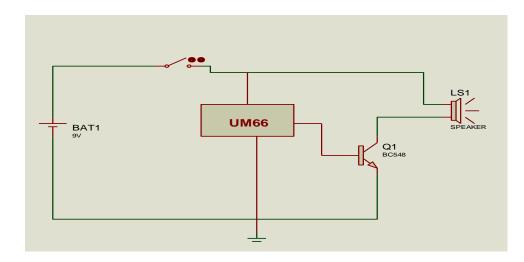
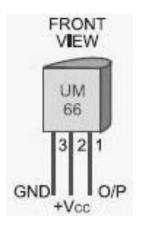
#### MELODY GENERATOR USING UM66 IC

This circuit is suitable for generating a musical bell in doors, home security alarm systems, burglar alarms etc. The main part of this alarm circuit is an UM66, which is a melody generator IC. It is a very small IC that almost looks like a transistor. It has an inbuilt tone and a beat generator. This IC is programmed to generate certain frequencies .When power is turned on, the melody generator is reset and melody begins from the first note. Many versions of UM66 are available which generate tones of different songs.

#### **CIRCUIT DIAGRAM:**





#### SONG SERIES LIST

P/N	SONG NAME
UTC UM66T05L	Home Sweet Home
UTC UM66T11L	Love Me Tender
UTC UM66T19L	For Alice
UTC UM66T32L	COO COO waltz

#### **COMPONENTS REQUIRED:**

• UM66 ( MELODY GENERATOR IC )



• TRANSISTOR BC548 (NPN)



• BATTERY SUPPLY (9V)



• SPEAKER (8 ohm)



• SWICTH



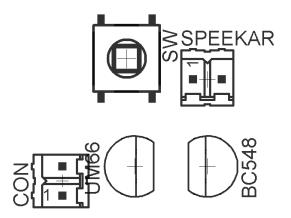
• Battery Strap

#### **WORKING:**

When power is switched ON, UM66 starts to generate the melody current. UM66 requires no additional components for the generation of audio signal/melody. The electrical signals for the corresponding notes of the melody tone are generated at the output pin 3 of UM66 IC. The output from the UM66 IC does not has the sufficient power to drive a speaker. So an NPN transistor is used here which will works as an amplifier. So the audio signal has connected to the base of the transistor which enhances the signal enough to drive a loudspeaker, the circuit is actually just converting the electrical signals to audio signals. The operating voltage of UM66 is 1.5V to 3V. The supply voltage should not exceed 3V. If it happens, the IC will get damaged.

## **PCB LAYOUT:**

### **FRONT SIDE:**



# **BACK SIDE:**

