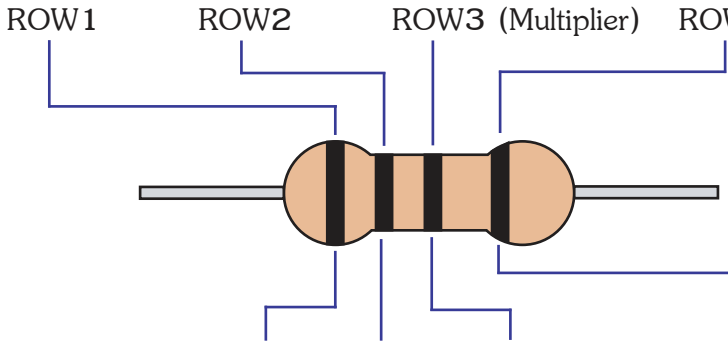
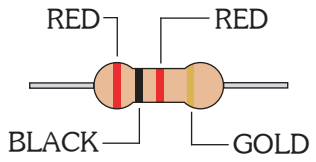
HOW TO READ THE VALUE OF RESISTOR

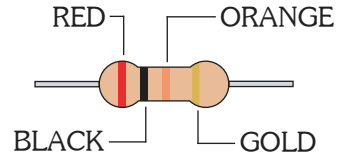


	ROW1	ROW2	ROW3 (Multiplier)	ROW4(Tolerance)
BLACK	0	0	x1	-
BROWN	1	1	x10	±1%
RED	2	2	x100	±2%
ORANGE	3	3	x1,000	-
YELLOW	4	4	x10,000	-
GREEN	5	5	x100,000	-
BLUE	6	6	x1,000,000	-
VIOLET	7	7	x10,000,000	-
GRAY	8	8	-	-
WHITE	9	9	-	-
GOLD	-	-	x0.1	±5%
SILVER	-	-	x0.01	±10%

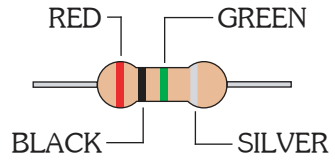
EX: 2KΩ ±5%



EX: 10KΩ ±5%

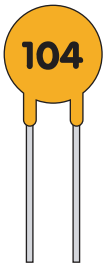


EX: 2MΩ ±10%



1,000Ω = 1KΩ	10,000Ω = 10KΩ
1,000KΩ = 10MΩ	4,700Ω = 4K7Ω

HOW TO READ THE VALUE OF CAPACITOR



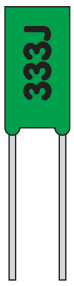
CERAMIC CAPACITOR

104

10 0000 pF

OR

0.1 µF



MILA CAPACITOR

333J

33 0000 pF ±5%

OR

0.033 µF ±5%

DATA CAPACITORS

pF, picoFarads = 10^{-12} F

nF, nanoFarads = 10^{-9} F

µF, microFarads = 10^{-6} F

1000 pF = 1 nF

1000 nF = 1 µF

e.g.

4n7 = 4.7nF =

4700pF or 0.0047 µF

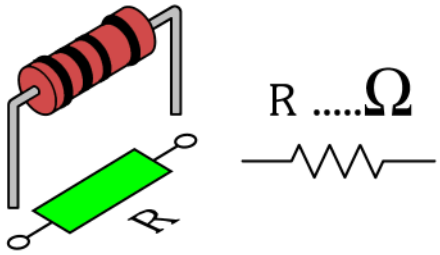
3	=	3 pF	105	=	1µF
15	=	15 pF	222	=	0.0022µF
101	=	100 pF	223	=	0.022µF
681	=	680 pF	332	=	0.0033µF
102	=	0.001µF	333	=	0.033µF
103	=	0.01µF	472	=	0.0047µF
104	=	0.1µF	473	=	0.047µF

THE VALUE OF TOLERANCE

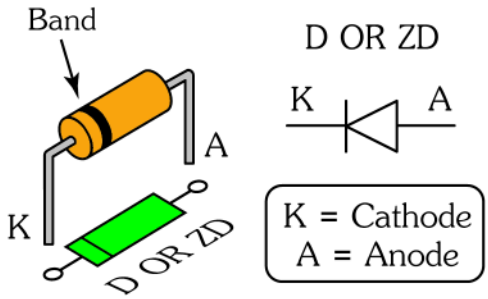
J = ±5%, K = ±10%, M = ±20%

ASSEMBLY INSTRUCTIONS

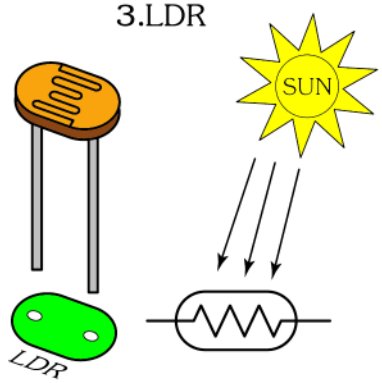
1.RESISTOR



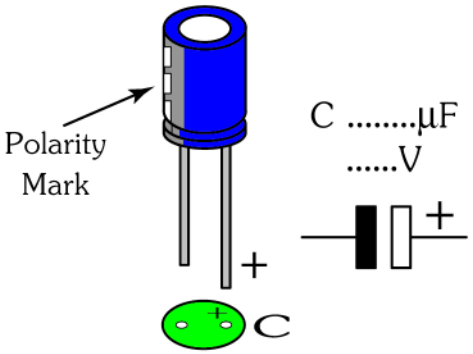
2.DIODE OR ZENER DIODE



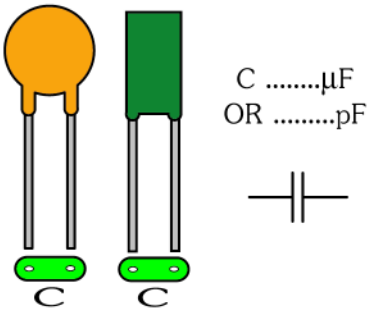
3.LDR



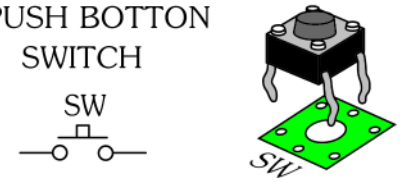
4.ELECTROLYTIC CAPACITOR



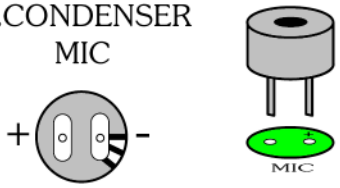
5.CERAMIC AND MILA CAPACITOR



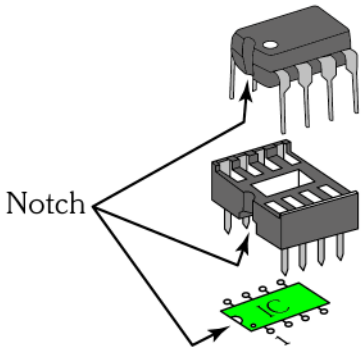
6.PUSH BOTTON SWITCH



7.CONDENSER MIC

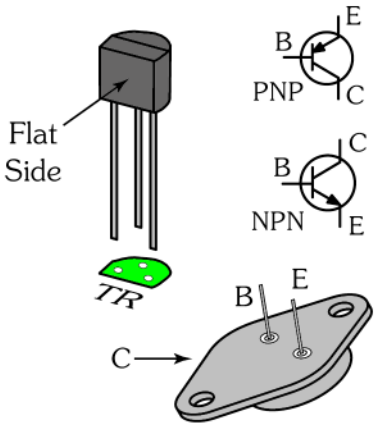


8.INTEGRATED CIRCUIT (IC)

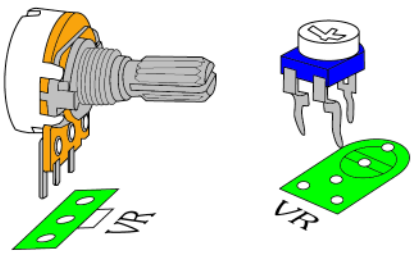


NOTE: WATCH THE POSITION OF THE NOTCH

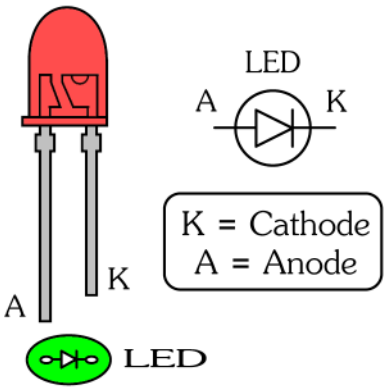
9.TRANSISTOR



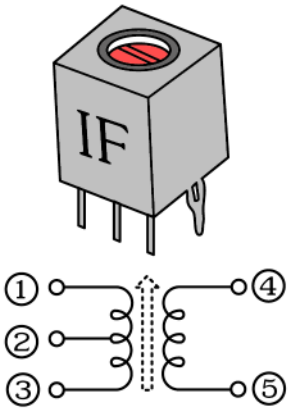
10.POTENTIOMETER



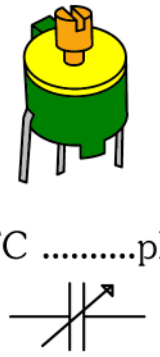
11.LED



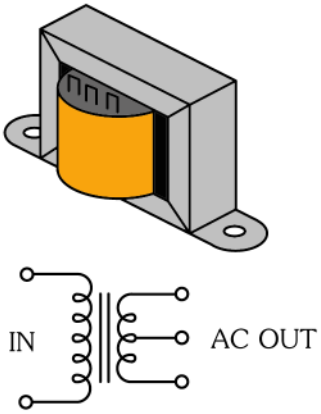
12.IF TANK



13.TIMMER CAPACITOR

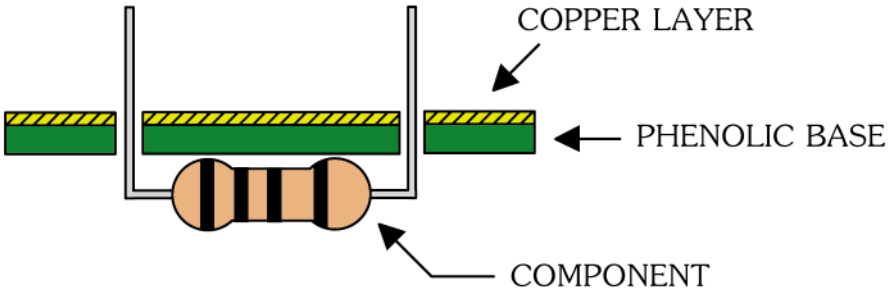


14.TRANSFORMER

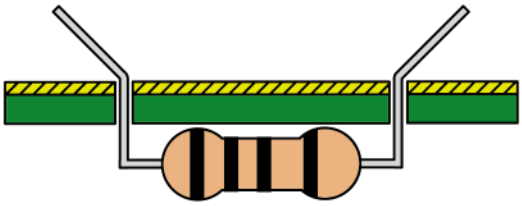


SOLDERING COMPONENTS TO THE PC BOARD

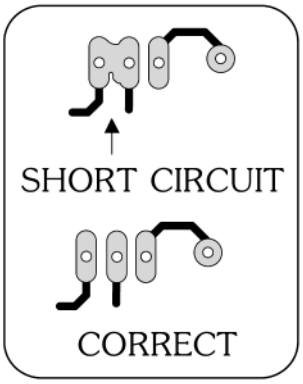
1. Mount the components to the PC board.

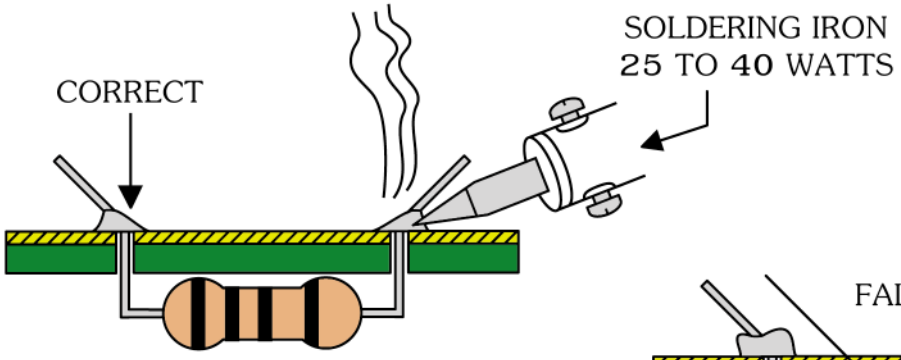


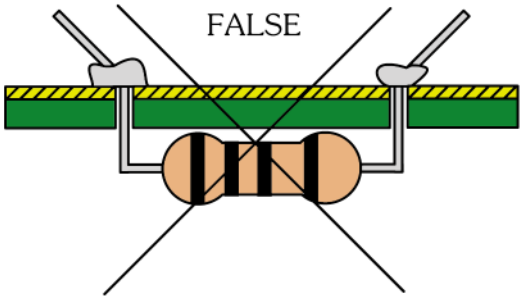
2. Bend leads to hold the components.



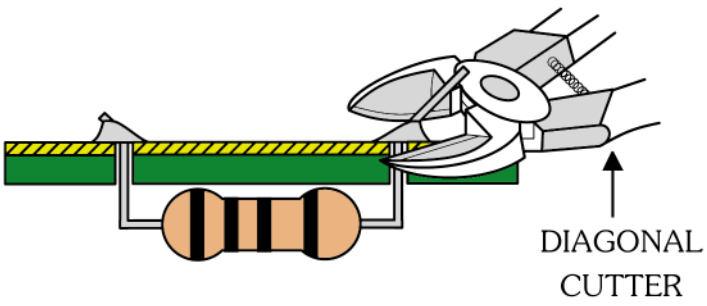
3. Soldering the components and the PC board with the soldering iron and the solder.







4. Cut off all leads of the components.



HOW TO INSTALL THE TRANSISTOR WITH SINK