Dynamic Loudspeaker

16×9.0×2.0 mm

Guts

CR1609S020YN8Z

Revision

Date	Version	Status	Changes	Approver
2023/12/14	V0.1	Draft	First release	AX

Parameter	Conditions/Description	Values	Un
Rated Input Power	in 1.0cc closed box	0.8	W
Max Input Power	IEC-60268-5, filter 60s on/120s(in 1.0cc closed box)	1.0	W
Rated Impedance	at 2.0 kHz	8±15%	Ω
Sound Pressure Level (S.P.L.)	at 1.0KHz in0.8W/0.1M average (0dB SPL=20μPa)(in 1.0cc box)	93±3	dB
Resonant Frequency (Fo)	in free air	600±20%	Hz
	in 1.0cc closed box	900±20%	Hz
Frequency Range	Output S.P.L. -10dB	Fo~20K	Hz
Distortion	at 1~5K Hz, input 0.5w/0.1m	< 10%	-
Magnet	NdFeB		m
Buzz, Rattle, etc.	must be normal at sine wave between Fo ~ 5K Hz(Free air)	1.0	V
	must be normal at sine wave between Fo ~ 5K Hz (in 1.0cc box)	2.53	v
Polarity	cone will move forward with positive dc current to "+" terminal		
Weight			g
Operating		-30~+70	℃
Storage Temperature		-40~+85	℃
Waterproof Rating			

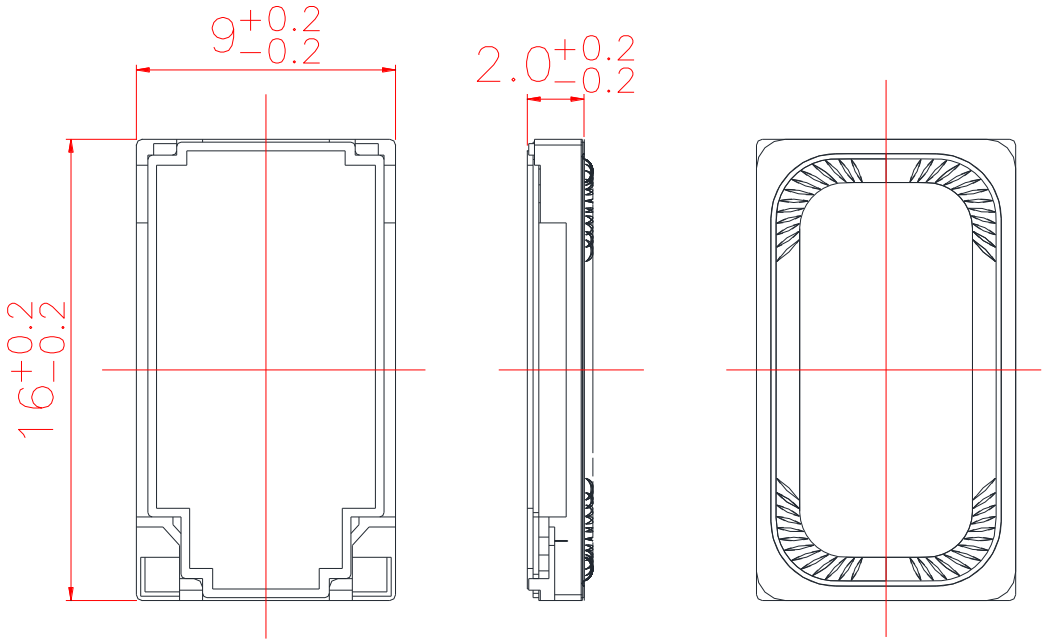
Notes: All specifications measured at 5~35°C, humidity at 45~85%, under 86~106 kPa pressure, unless otherwise noted.

This document is the property of Seltech and cannot be duplicated or communicated without prior permission.

MECHANICAL DRAWING

Units: mm

Tolerance: ±0.2mm



CONSTRUCTION DETAIL

PART NO.	PART NAME	Q' TY	MATERIAL	REMARK
1	Diaphragm	1	PEEK	
2	VOICE COIL	1	Cu	
3	Plate	1	SPCC	
3	Magnet	1	NdFeB	
4	PCB Terminal	1	FR4	
5	Frame	1	PBT	

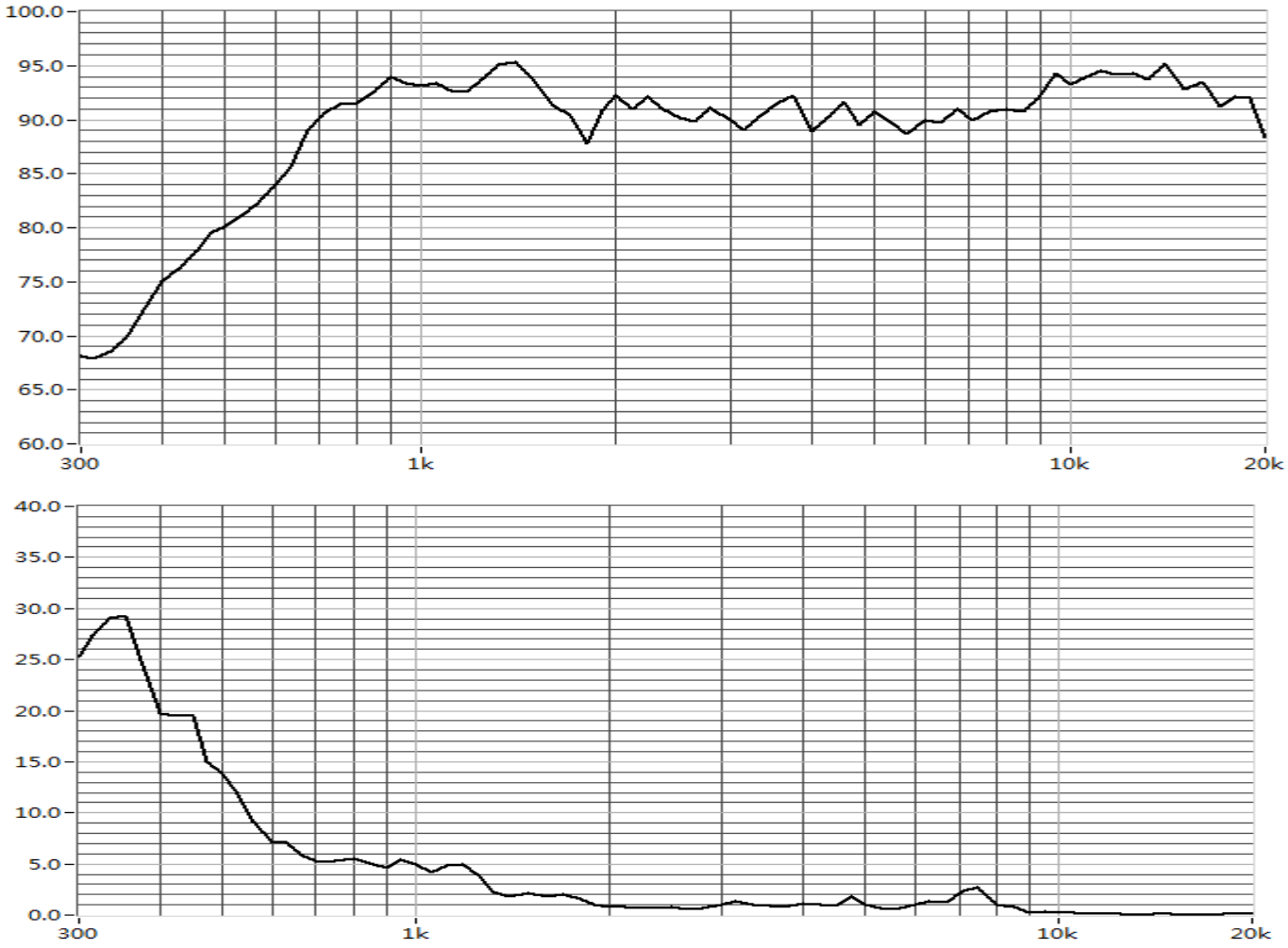
This document is the property of Seltech and cannot be duplicated or communicated without prior permission.

RESPONSE CURVES

Frequency Response

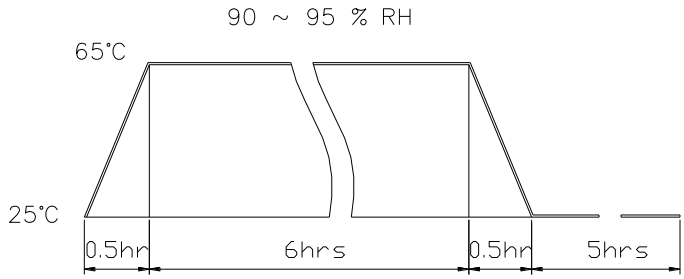
Curve Test

condition:0.8W/0.1M, 1cc BV



This document is the property of Seltech and cannot be duplicated or communicated without prior permission.

RELIABLITY TEST

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 +70℃±3℃
3	Low Temperature Test	96 hours at -30℃±3℃
4	Humidity Test	96 hours at +30℃±3℃, 92-95% RH
5	Temp./Humidity Cycle	The part shall be subjected 5 cycles. One cycle shall be 6 hours and consist of 
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	Operation Life Test	Must perform normal with program Pink-Noise 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;

This document is the property of Seltech and cannot be duplicated or communicated without prior permission.

MEASURING METHOD

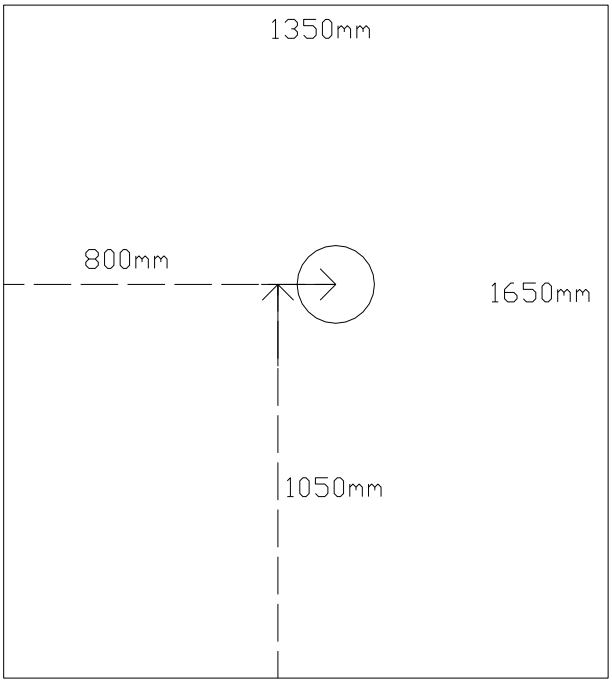
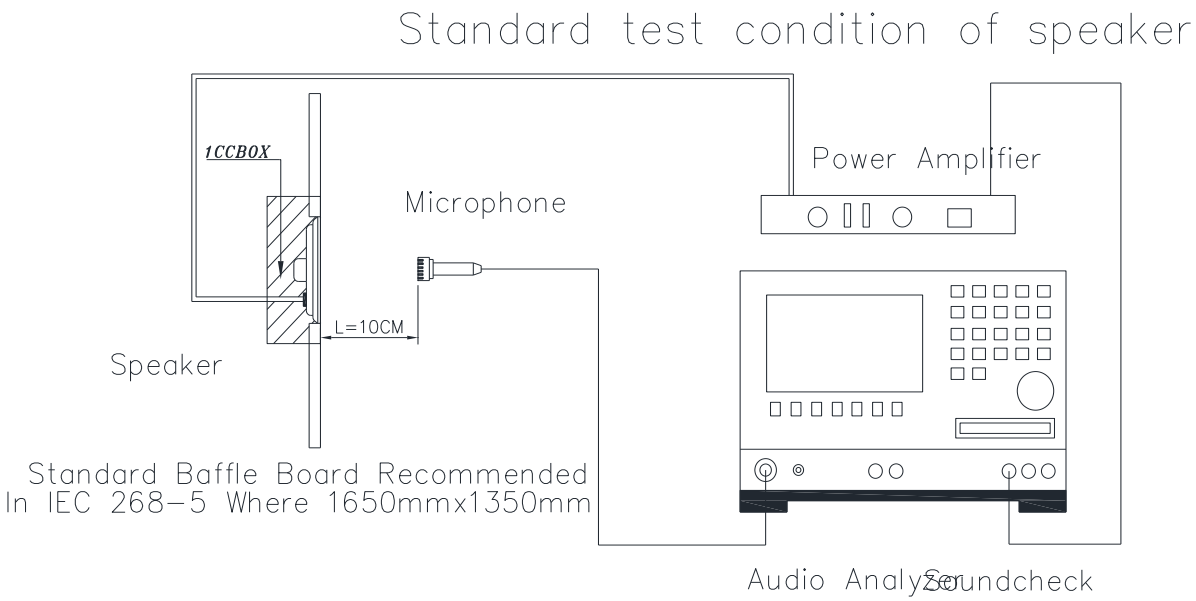


Fig. 1 Block Diagram for Measurement Method



L=10cm

Fig. 2 Speaker Test Condition

This document is the property of Seltech and cannot be duplicated or communicated without prior permission.

PACKAGING

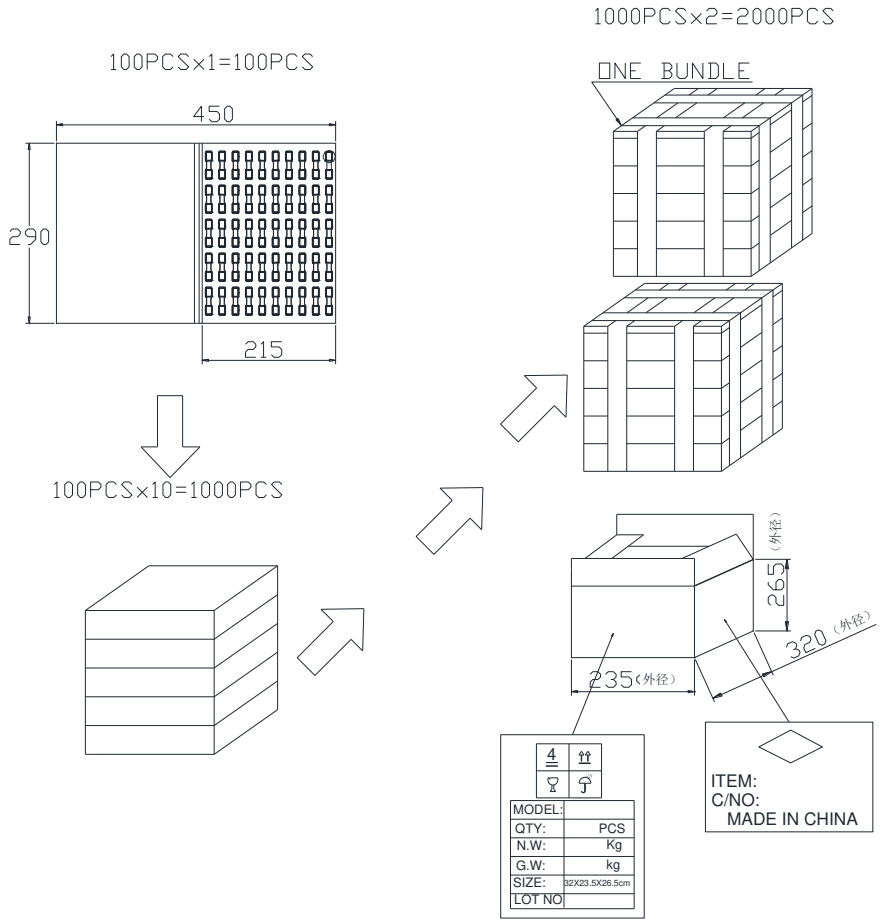
units: mm

RemarK;

100pcs of speaker in each tray

20 trays in one carton

Total:2000pcs / 1 carton



This document is the property of Seltech and cannot be duplicated or communicated without prior permission.