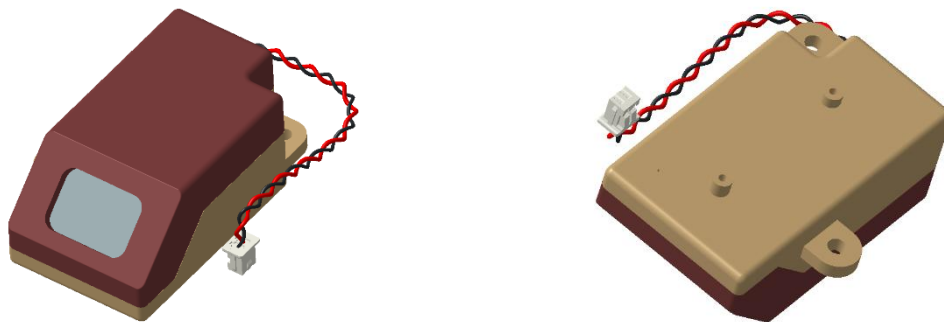



Part Number: BOX260520

Description: Speaker box with 11X15 mm speaker with wire and connector



Specification Approval

	Name & Position	Signature	Company	Date
Created by	William Gu – Project engineer	William Gu	Seltech	2026-05-20
Approved by	Lionel Francois – Project Manager		Seltech	2026-05-20

Customer Verification

	Name & Position	Signature	Company	Date
Verified by				
Approved by				

Revision

Date	Version	Modified by	Changes
2026-05-20	V1.0	Lionel Francois	First release

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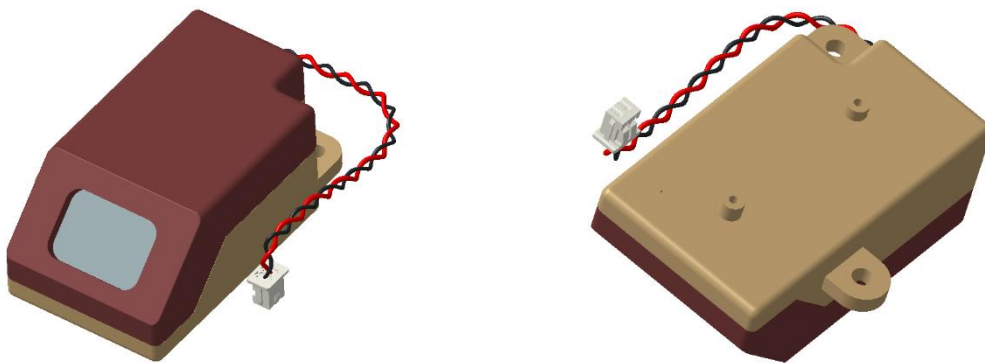
1. Material List

S/N	Item Number	Description	Usage
1	CR1511S035YN6Z	15*11*3.5mm speaker	1
2	TOPBOX260520	Top casing – ABS777D	1
3	BOTTOMBOX260520	Bottom casing – ABS777D	1
4	MESH3DA	Mesh for venting hole	1
5	WIRE260520	Wire UL3302 AWG30 – Red and black–Molex 51021	1

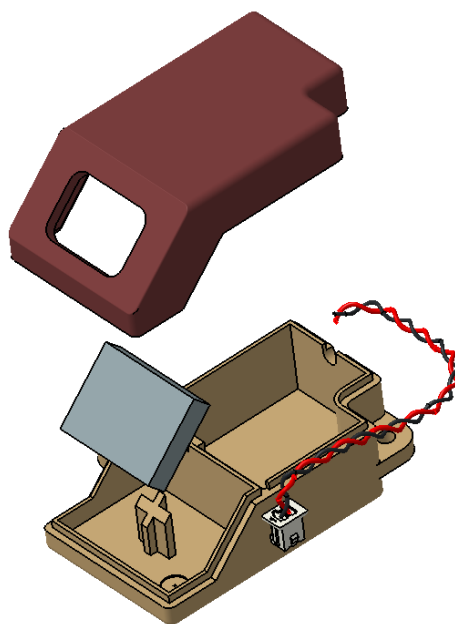
2. Mechanical Characteristics

2.1. Mechanical Drawing

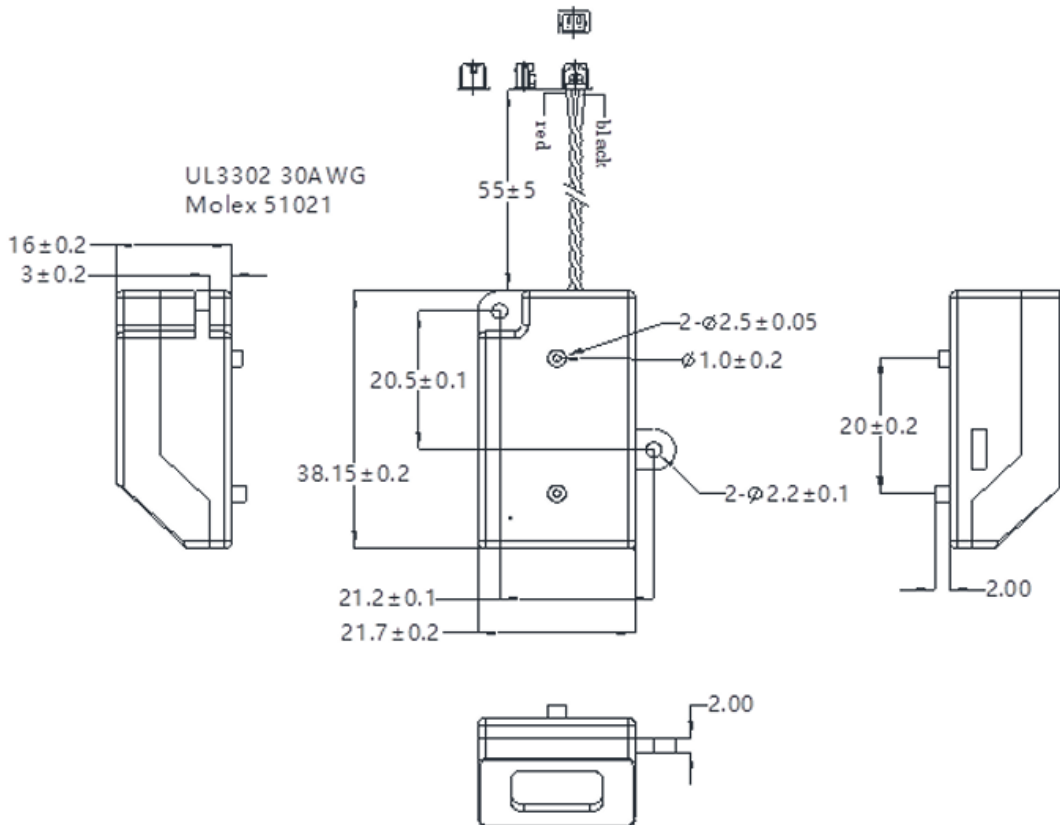
2.1.1. 3D overview



2.1.2. Exploded view



2.1.3. 2D drawing



Tolerance: +/- 0.5mm unless specified

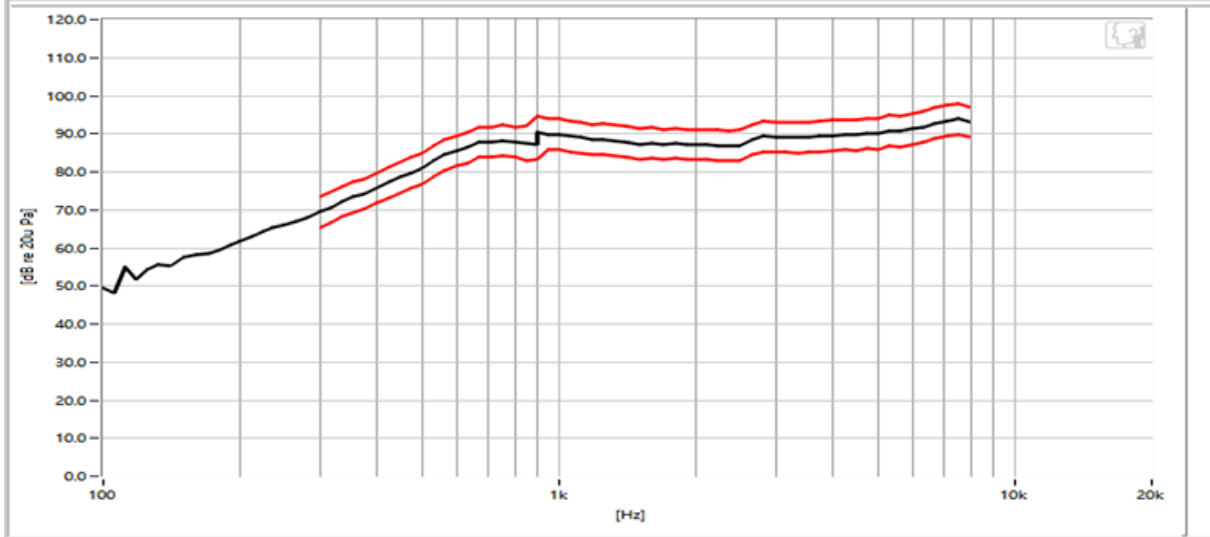
3. Electro-acoustic characteristics

3.1. Frequency Response

Typical frequency response measured in free field according to chapter 3.3

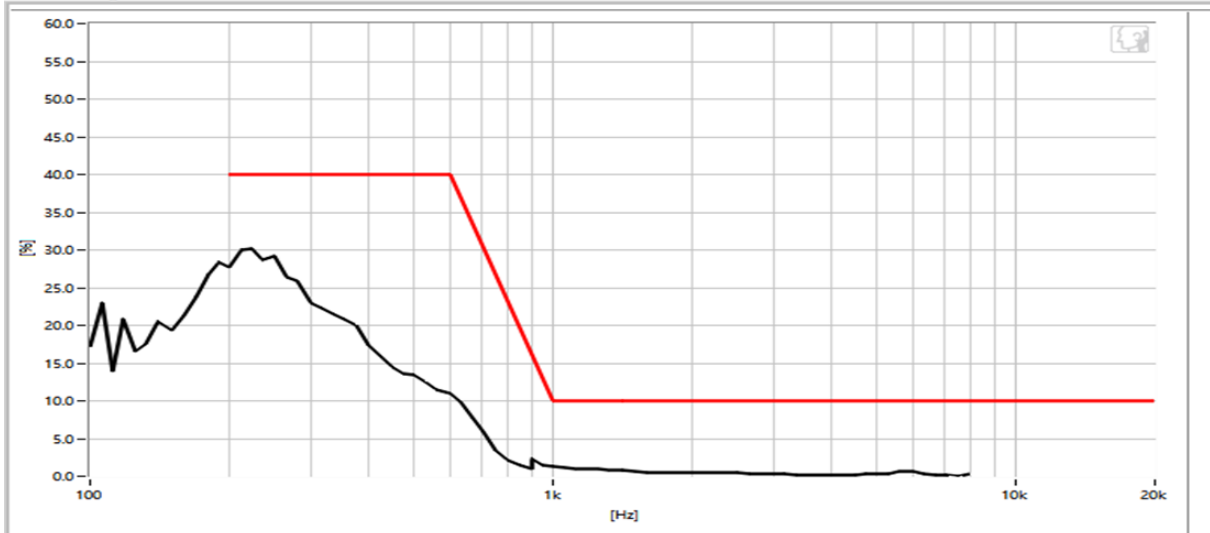
Test condition: 0.4W 100-900Hz 1.0W 900-8KHZ /0.1M,(300-8K) \pm 4dB

XY Graph 5



3.2. THD

XY Graph 2



Hz	200	400	600	1000	20000
%	40	40	40	10	10

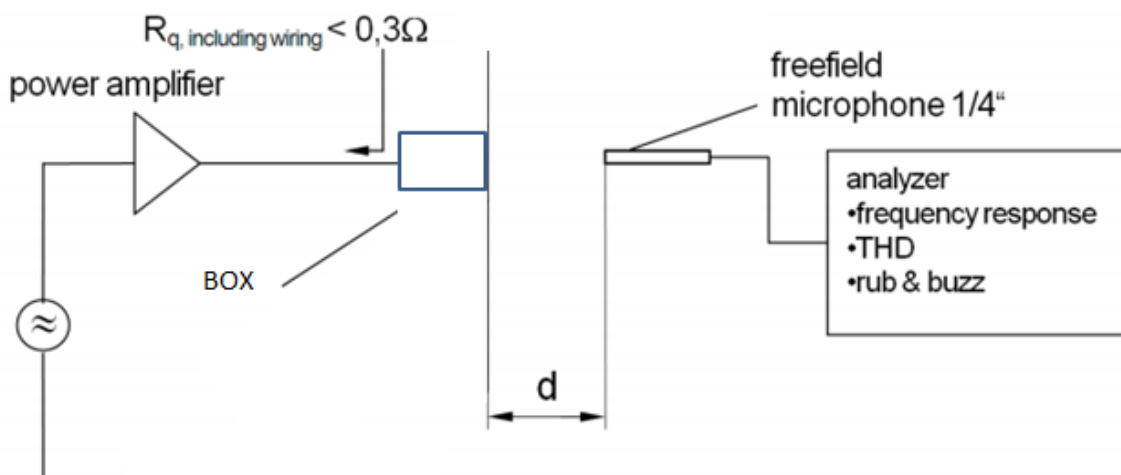
3.3. Electro-acoustic parameters

Speaker box measured in free field according to chapter 3.4

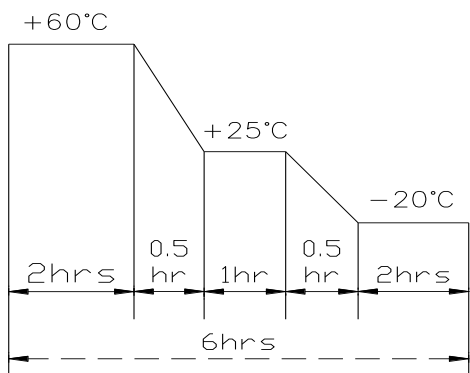
Parameter	Conditions/Description	Values	Units
Rated Input Power	With filtered white noise	1.0	W
Max Input Power	With filtered white noise	1.2	W
Impedance	At 2.0kHz, 1.0V	6±15%	Ω
Sound Pressure Level (S.P.L.)	at 2.0KHz in 1.0W/0.1M average (0dB SPL=20μPa)	87±3	dB
Resonant Frequency (f0)	at 0.4W	800±20%	Hz
Frequency Range	Output S.P.L. -10dB	Fo~20k	Hz
Distortion	at 2K Hz, input 1.0W	<10	%
Magnet	NdFeB		
Buzz, Rattle, etc.	must be normal at sine wave between 100 ~ 900 Hz must be normal at sine wave between 900 ~ 8K Hz	0.4 1.0	W
Operating Temperature		-20~+60	°C

All acoustic measurements at 15~35°C

3.4. Measurement setup (Acoustics) per channel

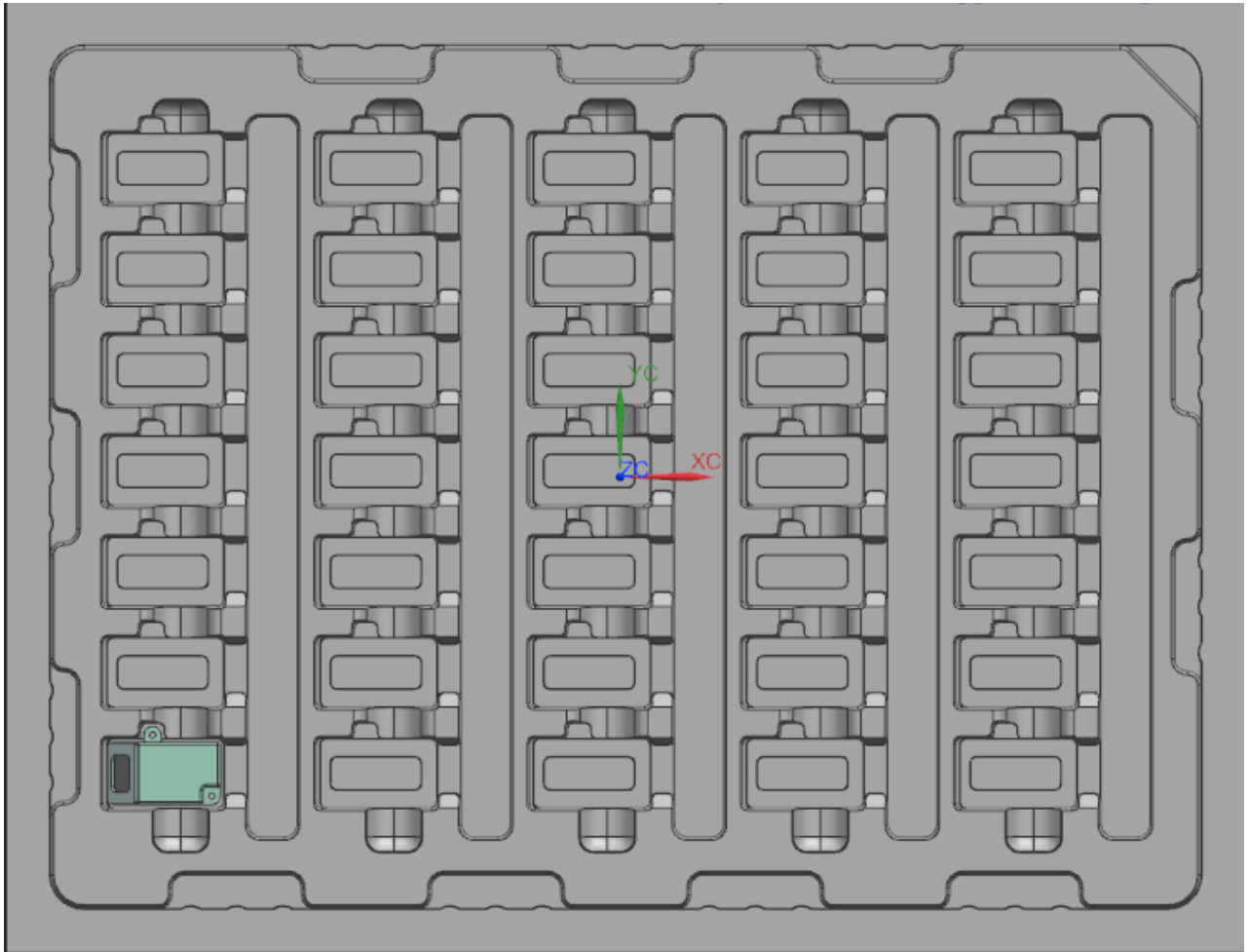


4. Reliability parameters

1	Reliability Test Performance	After any following test, parts should conform to original performance within ± 3 dB tested with Rated Power, after 6 hours of recovery period.
2	High Temperature Test	96 hours at $+60^{\circ}\text{C}\pm 3^{\circ}\text{C}$
3	Low Temperature Test	96 hours at $-20^{\circ}\text{C}\pm 3^{\circ}\text{C}$
4	Humidity Test	$+40^{\circ}\text{C}\pm 3^{\circ}\text{C}$ Relative Humidity(RH)90~95% 96 Hours
5	Temp Cycle	<p>The part shall be subjected 5 cycles. One cycle shall be 6 hours and consist of (GB5170.18-87)</p> 
6	Vibration Test	Frequency: 10~55~10Hz Oct/min Amplitude: 1.5mm Duration: 2 hours each of 3 perpendicular directions
7	Drop Test	Drop the speaker contained in normal box onto the surface of 40mm thick board 10 times from the height of 75cm
8	Load test	Must perform normal with programmed White-Noise(2nd order HPF at 900Hz, crest factor=2) source at Rated Power for 96 Hours
9	Termination Strength	Apply 3.0N(0.306kg) to each terminal in horizontal direction for 30 seconds; Apply 2.0N(0.204kg) to each terminal in vertical direction for 30 seconds
10	Waterproof level	IP55

5. Packaging

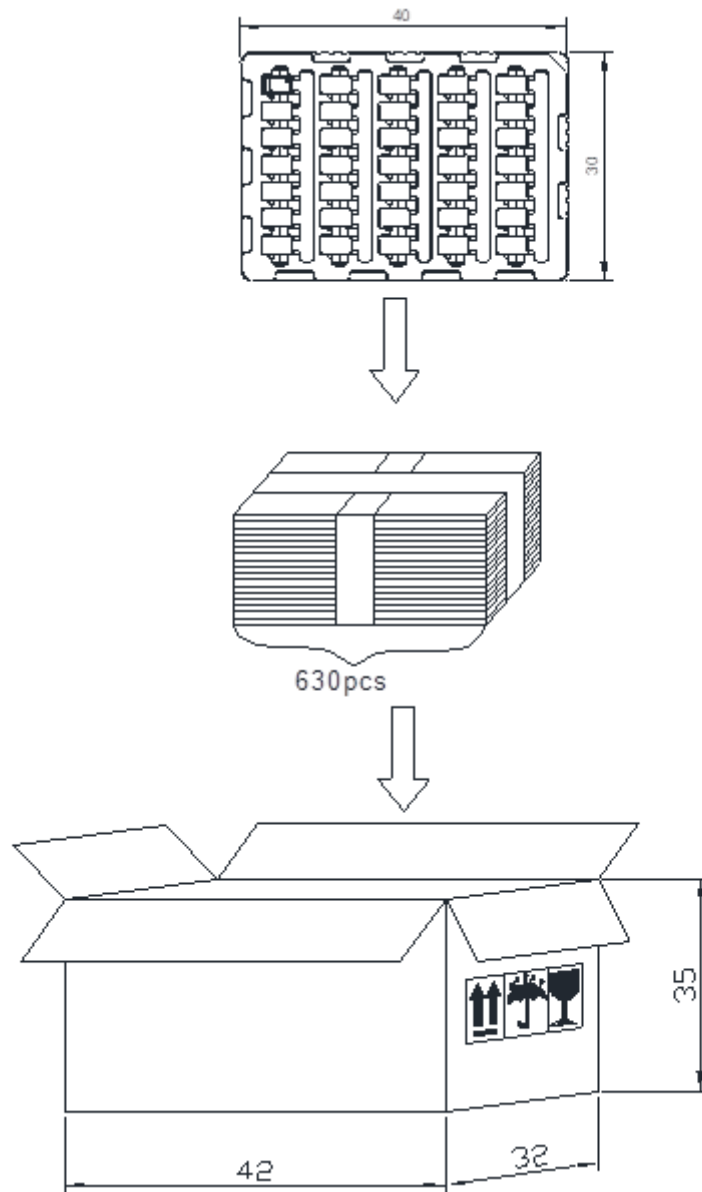
5.1. Tray design



Tray design changed to secure the connector.

5.2. Packaging details

- 35 pcs per tray - 18 trays per carton => 630 pcs per carton
- Carton Size:42.0*32.0*35cm



6. Related document

CR1511S035YN6Z datasheet