

## SOUND EFFECT IC

### ◆ Features

- \* Natural sound effect for sing a song output
- \* Built in audio amplifier , do not need transistor on output for sound amplifier
- \* TG pin : Trigger mode by one-shot non re-trigger, One TG pin touched has one song Output

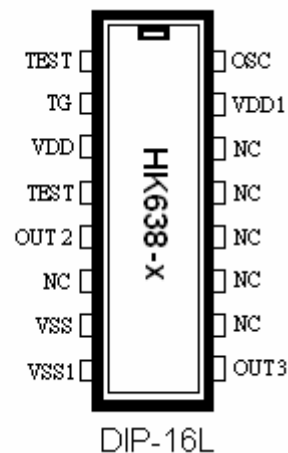
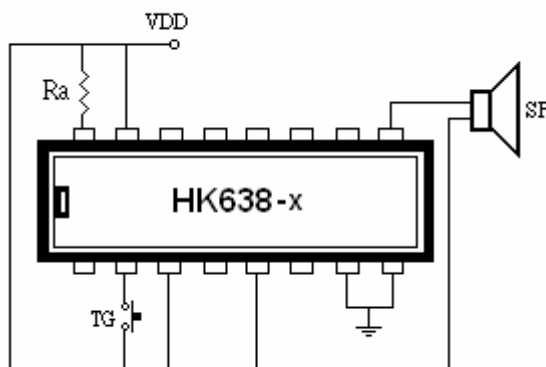
### ◆ Application

Toys, Musical box

### ◆ Electrical Characteristics

Characteristics	Sym.	Min.	Typ.	Max.	Unit	Remark
Operating voltage	V <sub>DD</sub>	2.6	3	5.1	V	
Output driving current	I <sub>OD</sub>	----	80	----	mA	load
Stand by current	I <sub>SB</sub>	----	1	10	uA	
Oscillator frequency	F <sub>OSC</sub>	----	100	----	KHz	±30%
Operating temperature	T <sub>EMP</sub>	0	25	60	°C	
Driving current	I <sub>O</sub>	1	----	----	mA	@ V <sub>DS</sub> =1V

### ◆ Application circuit

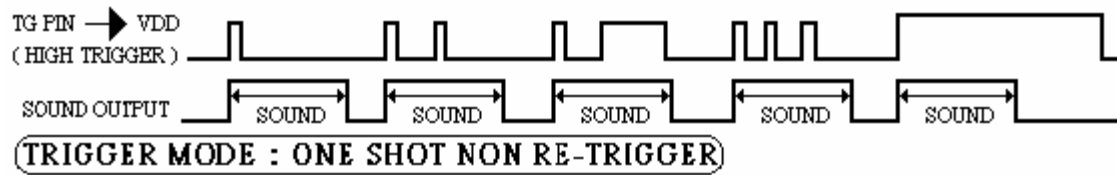


	Ra
HK638-1	220K
HK638-2	200K

- ★ Package Type : DIP-16L
- ★ Trigger Mode and Timing Chart :

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### ◆ Sound list

#### HK638-1

Jingle Bell song

#### HK638-2

“ Ho - Ho - Ho Merry X'mas “ ( Father Christmas speech ) with 2 times  
+ X'mas song