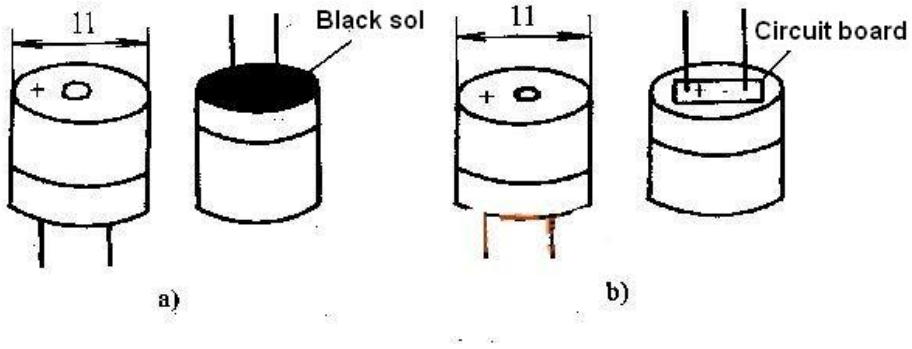

The buzzer is divided into an active buzzer (a) and a passive buzzer (b). The main difference between the two is the possess or lack a "vibration source". The "source" is not a power source but a vibration source. In other words, the active buzzer has an internal vibration source, so it will sound as soon as it is powered on. The passive buzzer didn’t possess an internal vibration source, so if you use a DC signal, you cannot make it sound.

The working principle of the passive buzzer is the same as the speaker. It uses the phenomenon of electromagnetic induction.

The active buzzer is often more expensive than the passive buzzer, because there are oscillating circuits inside, and it can make the sound of the specified frequency by connecting the DC voltage of rated voltage. The frequency is determined by the internal oscillation circuit, which cannot be changed.

The advantages of passive buzzers:

1. Low production cost.

2. The sound frequency range is wide, it can emit ultrasonic waves of certain frequencies at high decibels, and it can make the effect of "do,rui,mi,fa,so,la,xi".

3. In some special cases, it can share a control port with the LED.