

## SOUND EFFECT IC

Animals , Train , Baby , Truck , Car sound

### ◆ Features

- \* 5 kind ICs available for Animals , Train , Baby cry & laugh , Truck , Car sounds
- \* Fixing sound output with 4 sections each kind IC by 4 trigger keys ( TG1 ~ TG4 pin) option
- \* Trigger mode of TG1 ~ TG4 pin fixed in IC body by One-shot non re-trigger , Level hold or One-shot re-trigger

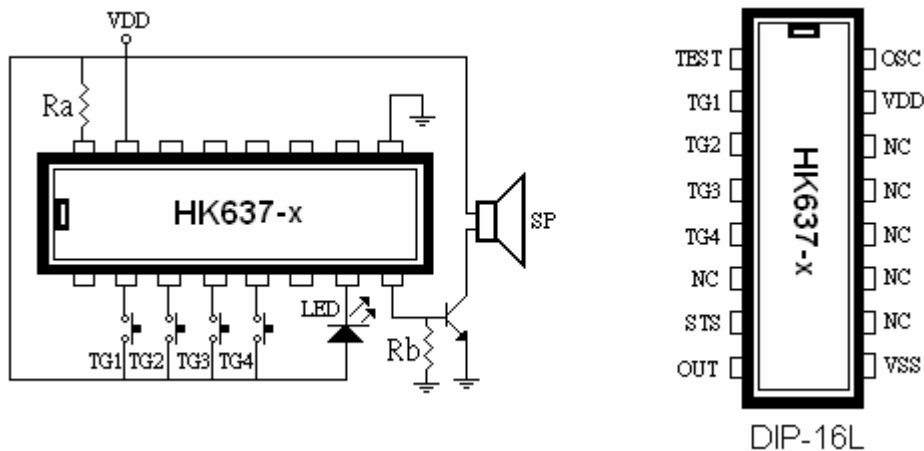
### ◆ Application

- \* Toys , Education kits , Sound 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>	----	4.5	----	mA	load
Stand by current	I <sub>SB</sub>	----	1	10	uA	
Oscillator frequency	F <sub>OSC</sub>	----	96	----	KHz	±30%
Operating temperature	T <sub>EMP</sub>	0	25	60	°C	
Consumption current	I <sub>CS</sub>	----	150	300	mA	Load

### ◆ Application circuit



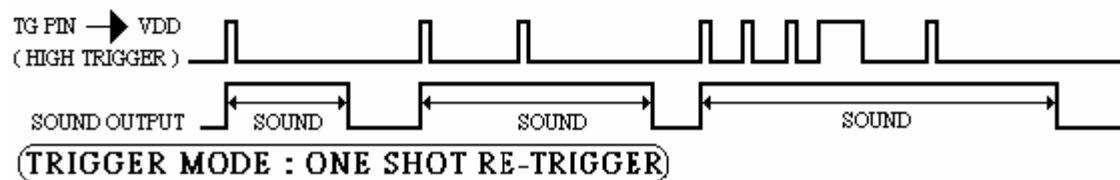
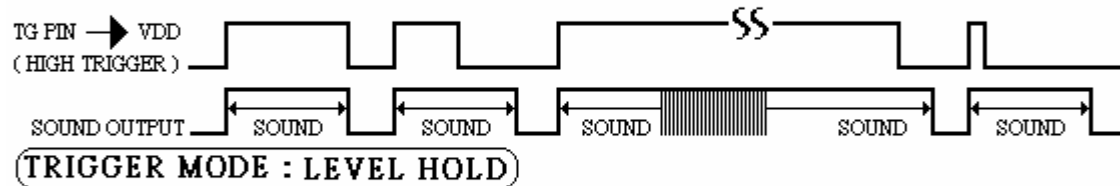
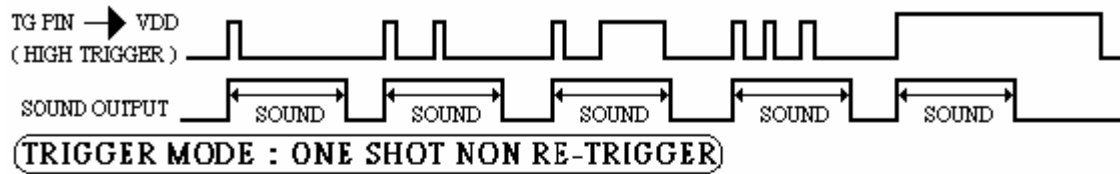
	Ra	Rb	STS pin output	Trigger mode
HK637-1	300K	2.4K	Stop pulse	One shot , non re-trigger
HK637-2	300K	680	LED flash signal	Level hold
HK637-3	300K	1.5K	Stop pulse	Level hold
HK637-4	270K	2.7K	LED flash signal	Level hold
HK637-5	300K	1K	LED flash signal	One shot , re-trigger

★ Package Type : DIP-16L

★ Trigger Mode and Timing Chart :

## SOUND EFFECT IC

Animals , Train , Baby , Truck , Car sound



### ◆ Sound list

#### HK637- 1 ( Animal sounds )

TG1: Cat sound  
TG2: Hen sound

TG3: Cow sound  
TG4: Dog sound

#### HK637- 2 ( Train Sounds )

TG1: Sounds of Train whistle + Train driving + Warning bell + Train pass by bridge  
TG2: Train whistle sound

TG3: Warning bell sound  
TG4: Train Pass by bridge sound

#### HK637- 3 ( Baby Cry & laugh sounds )

TG1: Baby laugh sound  
TG2: Baby cry sound

TG3: “ Ma Ma “ ( baby speech )  
TG4: “ Ma Ma “ + Baby cry sound

#### HK637- 4 ( Truck sounds )

TG1: Truck start + engine sounds  
TG2: Truck start + engine + driving sounds

TG3: Truck horn sound  
TG4: Truck horn + driving sounds

#### HK637- 5 ( Car sounds )

TG1: Car horn sound  
TG2: Car start + engine sounds

TG3: Car acceleration + driving sounds  
TG4: Car start + engine + acceleration + driving sounds