

# UM66T-L Series

## UM66T Simple Melody Generator

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### Features

- 64-note ROM memory
  - 1.3V to 3.3V operating voltage and low power consumption
  - Packaged in inexpensive TO-92 package
- Built-in RC oscillator
  - Level-hold mode to play repeatedly
  - Dynamic speaker can be driven with external NPN transistor.

### General Description

The UM66T series is a CMOS LSI designed melody generator IC for use in telephones and toys application. It has an on-chip ROM programmed for musical performance. Produced by CMOS technology, the device results in very low power consumption. And with built-in RC oscillator, a compact melody module can be constructed with only a few additional components.

### Absolute Maximum Ratings

DC Supply Voltage ..... -0.3V                    to +5.0V  
 Operating Ambient Temperature ..... -10°C                    to 60°C  
 Storage Temperature ..... -55°C                    to 125°C

### Electrical Characteristics

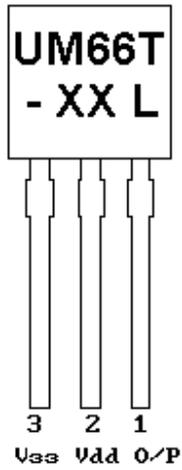
(V<sub>ss</sub>=0V, V<sub>dd</sub>=1.5V, T<sub>a</sub>=25°C, unless otherwise specified.)

Parameter	Symbol	Min.	Typ.	Max.	Conditions
Operating voltage	V <sub>dd</sub>	1.3V	1.5V	3.3V	
Current Consumption	I <sub>dd</sub>	-	16μA	50μA	Playing with no load
Output Current	I <sub>o/p</sub>	2mA	-	-	
Osc. frequency	F <sub>osc</sub>	63kHz	90kHz	117kHz	

### Song Series List

Part number	Song name
UM66T-01L	Jingle Bells + Santa Claus Is Coming To Town + We Wish You A Merry Christmas
UM66T-05L	Home Sweet Home
UM66T-09L	Wedding March (Mendelssohn)
UM66T-19L	For Alice
UM66T-32L	Coo Coo Waltz
UM66T-68L	It Is A Small World

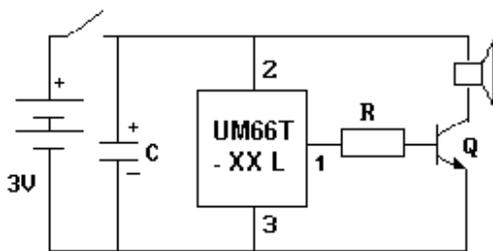
### Pin Configuration (Front View)



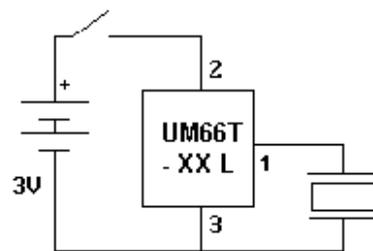
Pin no.	Symbol	Description
1	O/P	Melody Output
2	V <sub>dd</sub>	Positive Power Supply
3	V <sub>ss</sub>	Negative Power Supply

### Typical Application Circuits

#### LEVEL HOLD MODE FOR SPEAKER



#### LEVEL HOLD MODE FOR PIEZO BUZZER



Recommended values : C = 1 $\mu$ F , R = 4.7K $\Omega$  , Q = 2SC9013

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