



1618

CMOS IC

6 KEYS SIREN/ALARM SOUND GENERATOR

DESCRIPTION

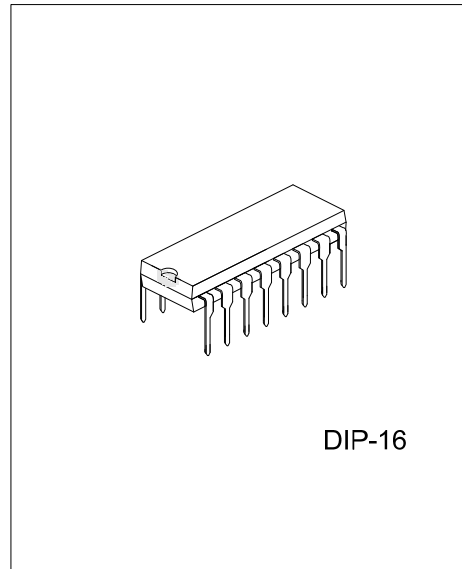
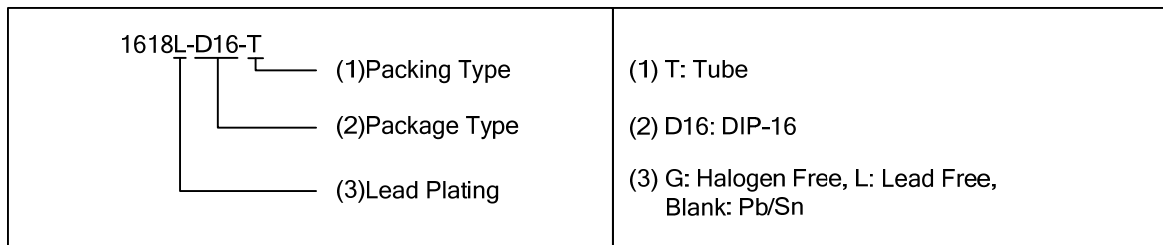
The UTC **1618** is a CMOS design for 6 different alarm sounds application. According to the priority of the select keys, the sound of UTC **1618** will be generated in cycling sequence.

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.

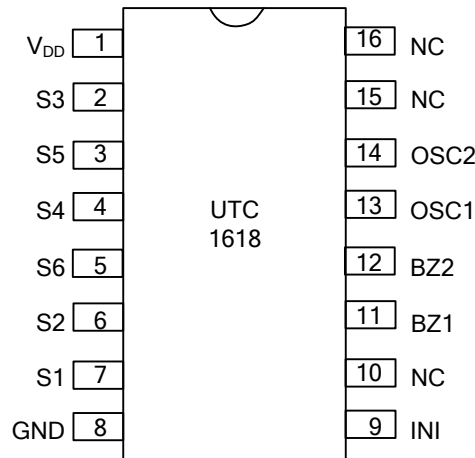
ORDERING INFORMATION

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



Lead-free: 1618L
Halogen-free: 1618G

■ PIN CONFIGURATION



■ PIN DESCRIPTIONS

PIN #	PIN NAME	I/O	DESCRIPTION
1	V _{DD}	-	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 _{DD} . 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.

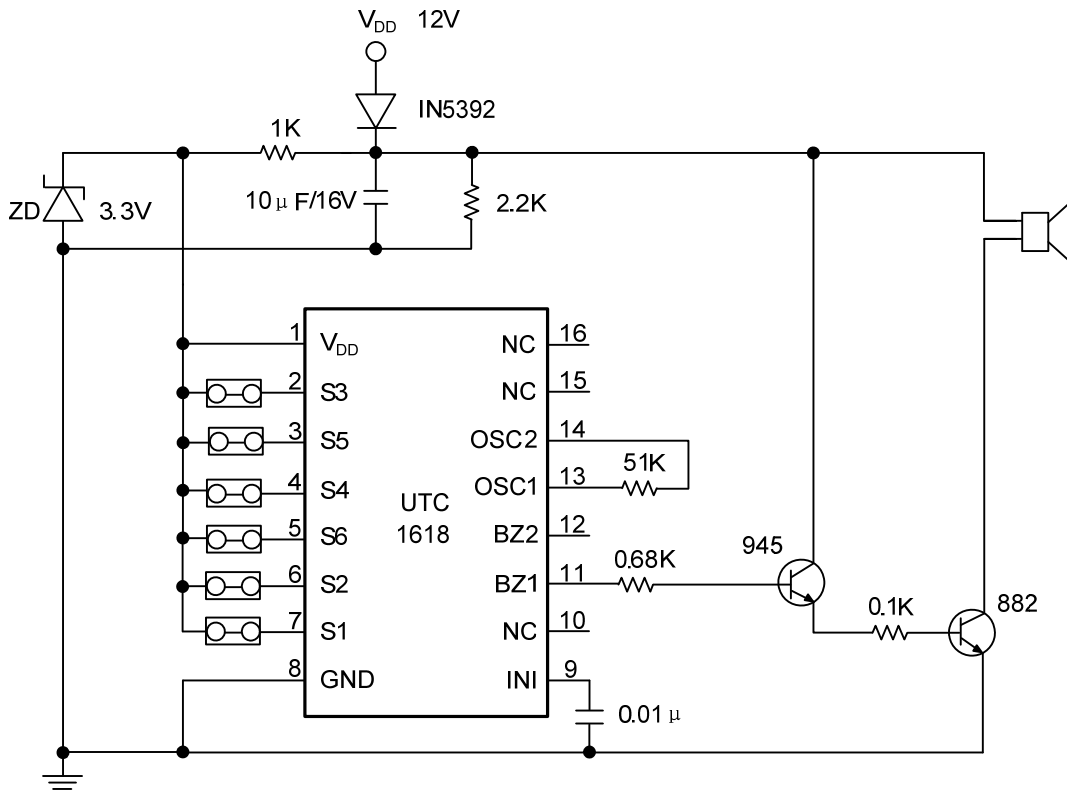
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

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

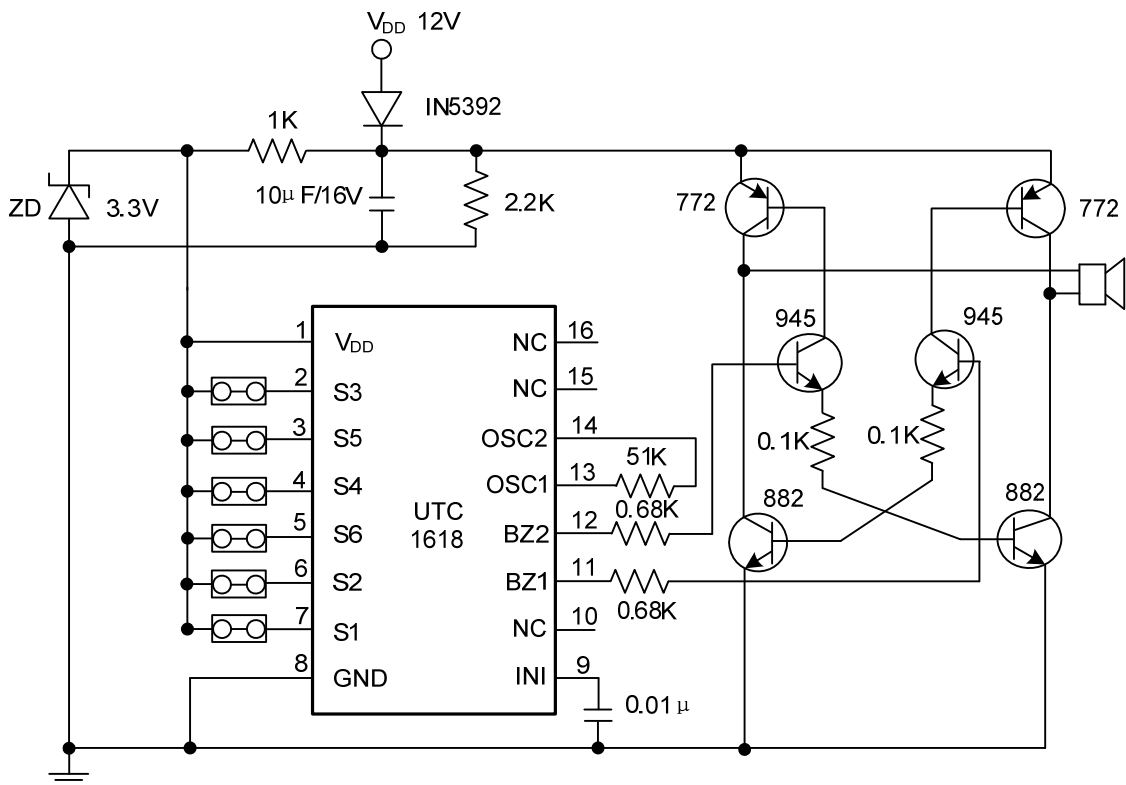
PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Operating Voltage	V_{DD}	2	3	5	V
BZ1, BZ2 Driving Current	I_{OH}	1			mA
	I_{OL}	1			mA
Stand-By Current	I_{sb}		10	20	uA
Operating Current	I_{op}		300	500	uA
Operating Frequency	F_{op}	70	80	128	KHz

APPLICATION CIRCUIT

(I)



(II)



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