

### ◆ Features

- \* Full natural harmonic sound effect , built in 4 different envelope wave form & 6 different frequency wave form for sound output quality
- \* Built in 4 LED flash driving circuit with several flash types , flash speed follows melody tempo of sound output
- \* 5 kinds different trigger mode by MODE & SL pins option while TG pin is triggered to VDD
  - Level hold mode
  - One shot re-trigger mode
  - One shot non re-trigger mode
  - Single touch plays all tunes mode ( one touch TG pin playing all tunes )
  - Power on/off control mode

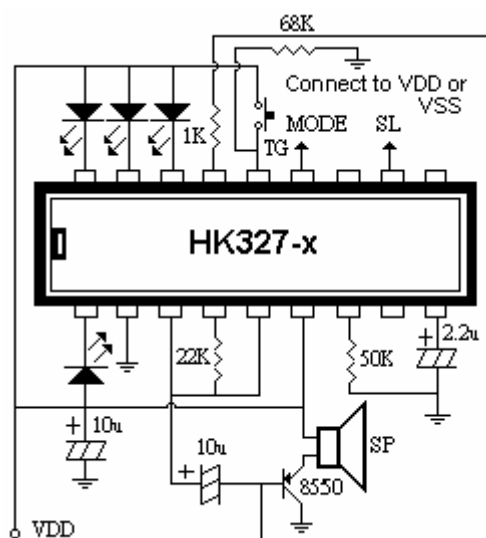
### ◆ Application

- \* Toys , Clock melody , Key chain , Musical box

### ◆ Electrical Characteristics

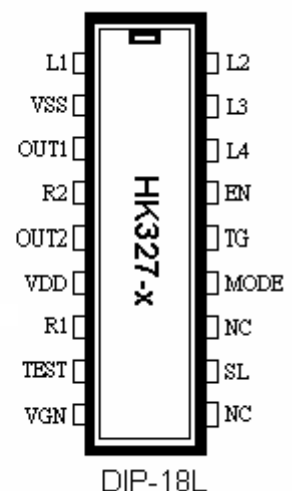
Characteristics	Sym.	Min.	Typ.	Max.	Unit	Remark
Operating voltage	V <sub>DD</sub>	2.6	4.5	5.2	V	
Operating current	I <sub>OP</sub>	----	0.1	0.5	mA	
Stand by current	I <sub>SB</sub>	----	0.4	1	uA	
Oscillator frequency	F <sub>OSC</sub>	----	500	----	KHz	± 30% R <sub>osc</sub> = 47KΩ
Operating temperature	T <sub>EMP</sub>	0	25	60	°C	
Driving current	I <sub>O</sub>	----	18	----	mA	@ V <sub>DS</sub> =1V

### ◆ Application circuit



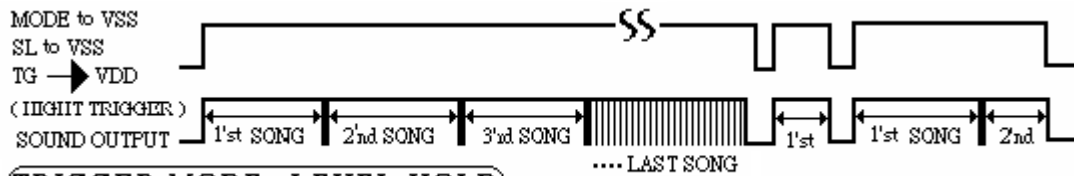
#### TRIGGER MODE OPTION

MODE	SL	Trigger Mode
VSS	VSS	LEVEL HOLD (by TG Touch)
VSS	VDD	ONE SHOT NON RE-TRIGGER (by TG Touch)
VDD	VSS	ONE SHOT RE-TRIGGER (by TG Touch)
VDD	VDD	PLAYS ALL TUNES ( by TG One Touch)

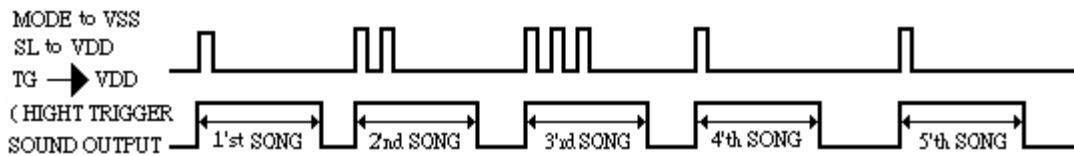


★ Package Type : DIP-18L

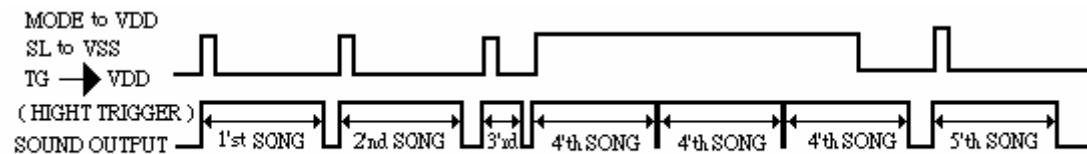
### ★ Trigger Mode and Timing Chart :



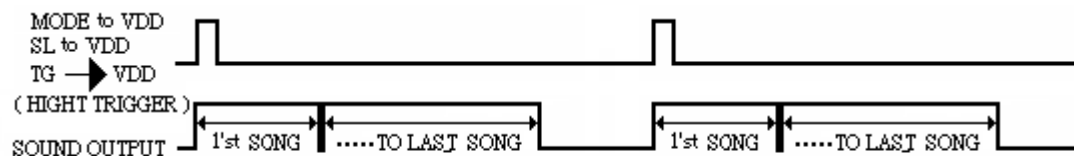
**TRIGGER MODE : LEVEL HOLD**



**TRIGGER MODE : ONE SHOT NON RE-TRIGGER**



**TRIGGER MODE : ONE SHOT RE-TRIGGER**



**TRIGGER MODE : ONE TOUCH PLAY ALL SONGS**

### ◆ Song list

#### HK327-1

1. SPRING SONG (BY MENDELSSOHN)
2. THE LAST ROSE OF SUMMER
3. THE HAPPY FARMER
4. HOME ON THE RANGE
5. MINUET IN G ( BY BEETHOVEN )
6. FANTAISIE IMPROMPTU ( BY CHOPIN )
7. HUNGARIAN DANCE
8. DIE FORELLE ( BY SCHUBERT )
9. ANNIE LAURIE
10. THE BLUE-BELL OF SCOTLAND
11. SURPRISE SYMPHONY ( BY HAYDN )
12. HOME SWEET HOME

#### HK327-3

1. WE WISH YOU A MERRY CHRISTMAS
2. O COME, ALL YE FAITHFUL
3. SILENT NIGHT
4. O TANNENBAUM
5. JINGLE BELLS
6. THE FIRST NOEL
7. O LITTLE TOWN OF BETHLEHEM
8. HARK! THE HERALD ANGELS SING
9. JOY TO THE WORLD
10. THE TWELVE DAYS OF CHRISTMAS
11. DECK THE HALLS
12. ANGELS WE HAVE HEARD ON HIGH