



Product Specification

Product Name:	SMD Speaker	
Part Number:	SES-13S04-8N0.7R	(8Ω 0.7W)
Version:	Rev. 1	
Date:	2014-8-18	
Note:		

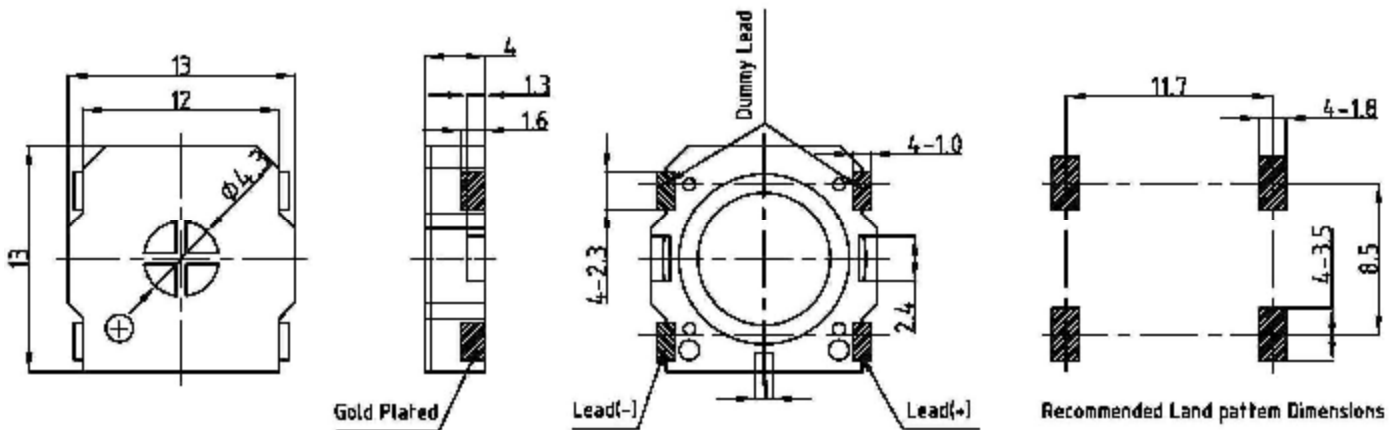
Company passed ISO 9001 / ISO TS16949 / ISO 14001 Certifications

Revision History

Rev.	Description	Author/Date	Checked By	Approver
1	Released	Lv Wenbin Aug. 18. 2014	Zhao Pengsen	Wang Jiancheng

1. Part Number : SES-13S04-8N0.7R

2. Dimension Drawing:



Unit: mm

Tolerance: ± 0.3

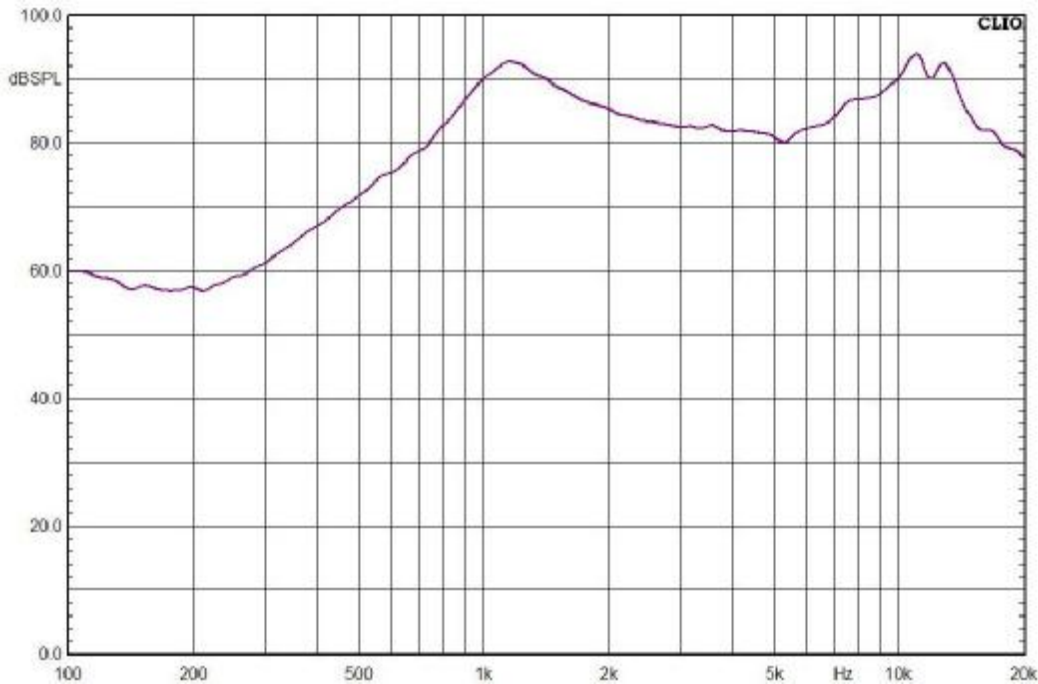
3. Specification :

No.	Items	Specification		
3-1	Rated Impedance	$8\Omega \pm 15\%$		
3-2	Resonant Frequency (f_0)	$900 \pm 20\%$ Hz		
3-3	Sound Pressure Level(S.P.L)	$87\text{dB} \pm 3$ 0.7W / 0.1M (at 1K,1.6K,2K,3.2K Hz average)		2.37V
3-4	Rated Frequency Range	$f_0 \sim 20\text{kHz}$	S.P.L-10dB	2.37V
3-5	Rated Harmonic Distortion	$< 5\%$ at 1kHz		2.37V
3-6	Rated Power	0.7 W (2.37Vrms)		
3-7	Maximum Power	1.0W (2.83Vrms)		
3-8	Appearance Normal	@ A.T. 15~35°C, H.M. 25~75%, B.P. 86~106kPa		
3-9	Buzzes & Rattles	Must be normal at sine wave 2.37 Vrms		
3-10	weight	1.1g		

NOTES :

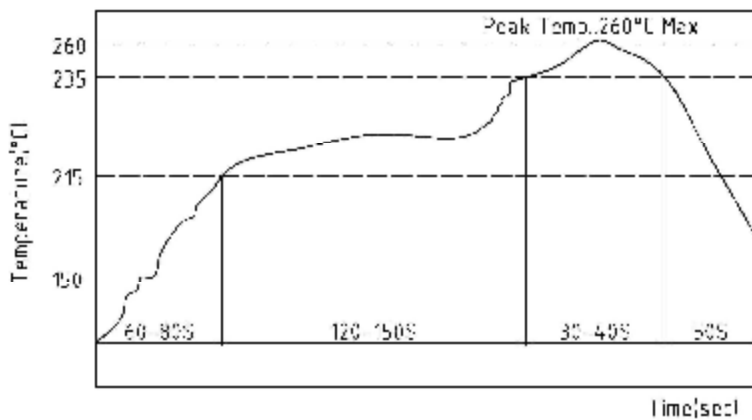
1. Test in anechoic room and use the IEC standard baffle which size at : 1350 mm (W) X 1650 mm (H)
2. Test should be made under the conditions of room temperature (20 ± 10 °C), relative humidity ($60 \pm 20\%$) and normal atmospheric pressure. In this case, however, that the judgment is questionable, the test conditions are to be changed to room temperature 20 ± 2 °C, relative humidity 60~70% and normal atmospheric pressure.

4. Typical Frequency Response Curve:



5. Reflow condition:

reflow soldering



Preheating: 215 °C for 120-150 seconds.

Soldering Temperature: 235 °C for 30-40 seconds.

Peak Soldering Temperature: 260 °C max for 10 seconds.

6. Reliability Test:

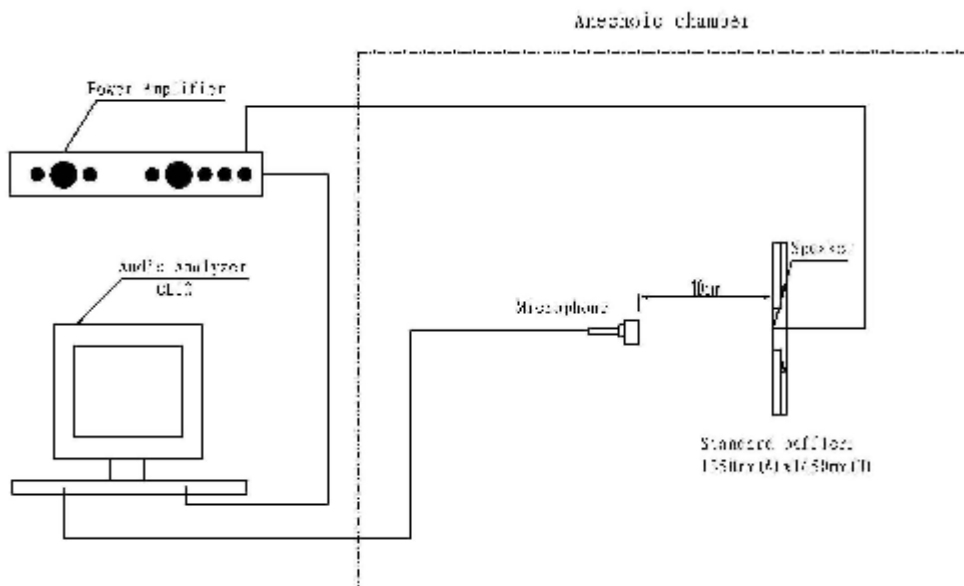
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No.	Item	Method of Test
6-1	Operating Temperature	-30°C ~ +85 °C
6-2	High Temperature Test	Keep 96 hours at +85°C±3°C and leave 3 hours in normal temperature and then check.
6-3	Low Temperature Test	Keep 96 hours at -40°C±3°C and leave 3 hours in normal temperature and then check.
6-4	Humidity Test	Keep 96 hours at +40°C±3°C relative humidity 92-95% and leave 3 hours in normal temperature and then checked.
6-5	Temperature Humidity Cycle	<p>The part shall be subjected 5 cycles. One cycle shall be 12 hours and consist of.</p>
6-6	Vibration	10~55~10 Hz sin-wave sweep 15 min. 5G(constant). X,Y,Z 3 direction. 2 hours each, total 6 hours.
6-7	Free Drop Test	Free drop from 100 cm height to the concrete floor X,Y,Z 6 direction. 5 times each, total 30 mites.
6-8	Load Test	Rated Power White noise is applied for 96 hours.
6-9	Max Power Test	Max power 1 min. on – 2 min. off 10 cycle.

Criterion:

After these test, the change of S.P.L shall be within ±3 dB

7. Electrical Testing Method:



8. Packing Information:

NO.	Item	Description
8-1	Tape type in formation	a) The design for such tape packing was executed under standard IEC-268-3. b) The material of the tape is polystyrene in black color. Detailed dimensions are as below (see figure8-1).
8-2	Dimensions of the rolling plate	a) The material of the rolling plate is paper. b) The dimensions of the rolling plate are as below(see Figure8-2)
8-3	Packing dimensions and quantity	a) The rolling plate is put into a 340x335x35mm inner packing box and is packed with 750pcs of speaker per plate. b) The dimension of the outer carton is 400x350x350mm containing 1 0inner boxes with a total quantity of 7500 pcs of speaker. c) The total gross weight per carton is 13.5Kgs, while net weight is 8.3Kgs.

Figure 8-1 (unit:mm)

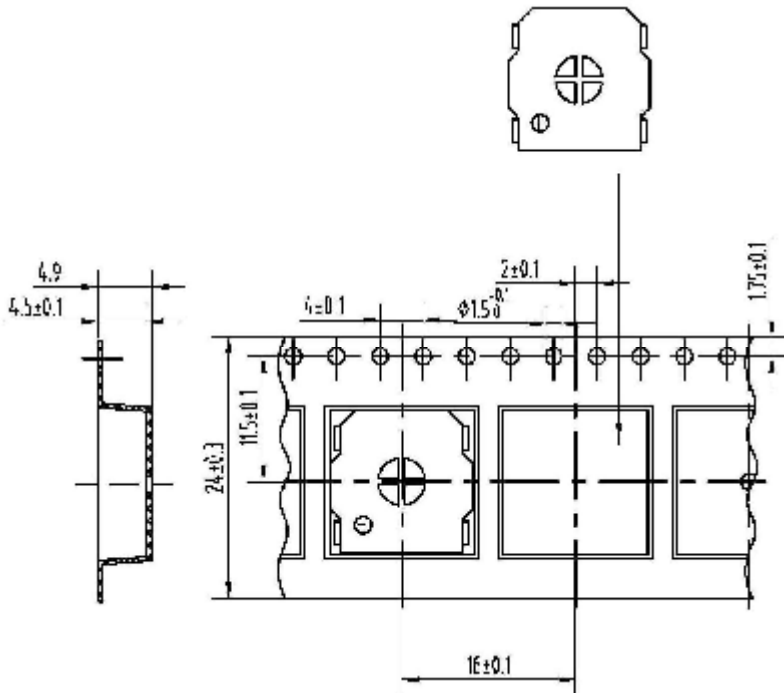


Figure 8-2 (unit:mm)

