least two value bands and a multiplier; other bands are optional.

### 4 band resistor



### 5 band resistor

