



## 1617

CMOS IC

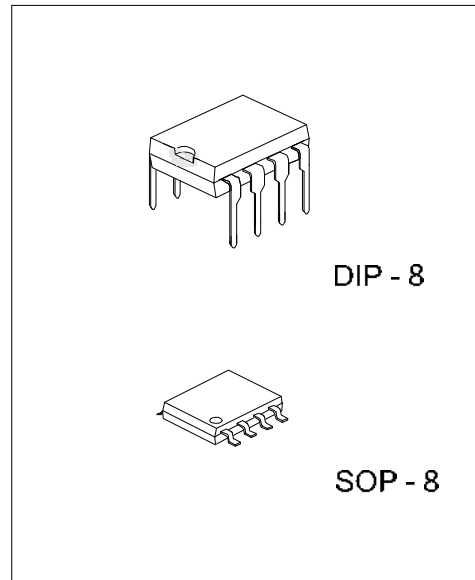
### 6 TONES SIREN/ALARM SOUND GENERATOR

#### DESCRIPTION

The UTC **1617** is a CMOS design for 6 different alarm sounds application. The sound of UTC **1617** will be generated in cycling sequence.

By the way, UTC **1617** is also partitioned to 6 types for single tone siren/alarm sound generator. The types of UTC **1617** Series are listed as following.

- 1617: 6 tones on chip.
- 1617A: Single tone which be outputted from 1617's 1st sound.
- 1617B: Single tone which be outputted from 1617's 2nd sound.
- 1617C: Single tone which be outputted from 1617's 3rd sound.
- 1617D: Single tone which be outputted from 1617's 4th sound.
- 1617E: Single tone which be outputted from 1617's 5th sound.
- 1617F: Single tone which be outputted from 1617's 6th sound.



#### FEATURES

- \* Low operating voltage: 2V ~ 5V.
- \* On-chip RC oscillator.
- \* Low stand by current.
- \* CMOS process.

#### ORDERING INFORMATION

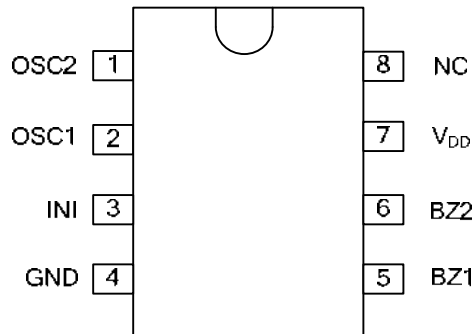
Ordering Number		Package	Packing
Lead Free	Halogen Free		
1617L-D08-T	1617G-D08-T	DIP-8	Tube
1617xL-D08-T	1617xG-D08-T	DIP-8	Tube
-	1617G-S08-R	SOP-8	Tape Reel
-	1617xG-S08-R	SOP-8	Tape Reel

<p>1617xL-D08-T</p> <p>(1)Packing Type</p> <p>(2)Package Type</p> <p>(3)Green Package</p> <p>(4)Single tone outputted</p>	<p>(1) T: Tube, R: Tape Reel</p> <p>(2) D08: DIP-8, S08: SOP-8</p> <p>(3) L: Lead Free, G: Halogen Free and Lead Free</p> <p>(4) refer to DESCRIPTION</p>
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## MARKING

Package	Marking	
	1617	1617x
DIP-8		
SOP-8		

## PIN CONFIGURATION



## PIN DESCRIPTIONS

Pin No	Symbol	I/O	Function
1	OSC2	I	Oscillator pin with external resistor.
2	OSC1	O	
3	INI	I	An internal pull-up resistor. Might disable BZ1, BZ2, when connected to GND.
4	GND	-	Power supply pin (-).
5	BZ1	O	Audio output pins.
6	BZ2	O	
7	V <sub>DD</sub>	-	Power supply pin (+) .
8	NC	-	No connecting.

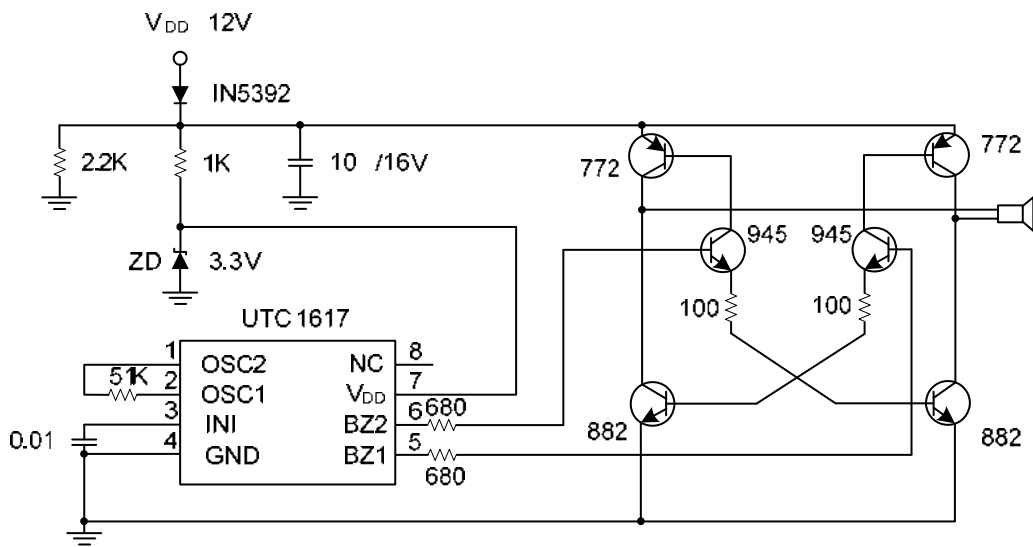
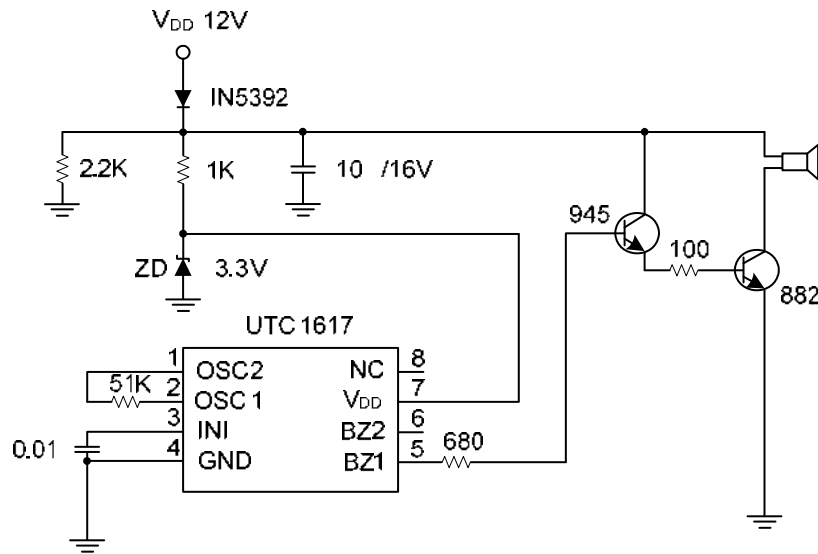
■ ABSOLUTE MAXIMUM RATINGS

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

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

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Operating Voltage	$V_{DD}$	2	3	5	V
Operating Current	$I_{OP}$		300	500	$\mu A$
BZ1, BZ2 Driving Current	$I_{OH}$	1			mA
	$I_{OL}$	1			mA
Operating Frequency	$F_{OP}$	70	80	128	KHz

■ TYPICAL APPLICATION CIRCUIT



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