BOWIN Bowin Microelectronics



UM66T Simple Melody Generator

Features

- 64-note ROM memory
- 1.3V to 3.3V operating voltage and low power consumption
- Packaged in inexpensive TO-92 package
- Bulit-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

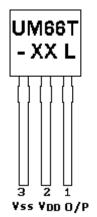
| (Vss=0V, VDD=1.5V, Ta=25°C, unless otherwise specified.) | | | | | |
|----------------------------------------------------------|--------|-------|-------|--------|----------------------|
| Parameter | Symbol | Min. | Тур. | Max. | Conditions |
| Operating voltage | Vdd | 1.3V | 1.5V | 3.3V | |
| Current Consumption | IDD | - | 16µA | 50μΑ | Playing with no load |
| Output Current | lo/p | 2mA | - | - | |
| Osc. frequency | Focs | 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 |

UM66T-01L 参考資料

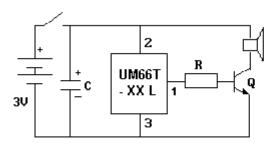
Pin Configuration (Front View)



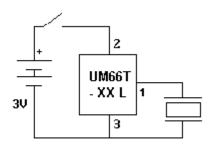
Pin no.SymbolDescription1O/PMelody Output2VDDPositive Power Supply3VssNegative Power Supply

Typical Application Circuits

LEVEL HOLD MODE FOR SPEAKER



LEVEL HOLD MODE FOR PIEZO BUZZER



Recommended values : C = 1 μ F , R = 4.7K Ω , Q = 2SC9013

REV.9-2008 (2 pages)