Resistor color codes

Four band resistors (carbon etc.)

First digit

Second digit

x power of 10

Tolerance

Example resistor: 1.5k Ω 5%

0 = Black

1 = Brown

2 = Red

3 = Orange

4 = Yellow

5 = Green

6 = Blue

7 = Violet

8 = Grey

9 = White

Tolerance 10% = Silver or x 0.01 if in "power of 10" position

Tolerance 5% = Gold   or x 0.1 if in "power of 10" position

Five or six band resistors (metal film)

First digit

Second digit

Third digit

x power of 10

Example resistor: 56.0k Ω 1%

Tolerance (wider band)

Colors as above, EXCEPT:

Tolerance 2% = Red

Tolerance 1% = Brown