

SEMICONDUCTOR IC's

BW – M66 Melody generators

Features

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

General Description

The M66T series is a CMOS LSI designed for use in telephone and toy application. It is an on-chip ROM programmed for musical performance. Produced by CMOS technology, the device results in very low power consumption. Since the M66T series includes oscillator, a compact melody module can be constructed with only a few additional components.

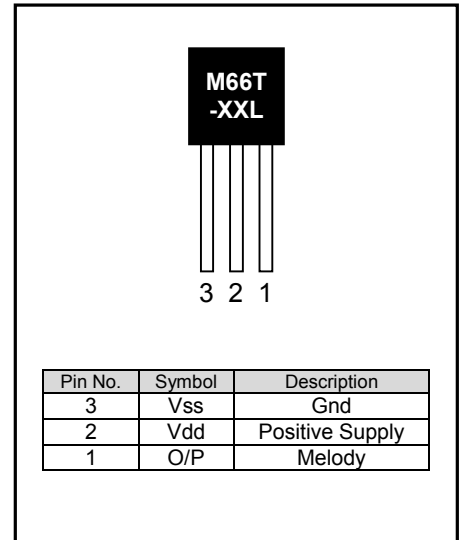
Absolute Maximum Ratings

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

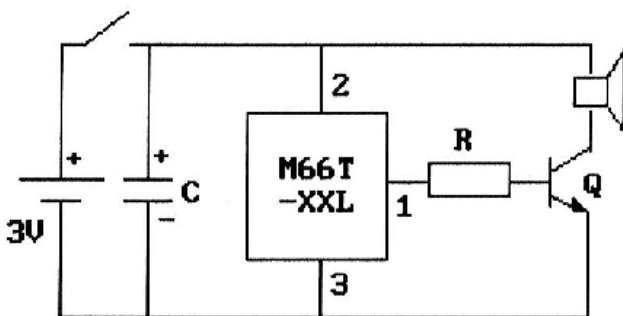
(V_{ss}=0V, V_{dd}=1.5V, T_a=25°C, unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Conditions
Operating Voltage	V _{dd}	1.3V	1.3V	3.3V	
Current Consumption	I _{dd}	-	16μA	50μA	Playing with no load
Output Current	I _{o/p}	2mA	-	-	
Osc. Frequency	F _{ocs}	63kHz	90kHz	117kHz	

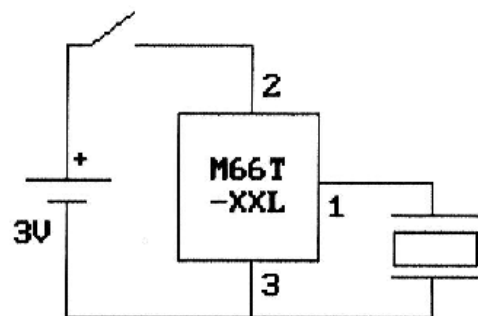


Typical Application

LEVEL HOLD MODE FOR SPEAKER



LEVEL HOLD MODE FOR PIEZO BUZZER



Suggested Values : C = 1μF, R = 4.7KΩ, Q = BC182

BW Ref. No.	Description	Pin-Package
M66T-01L	MELODY GENERATOR (JINGLE BELLS)	TO 92
M66T-09L	MELODY GENERATOR (WEDDING MARCH)	TO 92
M66T-68L	MELODY GENERATOR (ITS A SMALL WORLD)	TO 92
M66T-08S	MELODY GENERATOR (HAPPY BIRTHDAY)	TO 92