



请承认书

Version No.: V2.0

常州昊翔电子有限公司 Changzhou HaoXiang Electronic Co., LTD 客户名称 CUSTOMER NAMED : _____ 产品名称 COMMODITY : <u>Speaker</u> 产品型号 MODEL NO : <u>TDA-1511KC8N33</u> 客户料号 PART NO : _____
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审 核	秦皓	主 办	唐俐雅 Jul.28,2018
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客 户 承 认 栏			
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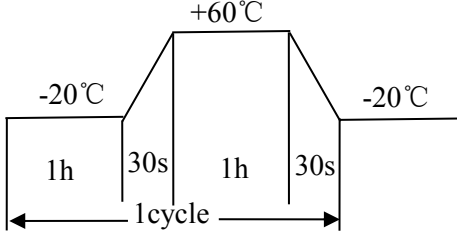
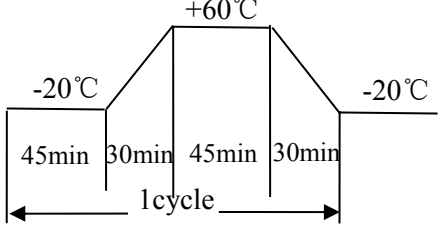
# A. MODEL: TDA-1511KC8KN33

## B. SPECIFICATION

Test condition: Temperature: 15~35°C Related Humidity:25~75% (GB/T9396-1996)

No.	Item	Specification	Condition
1	Dimension	15x11xH3.3mm	
2	Impedance	$8 \pm 15\% \Omega$	At 2KHz, 1V without baffle
3	Output Sound Pressure Level	$83 \pm 3\text{dB}$ ( 0.1Watt / 0.1Meter )	At 1.0, 1.2, 1.5, 2.0KHz in average (0dB SPL=20μPa)
4	Response Frequency	$1200 \pm 20\% \text{Hz}$	At 1V(Without Baffle)
5	Frequency Range	300 ~ 8KHz	
6	Distortion	$\leq 10\%$	At 1KHz, 0.1M, 0.1W
7	Power Rating	Normal: 0.5W Maximum: 0.8W	must be normal at a white noise (1W, F0-20KHz) for one minute
8	Operating temperature	- 20 ~ + 60°C	
9	Storage temperature	- 20 ~ + 60°C	
10	Abnormal Sound test	Must be Normal Tested By 2.0Vrms	
11	RoHS	The Speaker is RoHS compliant.	

## C. ENVIRONMENT TEST

No.	Item	Condition	Evaluation standard
1	High Temperature	After being placed in a chamber at $+60 \pm 2^\circ\text{C}$ for 96 hours	Being placed for 4 hours at room temperature, speaker shall be measured. SPL should not deviate by $\pm 3 \text{dB}$ , and nor any significant damage.
2	Low Temperature	After being placed in a chamber at $-20 \pm 2^\circ\text{C}$ for 96 hours.	
3	Humidity	After being placed in a chamber at $+40 \pm 2^\circ\text{C}$ and 90~95%(RH) Relative Humidity for 96 hours.	
4	Heat shock test	The part shall be subjected to 100 cycles. One cycle shall be consist of: 	
5	Temperature Cycle test	The part shall be subjected to 25 cycles. One cycle shall be consist of: 	

## D. MECHANICAL CHARACTERISTICS

No.	Item	Test condition	Evaluation standard
1	Drop Test	Mounted with dummy set mass:100g Height :1.5m Cycle:6(each plain) onto concrete board	SPL shall not deviate by $\pm 3$ dB from pre-test measurement, and nor any significant damage.

## E.RELIABILTY TEST

No.	Item	Test conditions	Evaluation standard
1	Load test	0.5W white noise(EIA filter) is applied for 96hours.	After test, SPL shall not deviate by $\pm 3$ dB from pre-test measurement,and nor any significant damage .

## F. MEASURING METHOD(SPEAKER MODE)

### F-1.Test Condition

#### (a)STANDARD:

Temperature : 15 ~ 35℃, Relative humidity : 45% ~ 85%,  
Atmospheric pressure : 860mbar to 1060mbar

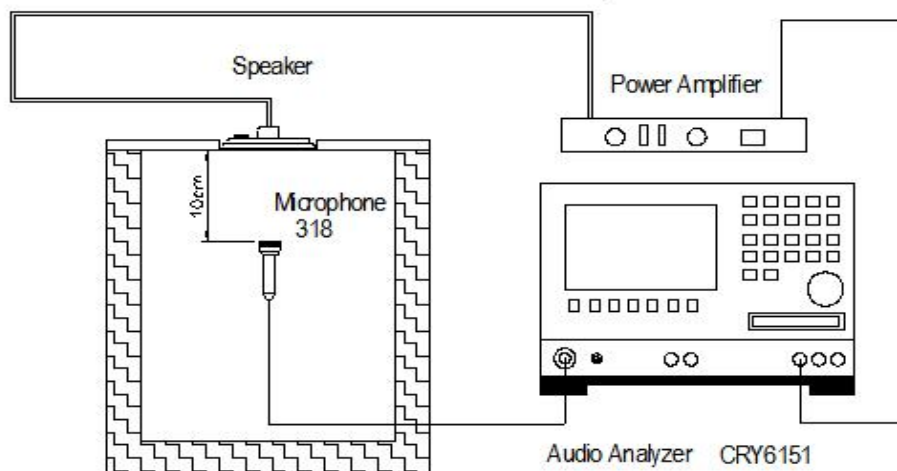
#### (b)JUDGEMENT:

Temperature :  $20 \pm 3$ ℃, Relative humidity : 60% ~ 70%,  
Atmospheric pressure : 860mbar to 1060mbar

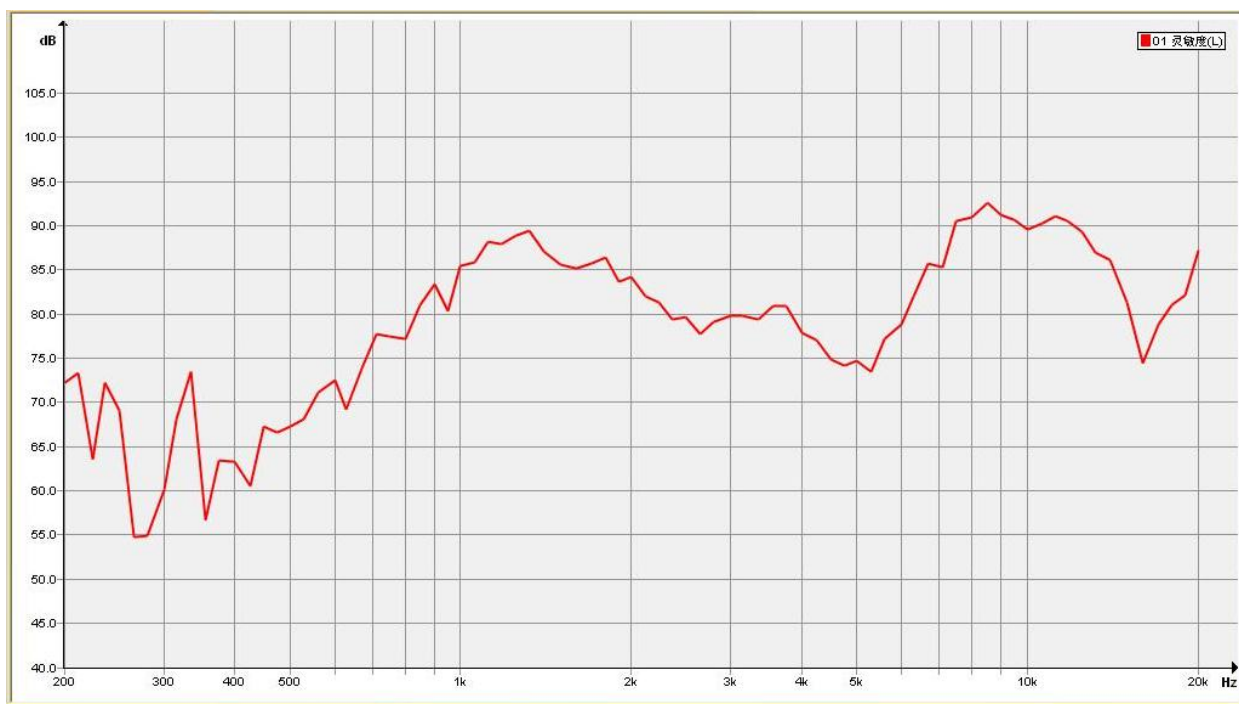
### F-2.Standard Test Fixture

- 1.Input Power :0.1W(0.89V)
- 2.Zero Level : -dB
- 3.Mode : TSR
- 4.potentiometer Range : 50dB
- 5.Sweep Time : 0.5sec

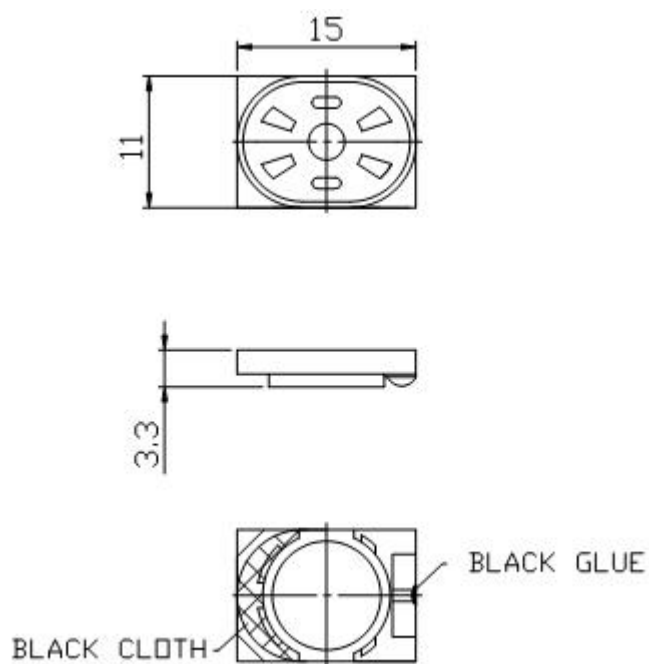
Standard test condition of speaker



## G.FREQUENCY CURVE



## H.APPEARANCE DRAWING



Unit:mm Tolerance :  $\pm 0.5\text{mm}$

