

REV.	DATE	PREPARED BY	CHECKED BY	APPROVED BY
暫定	08.12,2016	汪冬冬	林建宏	林建宏



SPECIFICATIONS

MODEL NO
OBO-40204F-01

PART NAME
DYNAMIC SPEAKER

SHEET
2 OF 8

MODEL NO : OBO-40204F-01

Features:Conformity RoHS Directive(2011/65/EU) Requests.

1. SPK General Specifications

Items	Spec.
Weight	Approx 90 Gram
Nominal Impedance	4 Ohm \pm 15% At 1000Hz. At 1V
Power Rating	Normal 5W. Maximum 8W.
Lowest Resond Frequency	500 \pm 150 Hz
Output Sound Pressure Level (S.P.L)	85 \pm 3 dB/1W/0.5M / 88 \pm 3 dB/5W/0.5M Average at 1000Hz.
Frequency Response Range	300~12000Hz Average SPL-20dB
Distortion	5% Max 1000Hz/1W/5W
Abnormal Sound Test	Must be Normal Tested by 4.48Volts. Sine Wave.
Polarity	Diaphragm shall move Forward when Apply a Positive DC Current to the “+” or “Marked” Terminal.
Operating Temperature	-25 $^{\circ}$ C TO +55 $^{\circ}$ C
Storage Temperature	-25 $^{\circ}$ C TO +55 $^{\circ}$ C

2. Buzzer General Specifications:

	Items	Spec.
1.1	Sound Pressure Level	85dB \pm 3 dB Min/3m/27VPP
1.2	Oscillating Frequency	4 \pm 0.5KHz
1.3	Current Consumption	8mA Max./27VPP
1.4	Tone	Continuous Tone
1.5	Operating Voltage	27VPP
1.6	Case Material	PC (UL 94V-0)
1.7	Operating Temp. Range	-25 $^{\circ}$ C TO +55 $^{\circ}$ C
1.8	Storage Temp. Range	-25 $^{\circ}$ C TO +55 $^{\circ}$ C

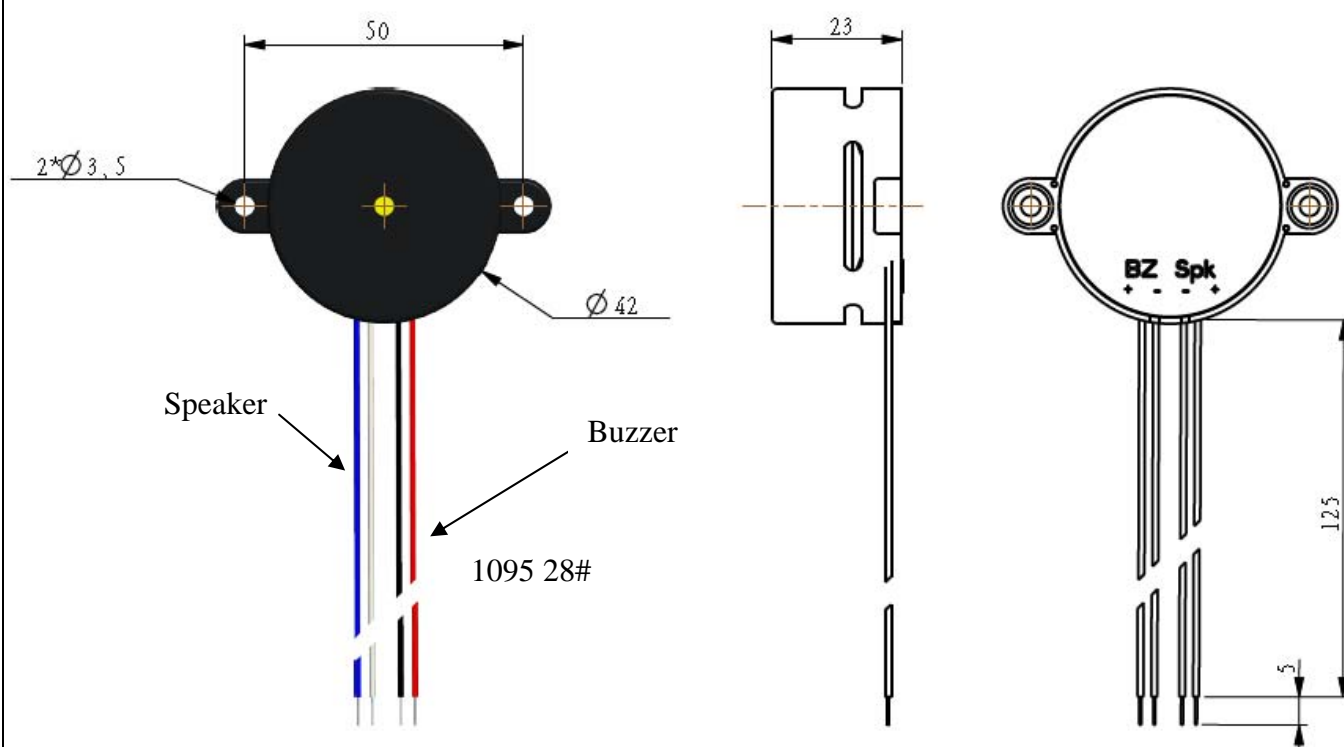
2. Environmental Test

Humidity Test	Temperature:	+40°C±3°C
	Relative Humidity:	90% ~ 95%
	Duration:	96 Hours
	Duration of recovery:	6 Hours
Temperature Cycle Test	Low Temperature:	-25°C±3°C
	High Temperature:	+55°C±2°C
	Duration of recovery:	1Hour
	Duration of Transfer Time:	Less Than 5 to 7Minutes
Load Test	Duration of Exposure:	1Hour
	Cycle:	5 Cycles
Drop Test	Pink Noise With Weighted Filter 4.48 Volts.(RSM) 96 Hrs	
	20~20000Hz Frequency Response	
Vibration Test	75cm Free Falling On Counter Floor,10 Times.	
	Frequency 30 ± 15 Hz, Amplitude 1.5 mm for 2 Hours per axis(x. y. z axis)	

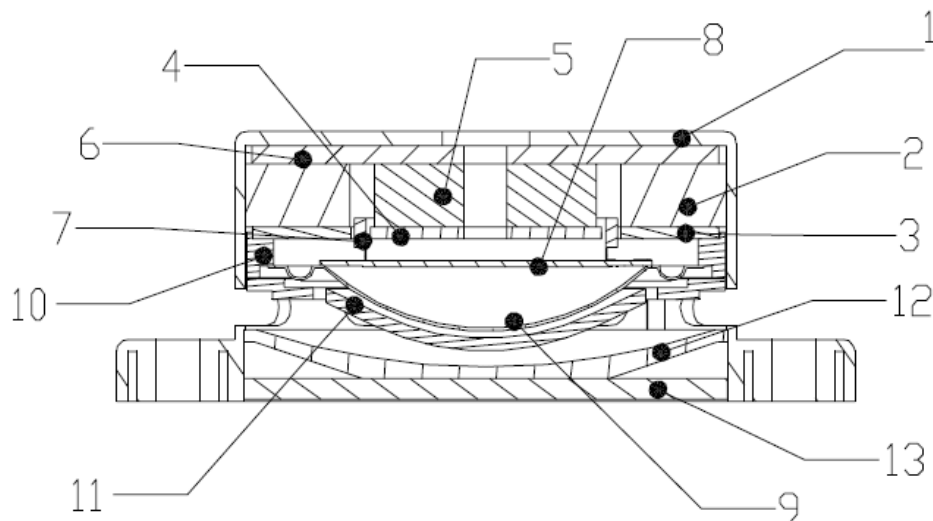
3. Appearance Drawing

3.1DIMENSIONS

Unit: mm Tolerance:±0.5

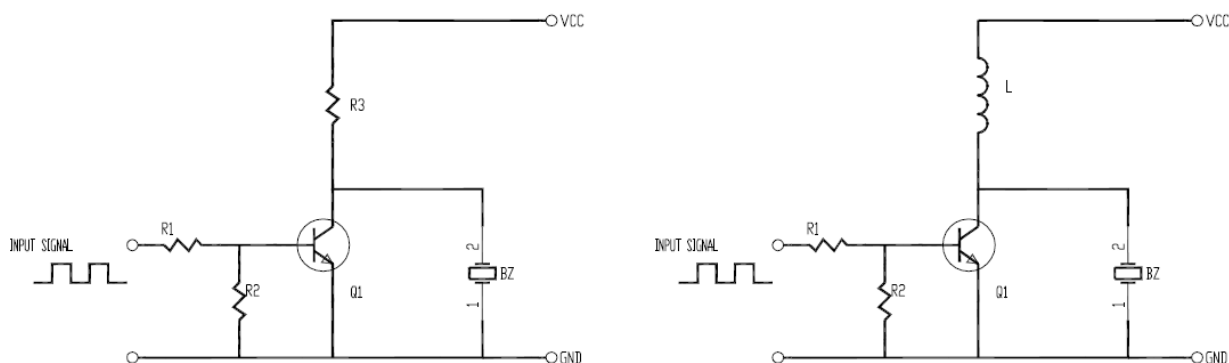


3.2 Speaker& Buzzer Construction



13	PCB	FR4	1
12	Reflection cover	PC (UL 94V-0)	1
11	Horn cover	PC (UL 94V-0)	1
10	Bracket	PC (UL 94V-0)	1
9	DIAPHRAGM	Resin	1
8	Buzzer	ceramics	1
7	VOICE COIL	KSV	1
6	WASHER 1	SPCC	1
5	MAGNET 2	NdFeB	1
4	WASHER 3	SPCC	1
3	WASHER 2	SPCC	1
2	MAGNET 1	Fe3O4	1
1	Under cover	PC (UL 94V-0)	1
NO	PART NAME	MATERIAL	Q'TY

3.3Recommended Driving Circuit:

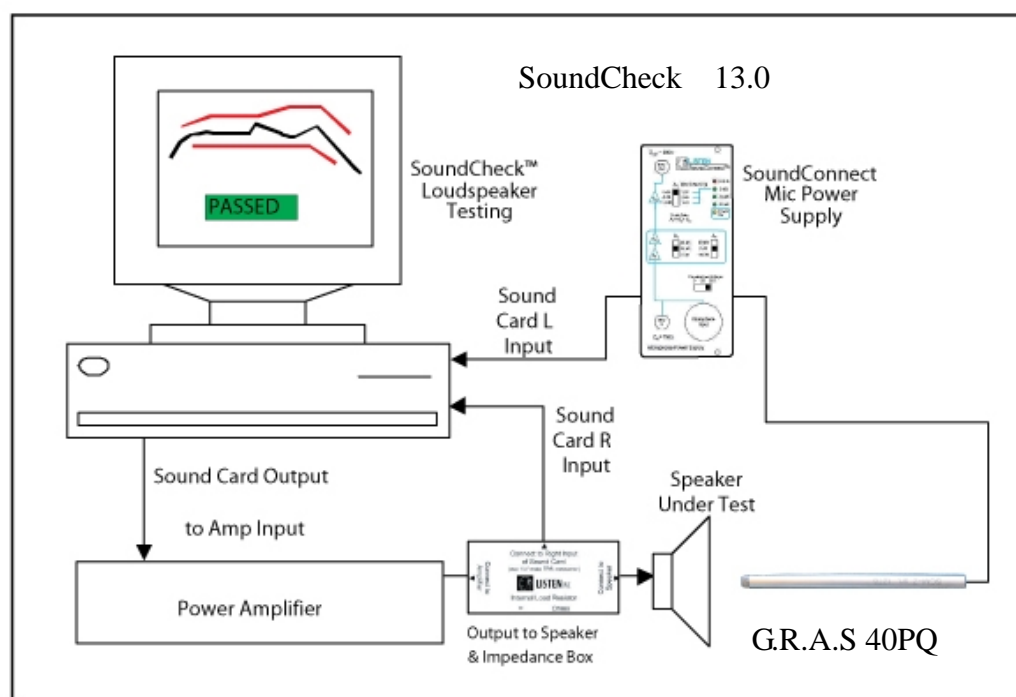


4. Test Method

4.1 Measurement Diagram

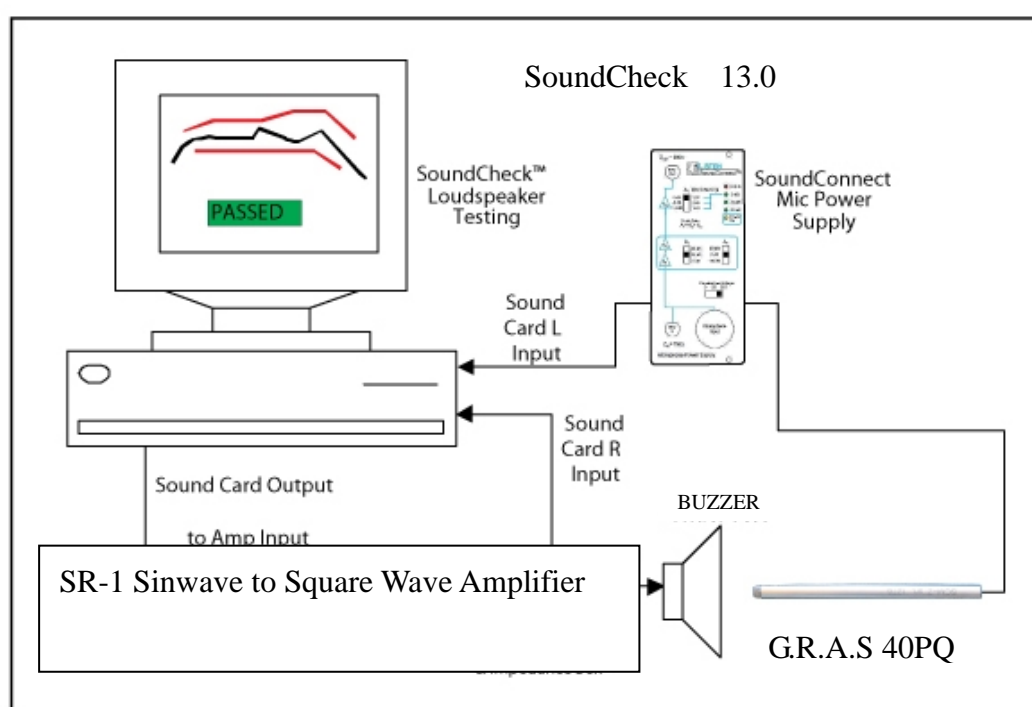
Electroacoustic

SPK Testing Adapter

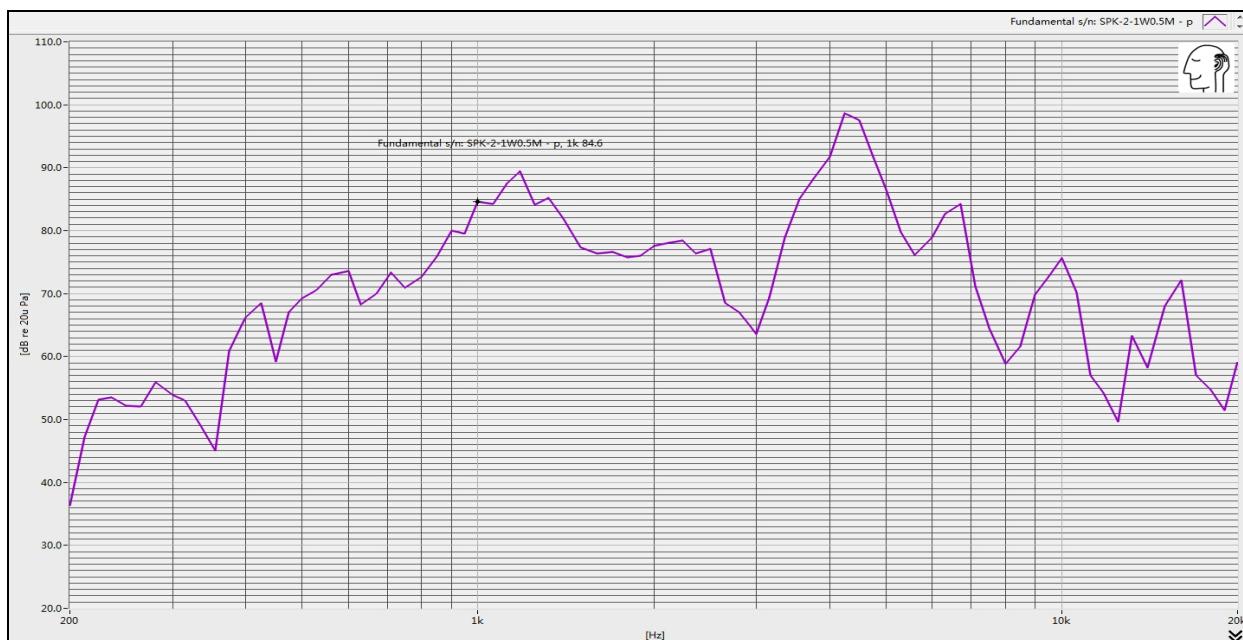


Electroacoustic

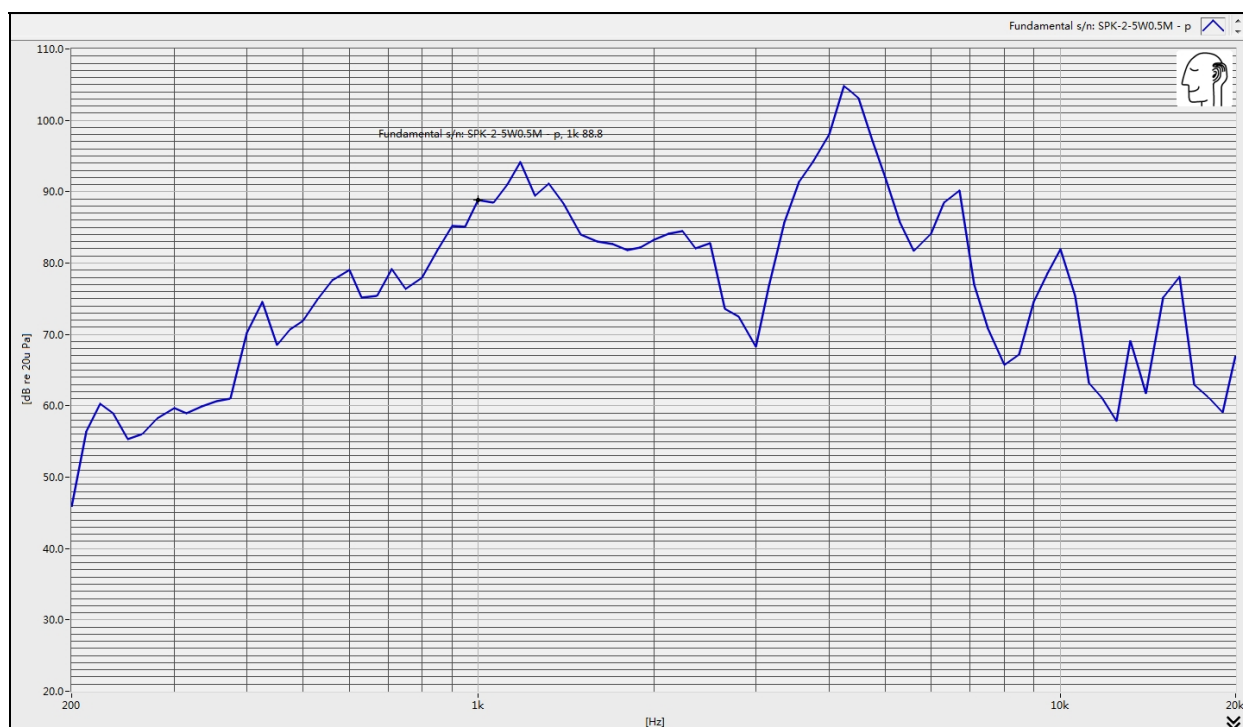
Buzzer Testing Adapter



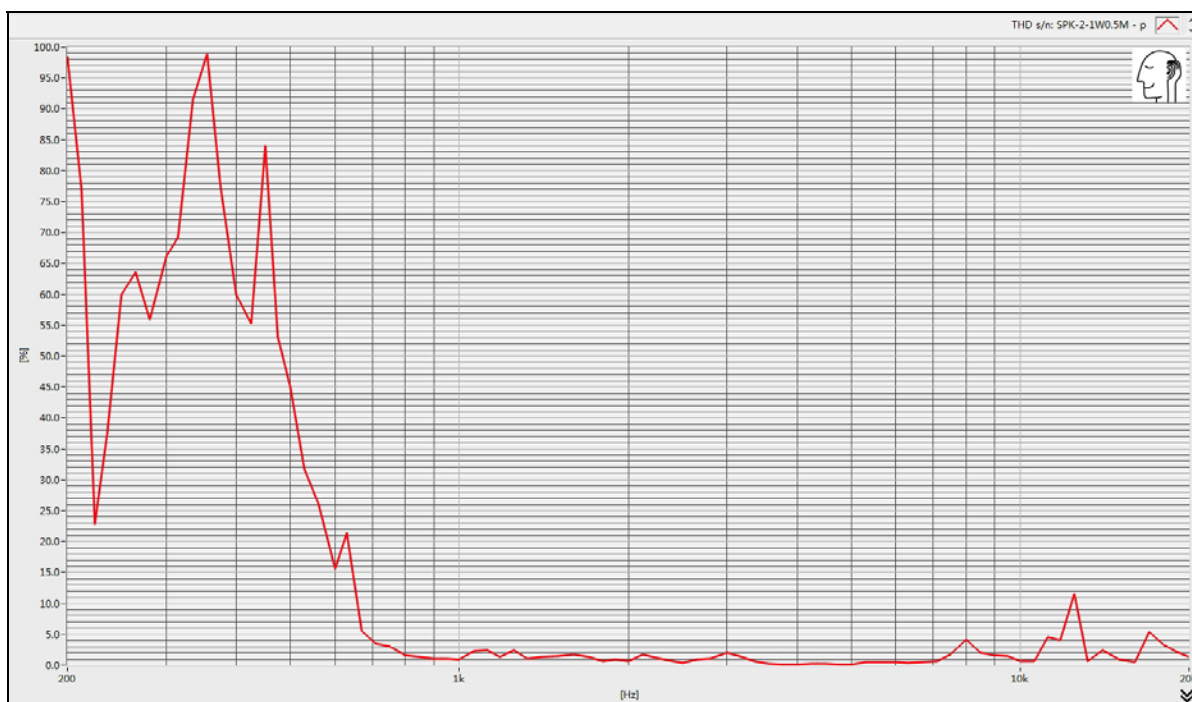
5.1 SPK curve-1w0.5m



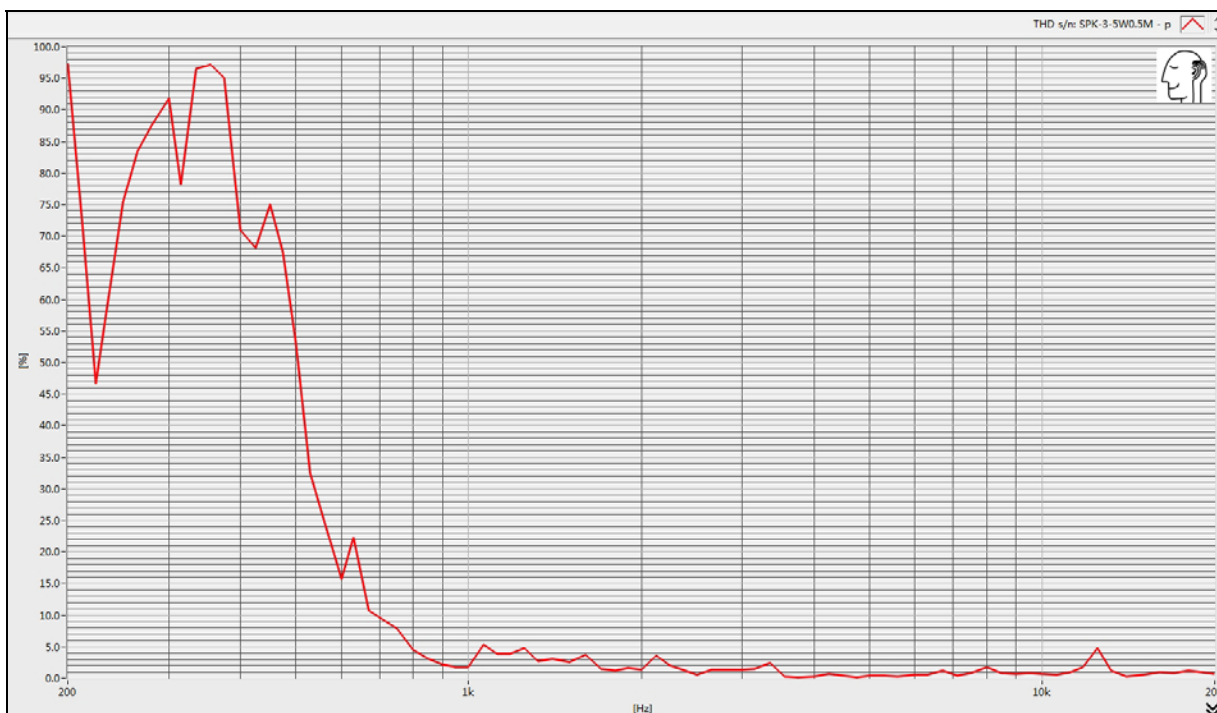
5.2 SPK curve-5w0.5m



5.3 SPK THD curve-1w0.5m



5.4 SPK THD curve-5w0.5m





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5.5 Buzzer curve- 27Vpp/3m

