

DONGGUAN INGHAI ELECTRONICS CO.,LTD

Our Part No : GSPK3005TN

A. 型号/PART No

该规格书适用于移动电话等使用的扬声器单元。

This Specification Applies to The Speaker, Used In Mobilephone sec.

B. 尺寸/TYPE

30mm圆形喇叭 电动式/ 30mm Rectangle Dynamic type

C. 尺寸与重量/DIMENSION

尺寸: 参考外观图面 (Figure.1)

Dimension: Refer To The Appearance Drawing. (Figure.1)

重量: $\pm 0.1g$

Weight: $\pm 0.1g$

D. 标准测试条件/STANDARD TEST CONDITION

在没有其他特别指定时, 测试应如下所记的标准测试条件下进行。

Unless Otherwise Specified, The Test Shall Be Made Under The Standard Conditions.

- 温度/Temperature : $17^{\circ}\text{C} \sim 25^{\circ}\text{C}$ (Standard: 20.5°C)
- 相对湿度/Relative Humidity : $45\% \sim 85\%$ (Standare: 65%)
- 大气压力/Pressure : 86Kpa~106Kpa (Standard: 101.3 Kpa)

E. 使用与储存温度/OPERATION AND STORAGE TEMIPERATURE

- 使用温度/Operation Temperature : $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$
- 储存温度/Storage Temperature : $-30^{\circ}\text{C} \sim 70^{\circ}\text{C}$

F. 电气特性规格/Electrical Specification

参考特性规格页面/Refer To The Appearance Page

G. 外观与尺寸: 参考附图

Appearance&Dimensions: Refer To The Apprarance Drawtng (Figure.1)

H. 额定/Rated

项目/Items	规格/Specification	条件/Conditions
额定阻抗/Rated Impeance	$4/8/16\ \Omega \pm 20\%$	at 1kHz 100 mV
额定输入功率/Rated input power	0.5/1/1.5/2W	

最大输入功率/Max input power	2.5W	
最低共振频率/Resonant Frequency	650±20% Hz	1V Input
灵敏度/Sound pressure level	116dB±3dB at 1KHz (0dB SPL=20μPa)	SPL at 1.0kHz in Average (0dB SPL=20μPa) Measuring condition: 0.5W (Sine wave) 0.1m measured with baffler shown in Figure3
有效频率范围/Frequency response	200~5000Hz	
总谐波失真/THD	≤5% at 1kHz	at 1kHz 0.2V

I. 动作检查/OPERATIONAL TEST

项目/ITEM	信号/SIGNAL	输入/INPUT	扫频范围/SWEEP RANGE
SWEEP TEST	Sine Wave	0.5/1/1.5/2W (4.7V)	200~5000Hz

- 在动作检查中不得有异常音出现
- Without Abnormal Sound In Operation Test.

J. 负荷实验/LOAD TEST

项目/ITEM	信号/SIGNAL	I 输入/INPUT	驱动时间 DRIVING TERM
Continuous load Test	With Noise/Jis Filter (Refer To Jis C5531)	0.5/1/1.5/2W (4.7V) (RMS)	96hours (wlth 5cc test box)

- 在负荷实验 后不得有异常音出现,灵敏度应保持在限度范围内。
- Without Abnormal Sound After Test, And The S.P.L Shall Be In The Limit.
- 负荷实验应使用粉红噪声信号
- Runing Test Shall Use pry Noise Signaln

K. 可靠性实验/Reliability Test

项目/Item	规格/Specification	判定/Judgement
高温放置实验 Hightemp.Storage Test	85℃±2℃/20~40%RH/96HR & 20℃±5℃,1H	实验完成后产品应满足上述第 H, I, J 项要求. Clause H, I, J Shallbe Satisfied Afer Test
低温放置实验 Lowtemp.Storage Test	-40±2℃/20~40%RH/96HR & 20℃±5℃,1H	
耐湿实验 Humidity Test	40℃±2℃/90~95℃RH/96HR & 20℃±5℃, 1H	
耐高温负荷实验 Heatrunning Test	85℃±2℃/20~40%RH/-	

耐低温负荷实验 Coldrunning Test	-40℃±2℃/20~40%RH/-	
热冲击实验 Thermalshock Test	+85℃±2℃—30℃±2℃—+85℃±2℃ 5Cycles	
震动实验 Vibration Test	10Hz—10Hz—10Hz/60s, 1.0mm (X: 2H, Y: 2B)	

L. 跌落实验/SHOCK TEST

项目/Item	条件/Condition	判定/Judgement
Drop Test	产品在包装状态下,从 1 米高处向混凝土地面跌落:1角:1次:3边:每条边 1 次:6面:每 1 面 1 次 Speaker Shall Be Packed In The Carton And Dropped The Concrete Floor(H:1m)	实验完成后新产品应满足上述第 I 项要求 Clause I Shallbe Satisfied After Test

M. Product Size

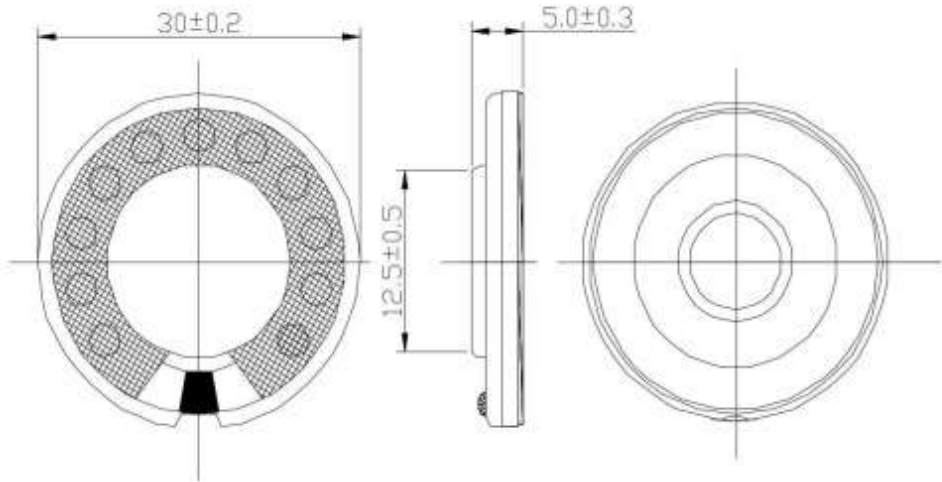
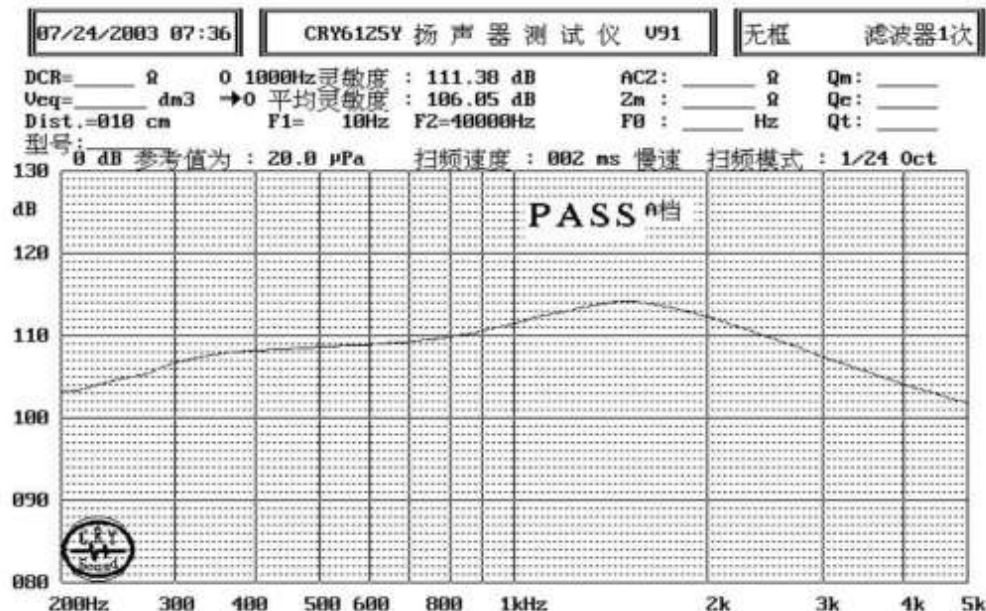


Figure.1

ITEM	DESCRIPTIONS	SPEC.	SUPPLIER	QTY	REMARK
1	Front foam ring	Adhesive		1	
2	Front cover	1Cr18Ni9		1	
3	Diaphragm	PET		1	
4	Voice coil	Self-bonding wire		1	
5	Inner pole shoe	08F ₂		1	
6	Magnet	Nd-Fe-B		1	
7	U YOKE	SPCE		1	
8	PCB	T0.3		1	
9	Lead wire	/		2	

10	Yoke assembly	PBT, black		1	
11	Insulator pad	Mylar		0	

N. Product testing curve



FREQUENCY MEASURING CIRCUIT AND EAR PIECE

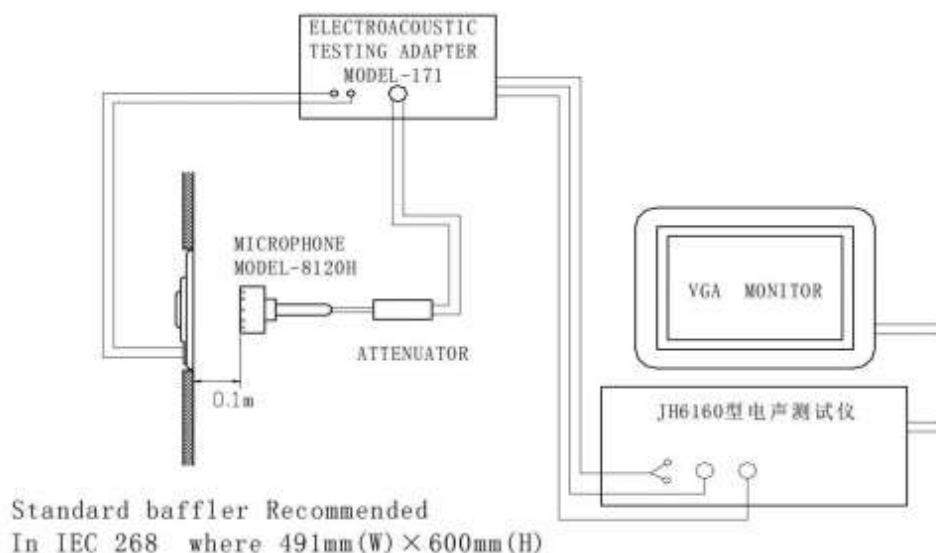


Figure 3