BT66T

SIMPLE MELODY GENERATOR

FEATURES

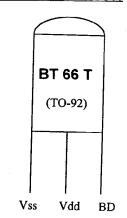
- * One shot or level hold mode
- * Plays a melody consisting of 64 note
- * RC oscillator on chip
- * 64-note ROM memory
- * Sound range : 2 octaves
- * Tempo : 15 kinds (presto-largo)
- * Direct piezo drive
- * Solution of automatic stop or repeat of the melody
- * Dynamic speaker can be driven with external NPN transistor
- * Power on reset : molody gegins from the first note
- * TO-92 or bare chip available
- * Chaning the contents of melody is possible ROM
- * Start from the head of melody

DESCRIPTION

The BT 8027 series is a CMOS LSI chip which electronically plays 2 prearranged melody.

BLOCK DIAGRAM

PIN CONFIGURATION



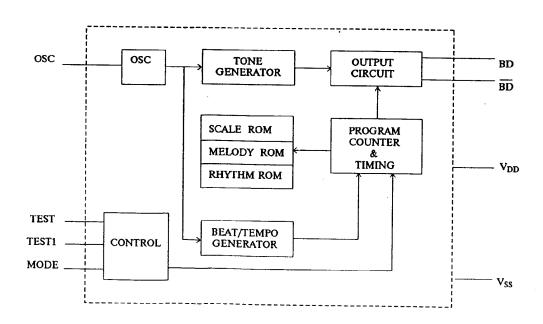
AVAILABLE SONG LIST

BT66T-19L : For Elise BT66T-02L : Jingle Bell

BT66T-08L : Happy Birthday

BT66T-12L : Love Story

BT66T-68L : it's a Small World



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ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	VALUE	UNIT
DC SUPPLY VOLTAGE	V DD - V SS	-0.3 ~ 3.5	V
INPUT VOLTAGE	Vin	Vss - 0.3 - VDD -0.3	V
OPERATING TEMPERATURE	T opr	- 20 ~ + 65	° C
STORAGE TEMPERATURE	T stg	- 55 ` + 125	° C

ELECTRICAL CHARACTERISTIC (Ta = 25°C, VDD = 1.5V, unless otherwise specified)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
OPERATING VOLTAGE	V DD		1.3	1.3	3.3	V
SUPPLY CURRENT STAND-BY	l s				1	μΑ
OPERATING	ΙD	BD,BD OPEN			60	
INPUT VOLTAGE HIGH	V IH		VDD-0.2V		VDD	V
INPUT VOLTAGE LOW	V IL		VSS		VSS+0.2V	mA
INPUT CURRENT MODE	11	VDD=3.3V, VMODE=0-3.3V	-30		50	mA
BD (Bb) DRIVE CURRENT	I BD(IBD)	VDD=1.3V,VBD=0.3V	0.6	1.5		mA
BD (BD) SINK CURRENT	I BS(IBS)	VDD=1.3V,VBD=0.3V	0.6	1.5		mA
FREQUENCY OPERATING	Fosc	Vpp = 1.5V	57	65	82	KHZ
FREQUENCY STABILITY	ΔF/F	Fosc (1.6V) - Fosc(1.3V) F osc (1.3V)			+12	%

PAD LOCATION

Pad No	Pad Name	Χ	Υ
rau NO	MODE	145	1455
	BD	145	1285
	BD	145	785
	TEST	145	535
	TEST1	145	145
	VSS	1005	145
 7	OSC	1455	510
	VDD	1455	680

PAD LAYOUT

(1500,1500)

1		
	BT 66 T	
3	CHIP SIZE: 1500X1000 PAD SIZE: 110X110	8
4	UNIT : µm	7
5	6	

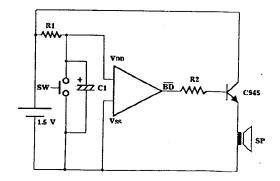
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APPLICATION CIRCUIT

For Speaker Type

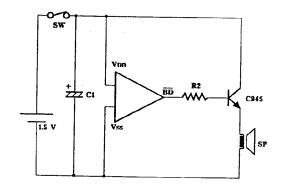
1) One Shot Mode



R1: 220Ω R2: 2.7 - 4.7KΩ

C1: 1µF

2) Lavel Hold Mode



R2: 2.7 - 4.7KΩ C1: 1µF