

Reading the Resistor Code

The bands are numbered from top to bottom.
 The top is the side where the bands are closest to the end.
 If there are 4 bands, the bottom will be Gold or Silver.
 If there is no tolerance band, assume a 20% tolerance

	Band 1	Band 2	Band 3	Band 4
	Digit #1	Digit #2	Multiplier	Tolerance
Black	0	0	1	
Brown	1	1	10	
Red	2	2	100	
Orange	3	3	1,000	
Yellow	4	4	10,000	
Green	5	5	100,000	
Blue	6	6	1,000,000	
Violet	7	7	10,000,000	
Grey	8	8	100,000,000	
White	9	9	1,000,000,000	
Gold			0.1	10%
Silver			0.01	15%

Examples

Band 1	Band 2	Band 3	Band 4	Resistance		
Digit #1	Digit #2	Multiplier	Tolerance			
2	2	10,000	15%	220,000	ohms	220k
1	0	100,000	10%	1,000,000	ohms	1M
6	8	1,000	15% (0.1)	68,000	ohms	68k
					ohms	
					ohms	
					ohms	
					ohms	
					ohms	

If you downloaded the excel spreadsheet you can just copy and paste in bands into the remaining rows and the formula will automatically calculate the value for you.