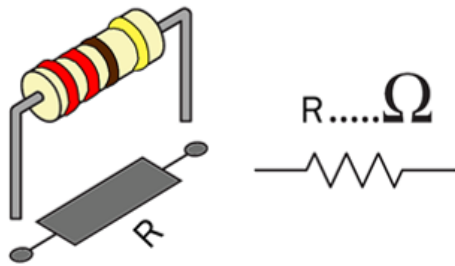
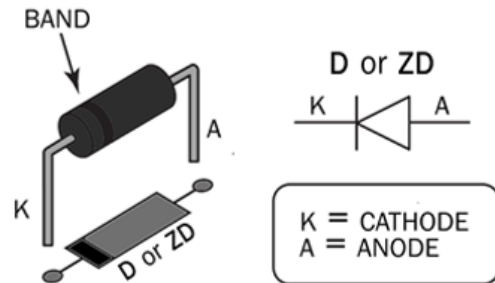


ASSEMBLY INSTRUCTIONS

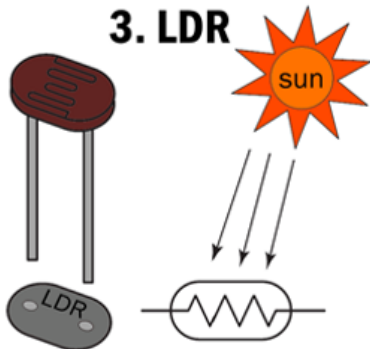
1. RESISTOR



2. DIODE OR ZENER DIODE

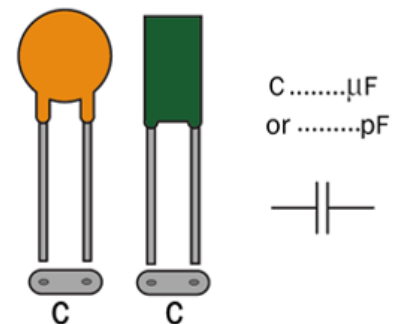


3. LDR



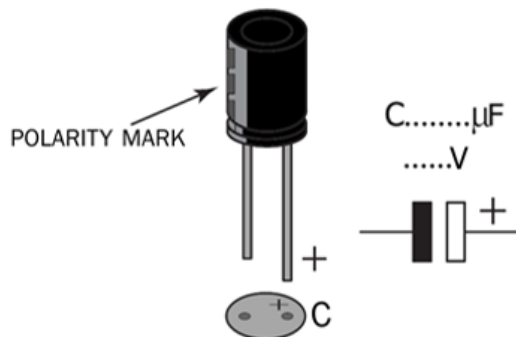
www.futurekit.com

4. CERAMIC AND MILA CAPACITOR

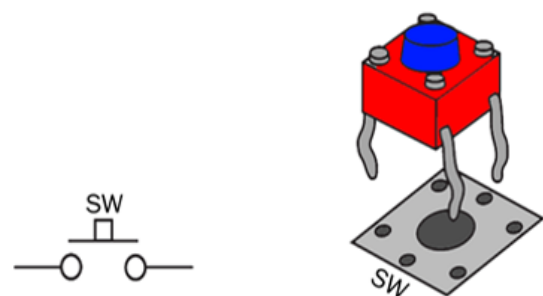


ASSEMBLY INSTRUCTIONS

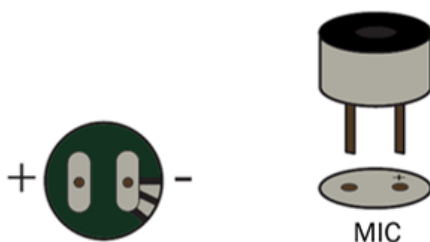
5. ELECTROLYTIC CAPACITOR



6. PUSH BOTTON SWITCH

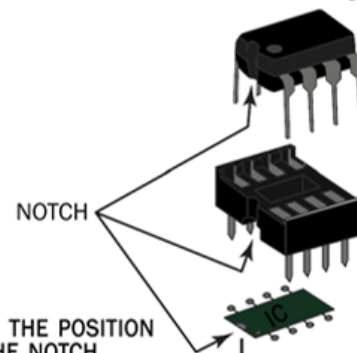


7. CONDENSER MIC



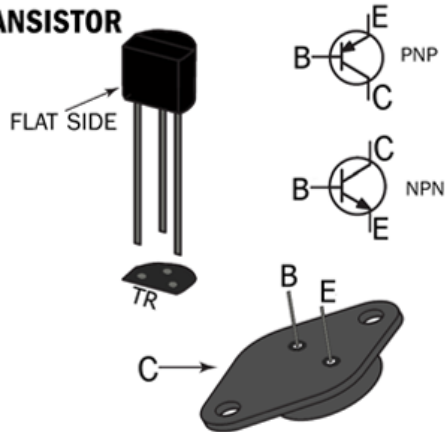
www.futurekit.com

8. INTEGRATED CIRCUIT (IC)

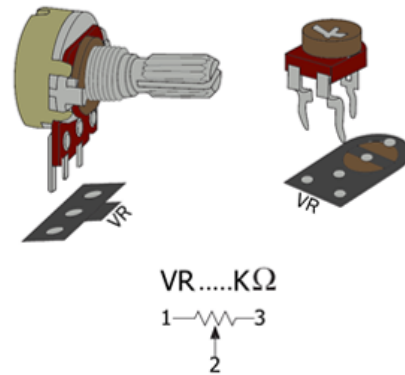


ASSEMBLY INSTRUCTIONS

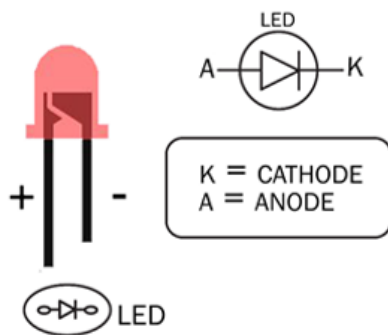
9. TRANSISTOR



10. POTENTIOMETER

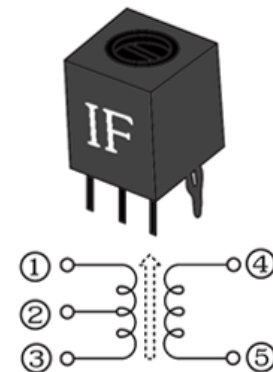


11. LED



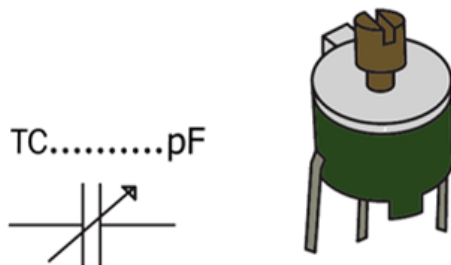
www.futurekit.com

12. IF TANK

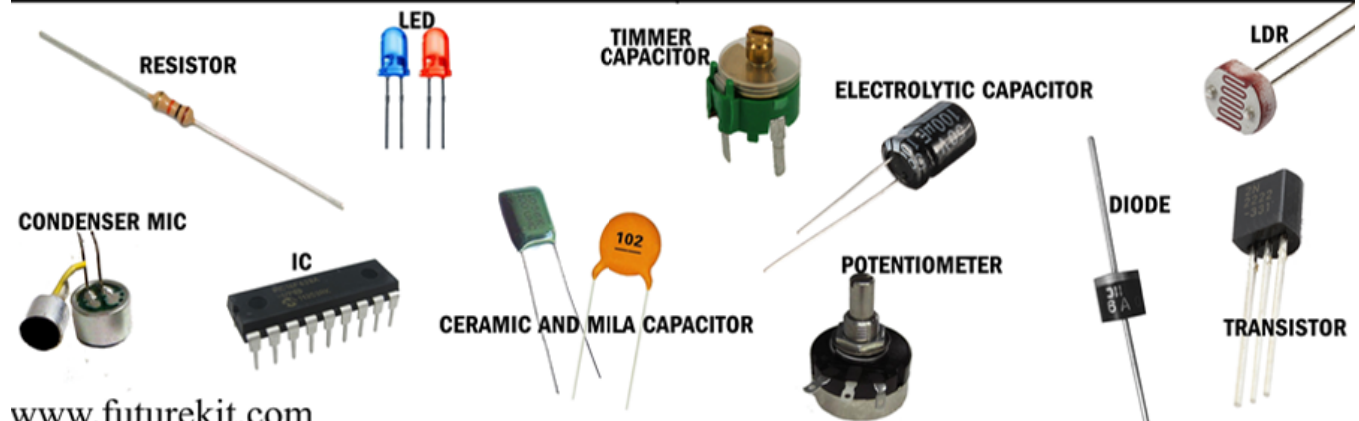
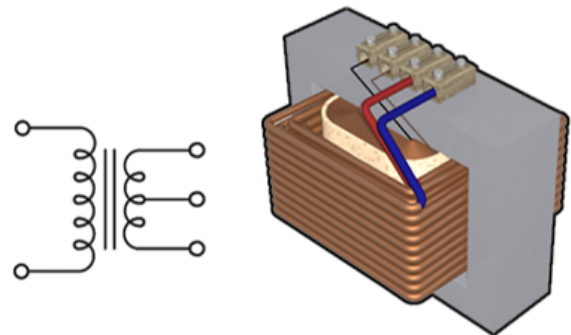


ASSEMBLY INSTRUCTIONS

13. TIMMER CAPACITOR



14. TRANSFORMER



www.futurekit.com

HOW TO READ THE VALUE OF RESISTOR

ROW 1

0
1
2
3
4
5
6
7
8
9

ROW 2

0
1
2
3
4
5
6
7
8
9

Multiplier

1
10
100
1000
10000
100000
1000000
0.1 GOLD
0.01 SILVER

Tolerance

1%
2%
5% GOLD
10% SILVER

www.futurekit.com

EX: 2KΩ ±5%
RED RED BLACK GOLD

EX: 10KΩ ±5%
RED ORANGE BLACK GOLD

EX: 2MΩ ±5%
RED GREEN BLACK SILVER

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

HOW TO READ THE VALUE OF CAPACITOR

104
10 0000 pF
OR
0.1 μF

104

CERAMIC CAPACITOR

DATA CAPACITORS

pF, picoFarads = 10⁻¹²F
nF, nanoFarads = 10⁻⁹F
μF, microFarads = 10⁻⁶F
1000 pF = 1 nF
1000 nF = 1 μF
e.g.
4n7 = 4.7nF = 4700pF or 0.0047μF

333J
33 000 pF +5%
OR
0.033 μF +5%

MILA CAPACITOR

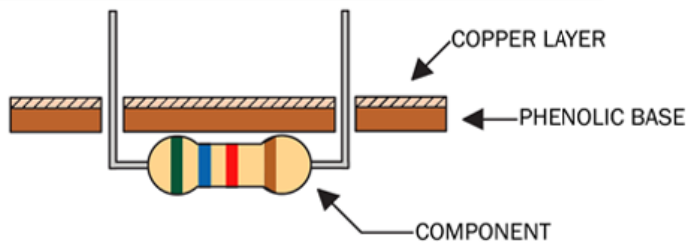
3 = 3 pF	103 = 0.01μF	223 = 0.022μF
15 = 15 pF	104 = 0.1 μF	332 = 0.0033μF
101 = 100 pF	105 = 1 μF	333 = 0.033μF
681 = 680pF	222 = 0.0022μF	472 = 0.0047μF
102 = 0.001μF		473 = 0.047μF

THE VALUE OF TOLERANCE

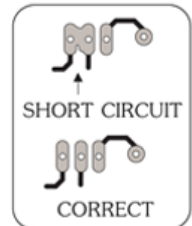
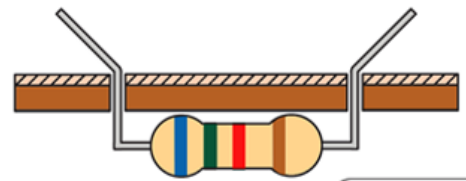
J = ±5%, K = ±10%, M = ±20%

SOLDERING COMPONENTS TO THE PC BOARD

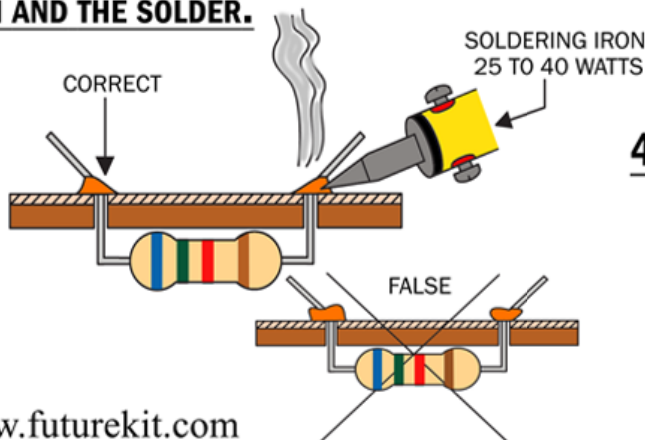
1. MOUNT THE COMPONENTS TO THE BOARD.



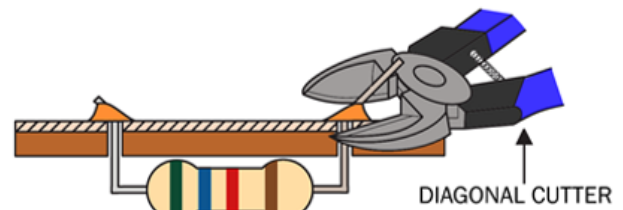
2. BEND LEADS TO HOLD THE COMPONENTS.



3. SOLDERING THE COMPONENTS AND THE PC BOARD WITH THE SOLDERING IRON AND THE SOLDER.

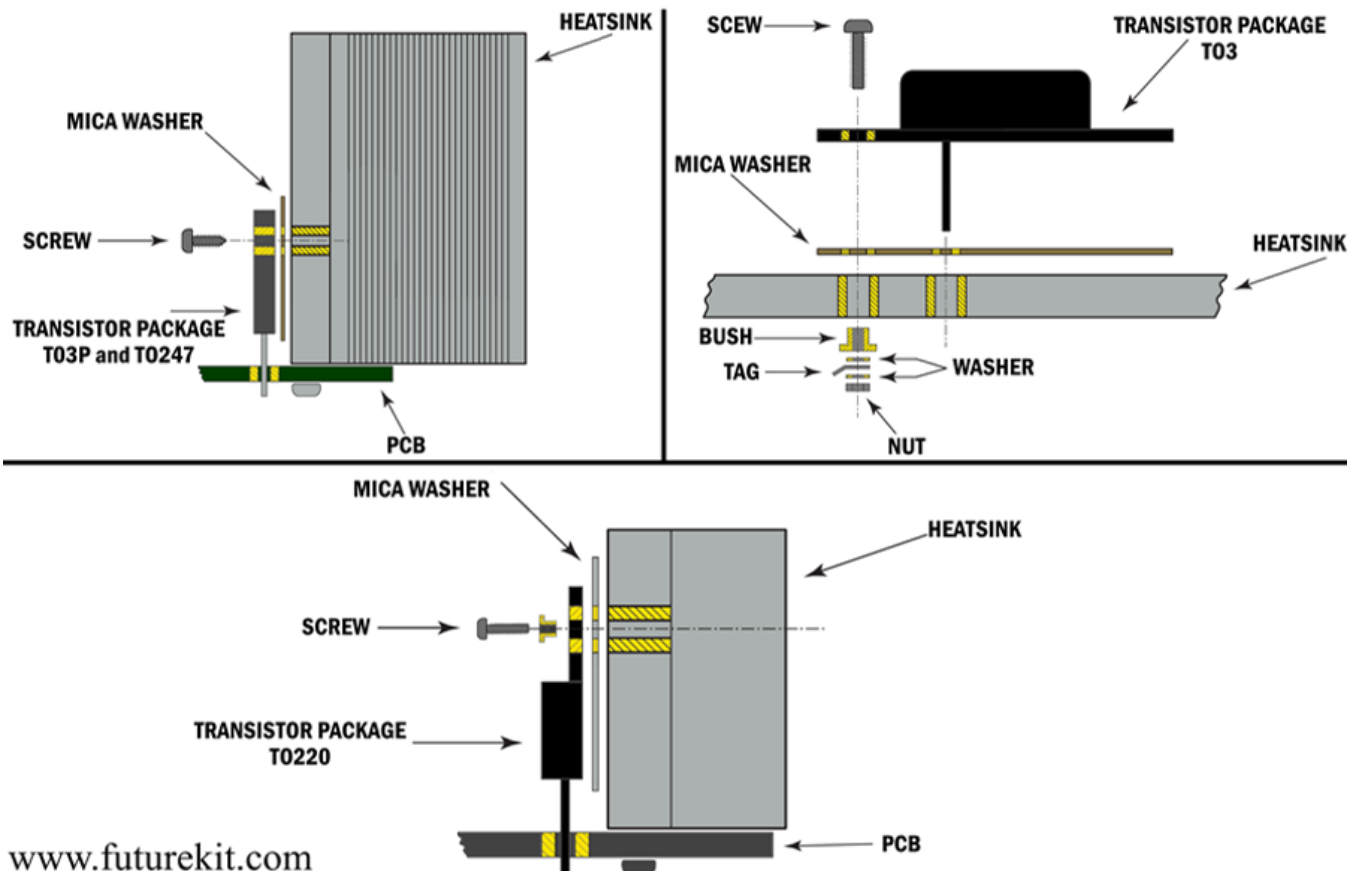


4. CUT OFF ALL LEADS OF THE COMPONENTS.



www.futurekit.com

HOW TO INSTALL THE TRANSISTOR WITH SINK



www.futurekit.com