

SD66T

Simple Melody Generator

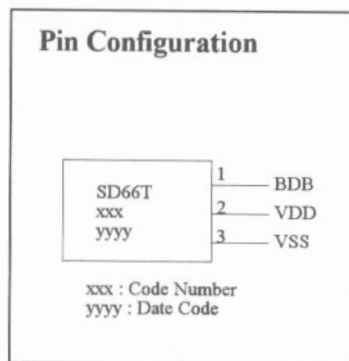
Features

- 64 Note ROM memory.
- 2 V to 5 V operating voltage and relatively low power consumption.
- Dynamic speaker can be driven with an external NPN transistor.
- OSC resistor is built-in.
- Level hold mode operating.
- Direct piezo drive.

General Description

The SD66T series is a CMOS LSI designed for use in telephones and toy applications. It is an on-chip ROM programmed for musical performance. Produced by CMOS technology, the device results in very low power

consumption. Since the SD66T series includes oscillator and mode selector circuits, a compact melody modules can be constructed with only a few additional components.


Pin Description

Pin No.	Symbol	Description
1	BDB	Melody output.
2	VDD	Positive power supply.
3	VSS	Negative power supply.

Absolute Maximum Ratings

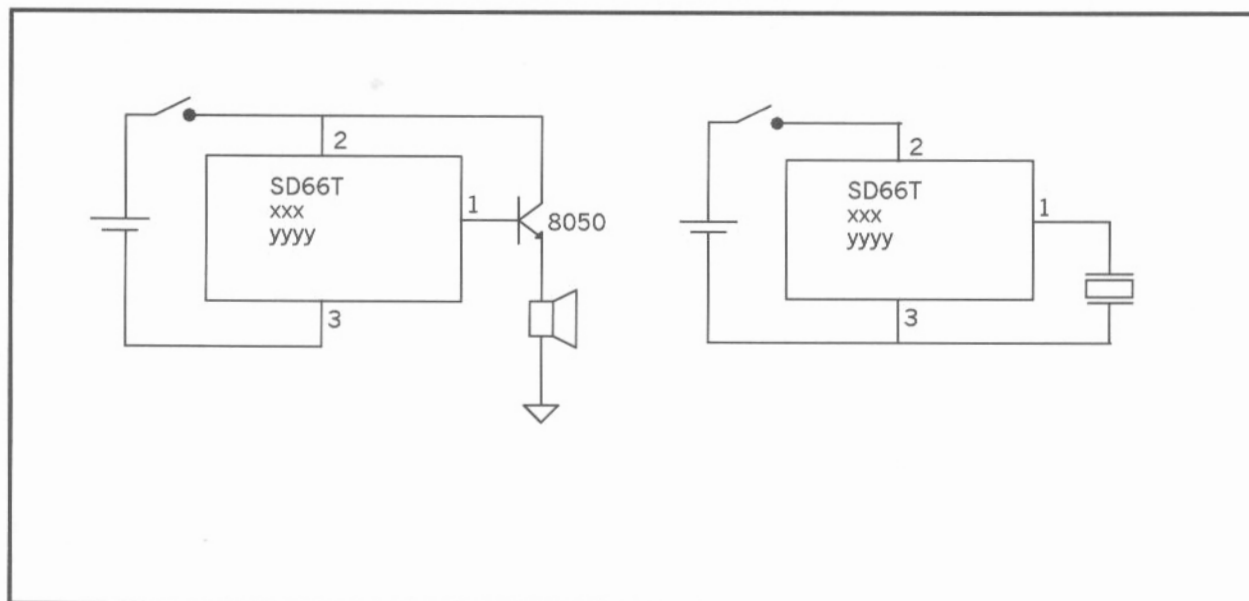
RATING	VALUE
DC Supply Voltage	<5.5V
Input/Output Voltage	VSS-0.3V to VDD+0.3V
Operating Temperature	0° C to 100° C
Storage Temperature	-25° C to 100° C

Notice: Stress greater than those listed under **Absolute Maximum Ratings** may cause permanent damage to the device. This is a stress rating only and functional operation of the device at these or any other conditions above those indicated in the operational sections of this specification is not implied, Exposure to absolute maximum rating conditions for extended period may affect reliability.

Electrical Characteristics

(VDD = 3.3V, VSS = 0V, Ta = 25°C, unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Condition
Operating Voltage	Vdd	2.0V	3.3V	5.0V	
Standby Current	Istb	---	---	10μA	Vdd=5V, No load
Operating Current	Iop	---	---	300μA	Vdd=5V, No load
Input Voltage High	---	Vdd -0.2V	---	Vdd	
Input Voltage Low	---	Vss	---	Vss+0.2V	
BD Drive Current	I _{BD}	10mA	---	---	Vdd=5V, V _{BD} =2.5V
BD Sink Current	I _{BS}	10mA	---	---	Vdd=5V, V _{BD} =2V
Frequency Stability	dF/F	---	---	15%	[Fosc (Vdd=2.8 V) - Fosc (Vdd=2.5 V)] / Fosc (Vdd=2.5 V)

Application Circuit

Song List

- | | |
|------------------|--------------------|
| SD66T-19L | For Alice |
| SD66T-32L | Coo Coo Waltz |
| SD66T-68L | It's A Small World |