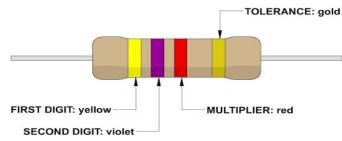
DETC/S2 WORKSHOP TEACHER-SMITA UKIL



Colour coding of Resistor

Colour	Digit	Multiplier	Tolerance
Black	0	1	
Brown	1	10	± 1%
Red	2	100	± 2%
Orange	3	1,000	
Yellow	4	10,000	
Green	5	100,000	± 0.5%
Blue	6	1,000,000	± 0.25%
Violet	7	10,000,000	± 0.1%
Grey	8		± 0.05%
White	9		
Gold		0.1	± 5%
Silver		0.01	± 10%
None			± 20%

COLOUR CODING METHOD:



Resistor are coded to indicate the resistance value and tolerance .As shown in fig there are four colour bands, one by the side of the another starting from the left end .The first two bands denotes the first and second digits of the resistance value and the third band indicates how many zeroes follow the first two digits. Tolerance is given by the fourth band.

For example ,a resistor with the following colour band sequence denotes,

$47 \times 10^2 = 4700$ ohm with $\pm 5\%$ tolerance.

<u>Question 1.</u> What will be the resistance having colour code RED-RED-GOLD? 2. What will be the colour of 1 Mega-ohm resistance?