



**1618**

**CMOS IC**

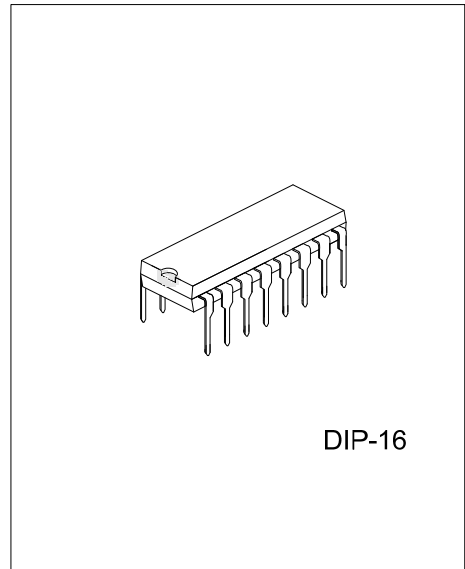
# 6 KEYS SIREN/ALARM SOUND GENERATOR

## DESCRIPTION

The UTC **1618** is a CMOS design for 6 different alarm sounds application. According to the priority of the select keys, the sound of UTC **1618** will be generated in cycling sequence.

## FEATURES

- \* Auto power off function, reduce power consumption.
- \* Low operating voltage: 2V ~ 5V.
- \* On-chip RC oscillator.
- \* 6 different sounds.
- \* 6 prioritized keys for selecting 6 different sounds.
- \* Low stand by current.
- \* CMOS process.

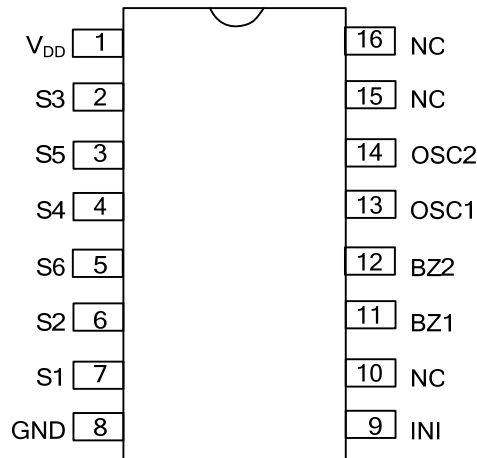


## ORDERING INFORMATION

Ordering Number		Package	Packing
Lead Free	Halogen Free		
1618L-D16-T	1618G-D16-T	DIP-16	Tube

<p>1618L-D16-T</p> <p>(1)Packing Type</p> <p>(2)Package Type</p> <p>(3)Lead Free</p>	<p>(1) T: Tube</p> <p>(2) D16: DIP-16</p> <p>(3) G: Halogen Free, L: Lead Free,</p>
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■ PIN CONFIGURATION



■ PIN DESCRIPTIONS

PIN #	PIN NAME	I/O	DESCRIPTION
1	V <sub>DD</sub>	-	Power supply pin (+).
2	S3	I	Sound selection keys. These keys connect with internal pull-down resistors. The sound output will be enabled when a key is connected to V <sub>DD</sub> . On other hands, the sound output will be disabled if a key is N.C. or connected to GND. When two or more keys are selected in the same time, the sound will be generated in cycling sequence. According to the priority of the keys, the proirity of S1~S6 list below : S1>S2>S6>S4>S5>S3.
3	S5	I	
4	S4	I	
5	S6	I	
6	S2	I	
7	S1	I	
8	GND	-	Power supply pin (-).
9	INI	I	An internal pull-up resistor. Might disable BZ1, BZ2, when connected to GND.
10	NC	-	No connecting.
11	BZ1	O	Audio output pins.
12	BZ2	O	
13	OSC1	O	Oscillator pin with external resistor.
14	OSC2	I	
15	NC	-	No connecting.
16	NC	O	No connecting.

■ ABSOLUTE MAXIMUM RATING

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	$V_{DD}$	-0.3 ~ 6	V
Input Voltage	$V_{IN}$	-0.3 ~ $V_{DD}+0.3$	V
Output Voltage	$V_{OUT}$	-0.3 ~ $V_{DD}+0.3$	V
Operating Temperature	$T_{OPR}$	0 ~ 65	°C
Storage Temperature	$T_{STG}$	-40 ~ 125	°C

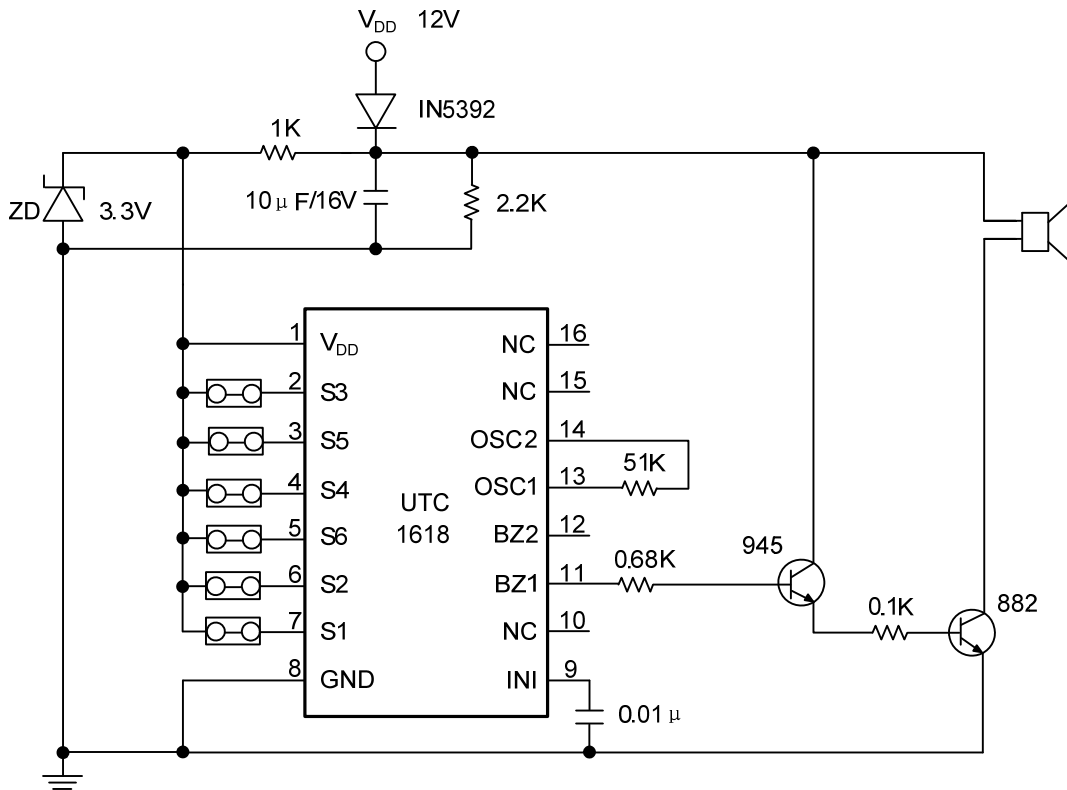
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.  
 Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS ( $V_{DD}=3V, T_A=25^{\circ}C$ , unless otherwise specified)

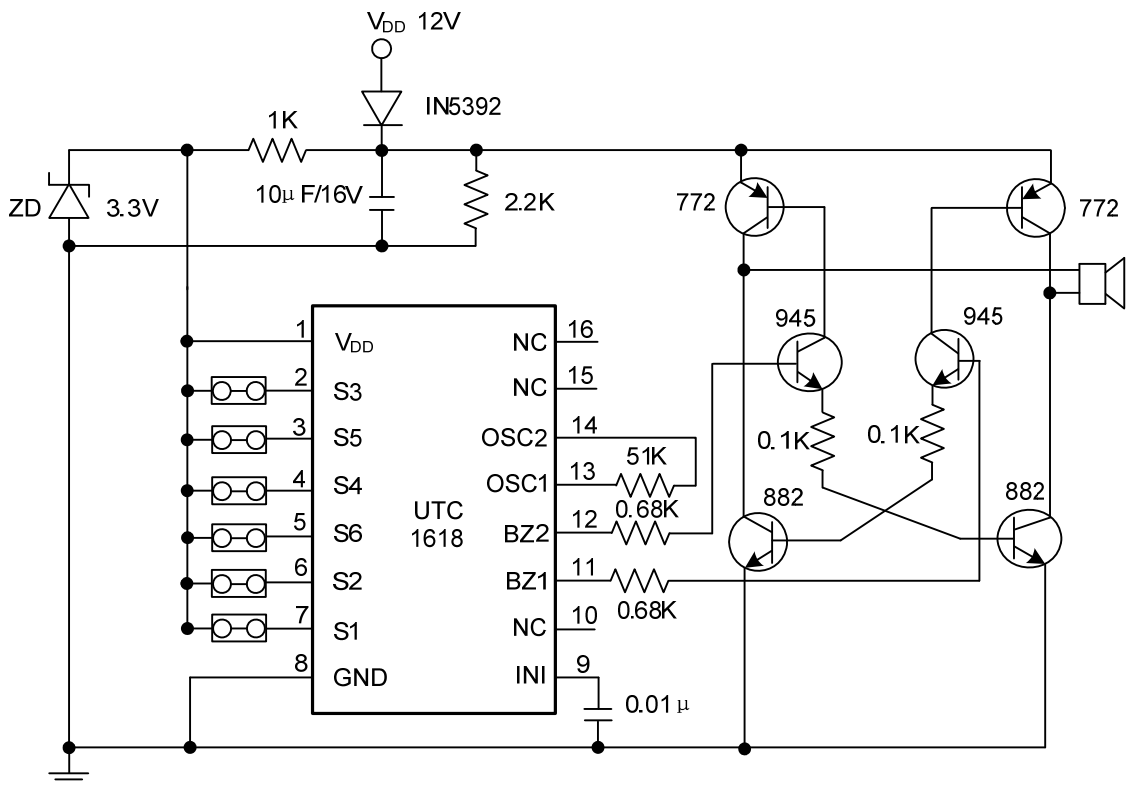
PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Operating Voltage	$V_{DD}$	2	3	5	V
BZ1, BZ2 Driving Current	$I_{OH}$	1			mA
	$I_{OL}$	1			mA
Stand-By Current	$I_{SB}$		10	20	uA
Operating Current	$I_{OP}$		300	500	uA
Operating Frequency	$F_{OP}$	70	80	128	KHz

## APPLICATION CIRCUIT

(I)



(II)



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