

**FEATURES**

- 127-note ROM memory
- 1.3V to 3.3V power supply and low power consumption
- RC oscillator on chip
- One shot or level hold mode
- Sound range: 4 octaves, 2 series
- Tempo: 16 kinds (presto-largo)
- Direct piezo drive

**FUNCTIONS**

- Solution of automatic stop or repeat of the melody
- Dynamic speaker can be driven with external NPN transistor
- Two or three times repeat of melody (mask option)
- Each note can be individually programmed to be staccato or legato (mask option)
- Changing the contents of melody is possible by reprogramming the maskable ROM
- Power on reset; melody begins from the first note
- Start from the head of melody
- Bare chip is available

**DESCRIPTION**

The FT66T is a CMOS LSI chip which electronically plays a prearranged melody. Selection of melody start signal is possible by mask option: orders specification suffix "L" indicate Level Hold Mode, and suffix "S" indicate One Shot Mode.

The Universal version (as One Shot or Level Hold Mode) is possible also (suffix "U").

**ABSOLUTE MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )**

Characteristic	Symbol	Value	Unit
DC Supply Voltage	$V_{CC} - V_{SS}$	-0.3 ~ 3.5	V
Input Voltage	$V_{IN}$	$V_{SS} - 0.3 \sim V_{CC} - 0.3$	V
Operating Temperature	$T_{opr}$	-20 ~ +65	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 ~ +125	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ ,  $V_{CC} = 1.5\text{V}$ ; unless otherwise specified)**

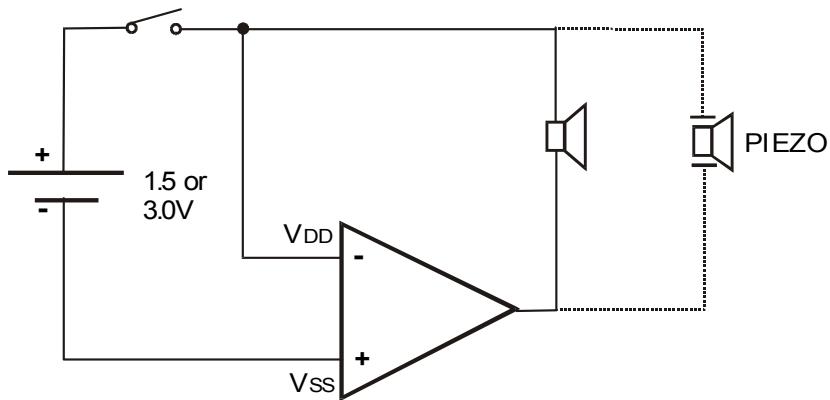
Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Operating Voltage	$V_{CC}$		1.3	1.5	3.3	V
Supply Current	$I_S$	Output open		0.1	1	$\mu\text{A}$
	$I_{CC}$				60	
Output Drive Current		$I_{OH}$	$V_{CC} = 1.3\text{V}$ , $V_O = 0.8\text{V}$	0.6	1.5	mA
Output Sink Current		$I_{OL}$	$V_{CC} = 1.3\text{V}$ , $V_O = 0.5\text{V}$	0.6	1.5	mA
Frequency Stability		$\Delta F/F$	$F_{osc}(1.6\text{V}) - F_{osc}(1.3\text{V})$		12	%
			$F_{osc}(1.3\text{V})$			



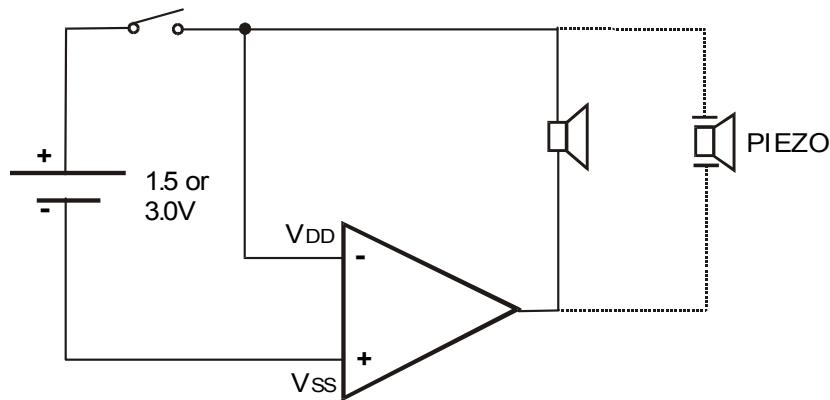
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TO-92 ONE SHOT OR LEVEL HOLD MODE CAN BE PROGRAMMED BY MASK OPTION

**ONE SHOT**  
FT66T-XXS



**LEVEL HOLD**  
FT66T-XXL



## PIN CONFIGURATION

