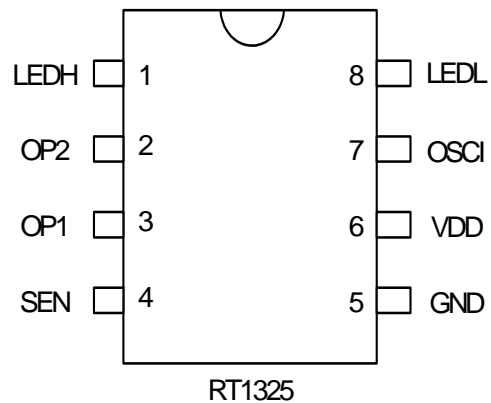## DESCRIPTION :

RT1325 is a slight signal detector utilizing CMOS technology. It is designed for security service and burglarproof systems.

FEATURES :

1. CMOS technology
2. An oscillator can be constructed by connecting an RC circuit
3. Two sensational range can be adjust by external circuit

PIN OUT :

| LEDH	1		8	LEDL
OP2	2		7	OSCI
OP1	3		6	VDD
SEN	4		5	GND

RT1325

APPLICATIONS:

1. Burglarproof system for car
2. Burglarproof system for motorcycle
3. Security service system

PIN DESCRIPTION:

| PIN NO.	PIN NAME	I/O	DESCRIPTION
1	LEDH	O	The detection of second sensational range output. It actives high.
2	OP2	I	The signal input pin for second sensational amplifier.
3	OP1	O	The signal output pin for first sensational amplifier.
4	SENSOR	I	Input pin for signal of sensor.
5	GND	-	Negative power supply.
6	VDD	-	Positive power supply.
7	OSCI	I	Oscillator input pin. It must be connecting an RC circuit
8	LEDL	O	The detection of first sensational range output. It actives high.

FUNCTION DESCRIPTION:

1. RT1325 is a CMOS slight signal detector integrator circuit. There are two sensational range can be detected by RT1325, and the range can be adjust by external circuit.

2. Sensor input:
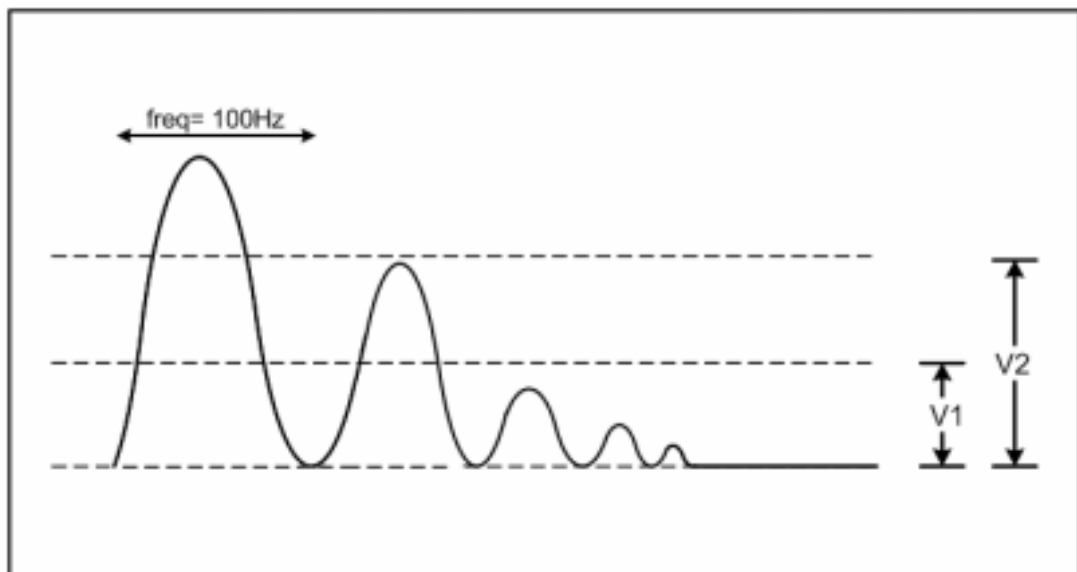
The trigger point of first sensational range is V1　1.6mV, and the frequency strength of sensor circuit to fit the trigger point.
The trigger point of second sensational range is V2　3.2mV, you can adjust external circuit to redefine it for your application.

3. Signal output:
    When the strength of sensor signal is $V1 < V_{Sensor} < V_2$, the detection of first sensational range output pin (LEDL) will from 'L' to 'H'..
    When the strength of sensor signal is $V_{Sensor} > V_2$, the detection of second sensational range output pin (LEDH) will from 'L' to 'H' and the LEDL will from 'H' to 'L'.

(1)   First sensational range :
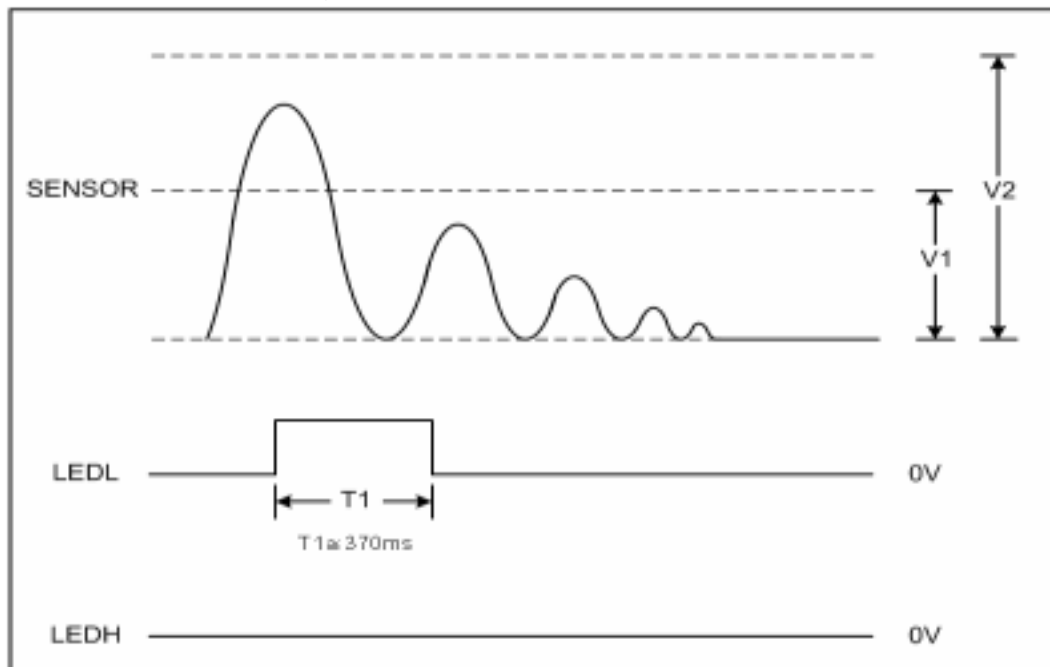
(2)   Second sensational range:
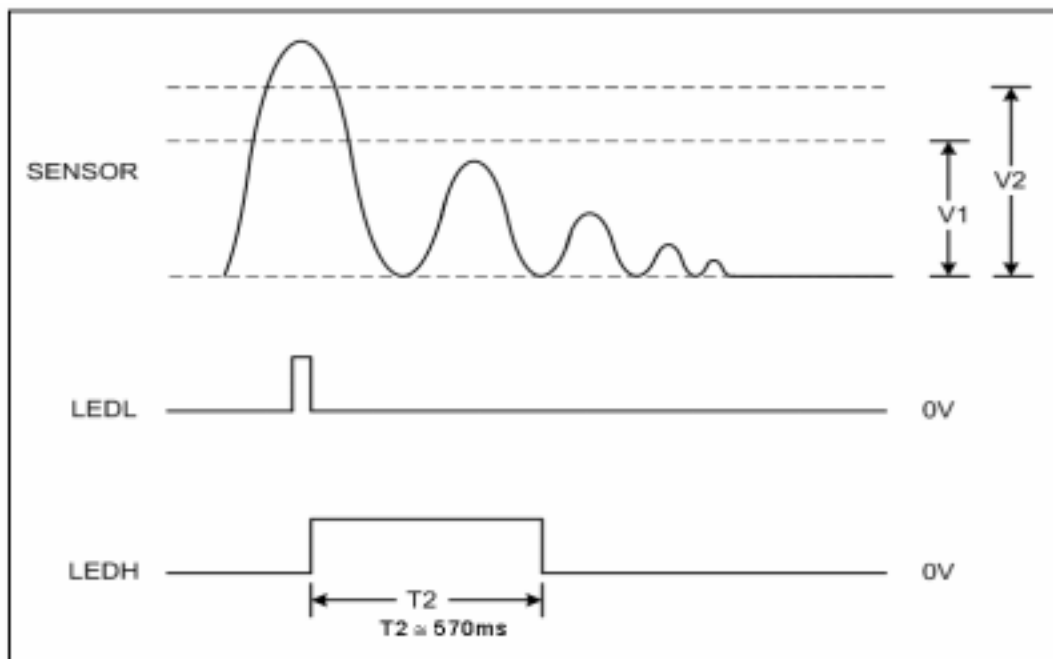
[Note]: (1) There interval of output pulse (LEDL or LEDH) between
different trigger must large then 50ms.
(2) When the LEDH from 'L' to 'H', the LEDL will from 'H' to 'L'.

Maximum Rating:

(Temp=25)

Characteristic	Symbol	Rating	Unit
Supply Voltage	V_{DD}	5.5	V
Input Voltage	V_{IN}	$(V_{SS}-0.5)$ $(V_{DD}+0.5)$	V
Power Dissipation	P_d	200	mW
Storage Temperature	T_{STR}	-50 +125	
Operating Temperature	T_{OP}	-40 +85	

Electrical Characteristic:

Characteristic	Symbol	Condition	Min.	Typ.	Max.	Unit
System Frequency	F_{OSC}	-	--	50	--	KHz
Supply Voltage	V_{DD}	All Function Operations	4.5	5.0	5.5	V
Stand-by Current	I_{STB}	-	--	-	400	uA
Output Sink Current	$I_{OL(LEDH)}$ / $I_{OL(LEDL)}$	$V_O=0.5V$	1	-	--	mA
Output Source Current	$I_{OH(LEDH)}$ / $I_{OL(LEDL)}$	$V_O=4.5V$	1	-	--	mA