



# Round Loudspeaker

$\text{Ø}36 \times 5.8\text{mm}$

**SOC36S05B8-1**

## Revision

Date	Version	Status	Changes	Approver
2011 /07/21	V0.1	Draft	First release	LC
2011/09/01	V0.2	Draft	Add per weight and testing condition	LC
2020/04/30	V0.3	Draft	Update PCB	AX
2020/5/6	V0.4	Draft	Update F0 tolerances	AX

项目 ITEMS	规格 TEST SPECIFICATIONS	测试条件 TEST CONDITIONS
1、尺寸 DIMENSIONS	Φ 36 mm	参照外形装配图 PER SPEAKER CONSTRUCTION DWG.
2、主要材料 MAIN MATERIAL	盆架 BASKET	● METAL      ○ PLASTIC ○ OTHER:
	磁钢 MAGNET	Φ 12.5×1.5mm ○ FERRITE      ● Nd-Fe-B ○ Al-Ni-Co      ○ OTHER:
	纸盆 CONE	○ 全纸盆 PAPER      ● MYLAR      ○ OTHER
		○ 复合盆 COMPOUND
3、总重量 TOTAL WEIGHT	9.5 ± 2 g	
4、功率 POWER	额定功率 NORMAL POWER : 1 W 最大功率 MAX POWER : 1.5 W	
5、阻抗 NORMAL IMPEDANCE	8 Ω ± 15%	AT 1 KHz/1.0V
6、纯音检测 SINA SIGNAL OPERATION	不允许有任何杂音 THERE SHALL NOT BE EXTRANEIOUS NOISE	2.83 V/RMS FROM FO TO 10 KHz(≥0.3m)
7、共振频率 RESONANT REQUENCY	380Hz ± 20%	AT 1.0 V, Constant Voltage
8、特性灵敏度 S.P.L.	88 dB ± 3dB	AT 0.1W / 0.1 M@ (0.6/0.8/1.2/1.5KHz) Ave
9、频响范围 FREQUENCY RANGE	300Hz ~ 20 KHz	AT 0.1W / 0.1 M, MAX : 20 dB
10、IP 等级 IP LEVEL		
11、失真 THD	≤12%	FROM 600Hz-5kHz, 1W/0.1m
12、极性 POLARITY	纸盆向正面移动 THE CONE SHALL MOVE UPWARD	正电流接于“+”上 WHEN APPLIE POSITIVE POTENTIAL TO THE (“+”)
13、存储与运输 TRANSPORTATION AND STORAGE	GUARANTIED TEMPERATURE RANGE: Tmax= +60°C, Tmin= -25°C	
NOTE: Above measuring condition under temperature: 15~35°C,R.H. 25 ~75%.		
ENDURANCE AND MECHANICAL TEST		
14、连续负荷测试 LOAD TEST	WHITE NOISE 1 W APPLIED FOR 96 H	
15、高温测试 HIGH TEMPERATURE	+ 60 ± 3 °C HUMIDITY RANDOM FOR 96 HOURS.	
16、低温测试 LOW TEMPERATURE	-25 ± 3 °C HUMIDITY RANDOM FOR 96 HOURS.	
17、潮湿测试 HUMIDITY	+ 40 ± 3 °C RELATIVE HUMIDITY (RH) 90 ~ 95 % FOR 96 HOURS.	
NOTE: After test, leave speakers at room temperature for 1 hour, and speakers meet above item 5,6,7,8.		
18、跌落测试 DROP TEST	SPEAKERS PROPERLY PACKAGED IN THEIR SHIPPING CARTON ARE DROPPED ON EACH SIDE OF THE CARTON EXCEPT THE TOP FROM A HEIGHT OF 80CM (CARTON GW≤10kG) OR 60CM (10kG<CARTON GW≤25kG)	
NOTE: After test, there shall be no buzz/rattle and the speakers shall not exhibit any physical damage.		
19、环境有害物质控制 ENVIROMENT HARMFUL MATERIAL CONTROL	RoHS COMPLIANT	

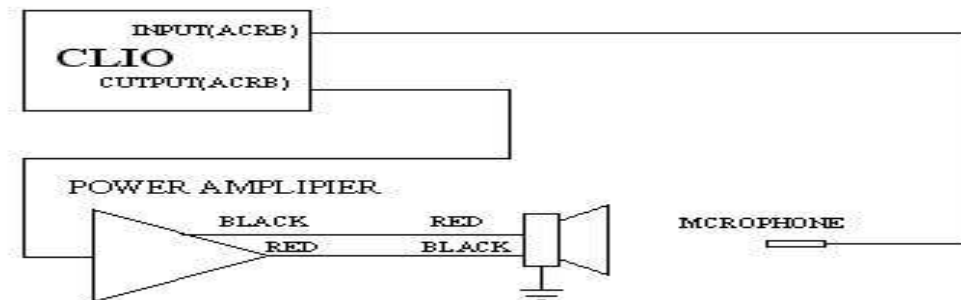
## Test method and User precaution

### 1. Characteristics measurement environment condition

1.1 Except other specified, measuring are under temperature 15~35°C, R.H. 25 ~75%, air pressure 86~106kPa.

1.2 Judgement condition temperature 20 ±2°C, R.H. 63~67%, air pressure 86~106kPa.

### 2. Output Sound Pressure Level (S.P.L.) and distortion testing setup



Speaker to mounted on a standard IEC268-5 baffle in an anechoic chamber

### 3. Endurance & Mechanical test:

#### 3.1 Load test:

Speaker should not fail after applying 20 ~ 20K Hz white noise rated power input (RMS) for 96 hours, then leave the speaker at room temperature for 1 hour, speaker shall meet item 5,6,7,8.

#### 3.2 High Temperature:

After exposure the speaker in the high temperature chamber on condition described as item 15 for 96 hours, then leave the speaker at room temperature for 1 hour, the speaker shall meet item 5,6,7,8.

#### 3.3 Low Temperature:

After exposure the speaker in the low temperature chamber on condition described as item 16 for 96 hours, then leave the speaker at room temperature for 1 hour, the speaker shall meet item 5,6,7,8.

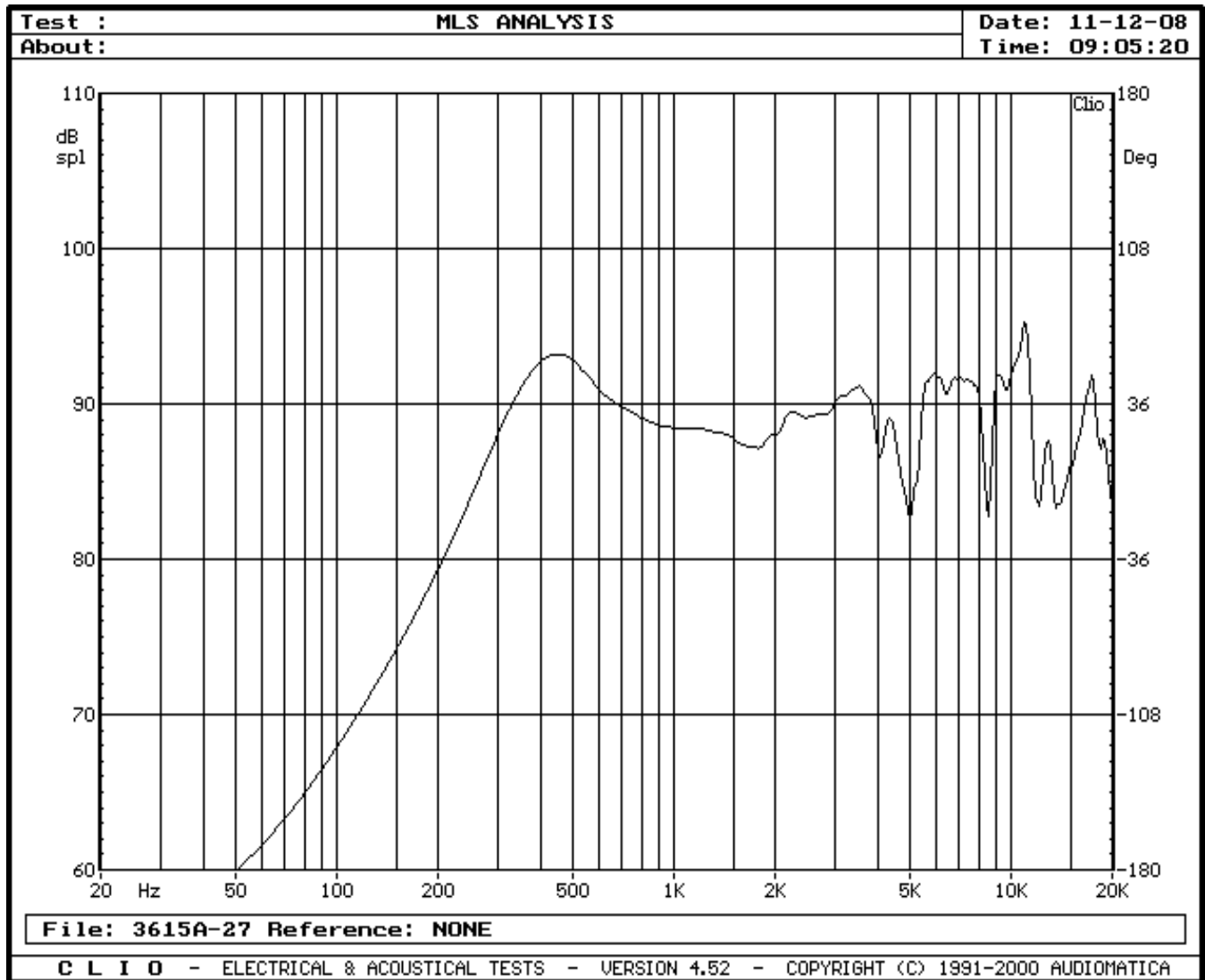
#### 3.4 Humidity:

After exposure the speaker in the chamber on condition described as item 17, for 96 hours, then leave the speaker at room temperature for 1 hours, the speaker shall meet item 5,6,7,8.

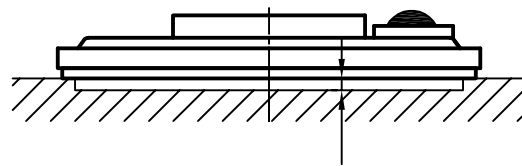
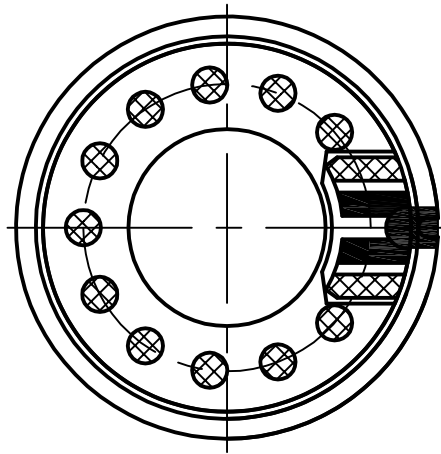
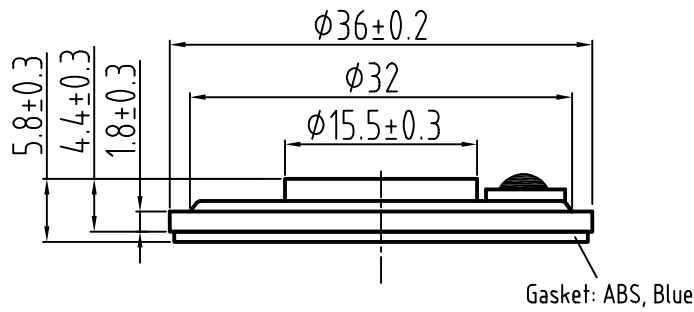
#### 3.5 Drop test:

Speakers properly packaged in their shipping carton are dropped on each side of the carton except the top from a height of 80cm (carton  $GW \leq 10\text{kg}$ ) or 60cm ( $10\text{kg} < \text{carton } GW \leq 25\text{kg}$ ), after test, there shall be no buzz/rattle and the speakers shall not exhibit any physical damage.

## TYPICAL FREQUENCY RESPONSE CURVES



# DRAWING



At least 0.8mm for membrane moving.  
Condition: Sina wave signal input, max power.

				RoHS Compliant	
				Tolerance is not marked	
			below 6	$\pm 0.2$	>6 to 30 $\pm 0.3$
			>30 to 80	$\pm 0.5$	>80 to 120 $\pm 0.8$
			>120 to 250	$\pm 1.0$	>250 $\pm 1.3$
NO	Date	Description		Scale	1:1
NAME	SPEAKER	PN	SOC36S05B8-1		