

Specification

Part Number: TS121043

Description: Loudspeaker (Size: L70mm x W70mm x H24.3mm)

RoHS Compliant

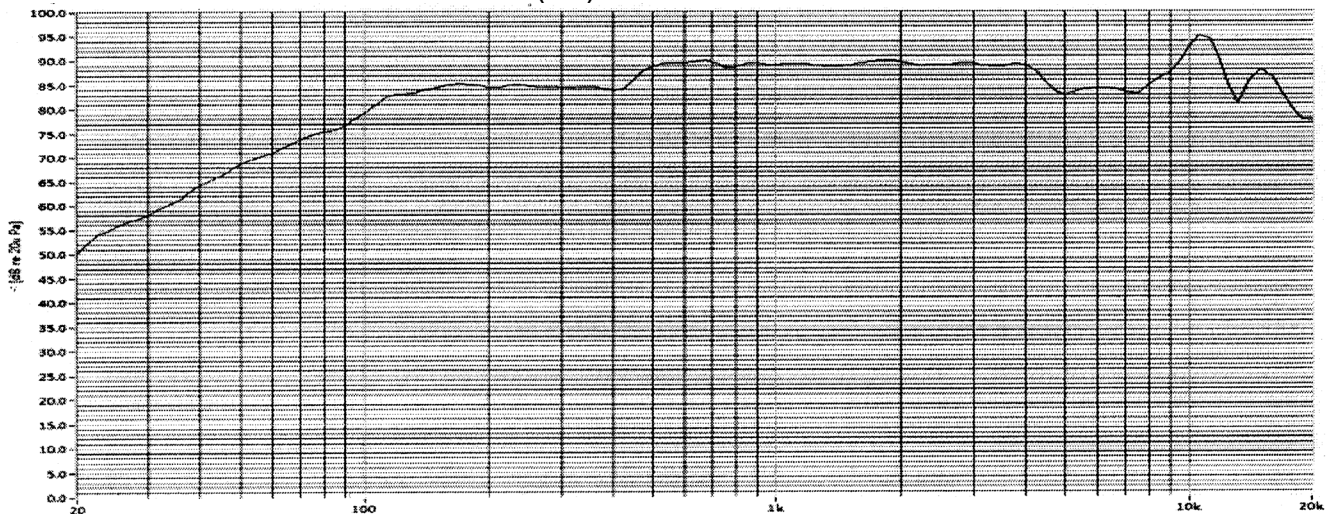
Revision	Date	Comments
A	March 15, 2024	Released for Production

1	General	
1.1	Scope	This specification defines all design requirements for the TS121043 loudspeaker.
1.2	Test Conditions	Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are 5°C~35°C, 25%~85%RH , 860~1060HPA

2	Acoustic and Electrical Specifications		
2.1	Nominal Impedance	4±0.6Ω	1.0V / 1kHz
2.2	Resonance Frequency	95±19Hz	At 1.0V
2.3	Output SPL	90±3dB SPL	1W (2V) / 0.5m / 800, 1000, 1250, 1600 Hz Avg
2.4	Rated Input Power	15W	7.75V
2.5	Max Input Power	20W	8.94V
2.6	Frequency Response and Deviation	100Hz~20kHz	Output SPL - 10dB
2.7	Buzz and Rattle	No audible buzz or rattle	Sine Wave Sweep at 7.75V / 50Hz~2kHz
2.8	Distortion	100Hz: 6% Max 200Hz~10kHz 3% Max	At 1W (2.0V) / 0.5m
2.9	Polarity	When a positive DC current is applied to the voice coil terminal marked +, the diaphragm shall move forward	

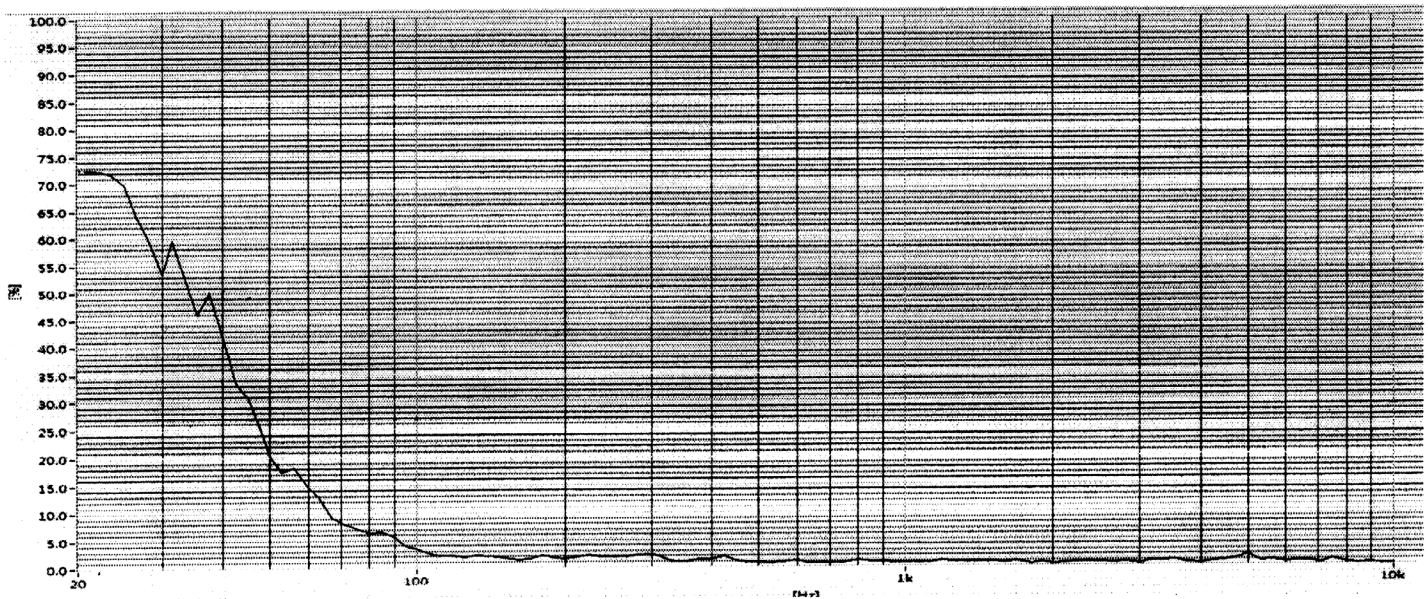
3.1 Frequency Response

1W (2V) / 0.5m / IEC Baffle

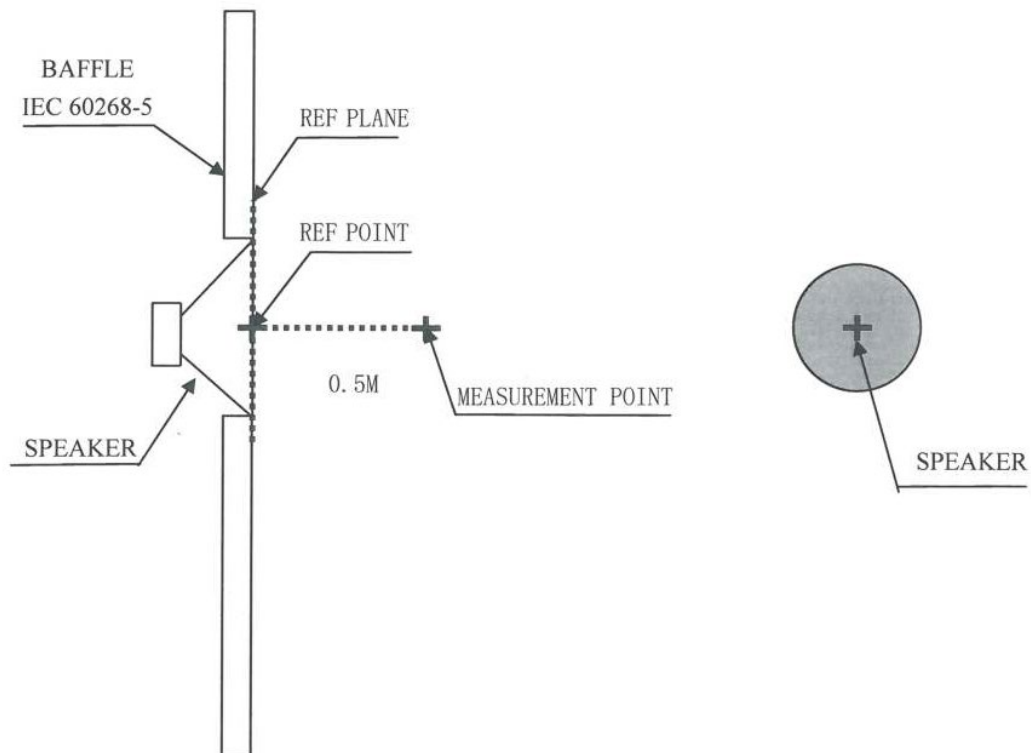


3.2 THD

1W (2V) / 0.5m / IEC Baffle



3.3 Measurement Setup



4 Environmental Characteristics		
4.1	Sweep Test	No buzz or extraneous noises Test Signal: 7.75Vrms (15W) Sine wave 50Hz~2kHz in free air
4.2	Power Test	IEC Pink Noise with 50Hz HP, 96 hours
4.3	Max Power Test	Placed in environmental chamber at $+23\pm3^{\circ}\text{C}$ 20W (10.95V) in free air Pink Noise: 1 sec on, 60 sec off, 60 cycles
4.4	High Temperature Test	96 hours in test chamber at $+85\pm2^{\circ}\text{C}$
4.5	Cold Temperature Test	96 hours in test chamber at $-40\pm3^{\circ}\text{C}$
4.6	Humidity Test	96 hours in test chamber at $+50\pm2^{\circ}\text{C}$, 91~95%RH

5 Mechanical Drawing

