Miniature Speaker 8ohm, 2W, 70x30x23mm	Part No.	ABS-235-RC
	Page	1/5

1. ELECTRICAL AND ACOUSTICAL SPECIFICATION

	Item	Specifications
1-1	**Dimension**	70.0×30.0×23 t
1-2	**Rated Input Power**	2.0W
1-3	**Max Input Power**	5.0W
1-4	**Rated Impedance**	8±15% Ω /1KHz/1V
1-5	**Resonance Frequency(f0)**	300±20% Hz/1V
1-6	**Sound Pressure Level**	86±3 dB at (AVG 0.8,1.0,1.2,1.5)KHz 1 W/0.5 M
1-7	**Frequency Range**	200HZ ~ 20KHz
1-8	**Total Harmonic Distortion**	10%MAX. at 1KHz, 2W
1-9	**Flux Density**	1.0T
1-10	**Polarity**	When a positive DC Current is applied to the voice coil terminal marked +or red ,the diaphram shall move forward
1-11	**OperationTest**	Must be normal at sine wave and program source2.0W.
1-12	**Buzz,Rattle,etc.**	Should not be audible at4.0 V sine wave between (200 Hz ~ 20KHz)
1-13	**Weight**	34g
1-14	**Voice Coil Diameter**	Φ13.28mm
1-15	**Magnet (NdFeB)**	Φ12.5×2.5t mm
1-16	**Appearance**	Should not exist any obstacle to be harmful to normal operation;damages,cracks,rusts and distortions,etc.

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2.ENVIRONMENTAL TEST

	Item	Specifications
2-1	**High temp. Test**	Keep 96 hours at +60℃±3℃ and leave 3 hours in normal temperature and then check
2-2	**Low temp. Test**	Keep 96 hours at -30℃±3℃ and leave 3 hours in normal temperature and then check
2-3	**Humidity test**	Keep 96 hours at + 40℃±3℃ relative humidity 95% and leave 3 hours in normal temperature and then checked.
2-4	**Thermal cycle test.**	Low temperature: -30℃±3℃, temperature:+60℃±3℃, cycle: 1 hour/cycle each, and then keep 96 hours.
2-5	**Vibration**	10~55~10Hz sin-wave sweep 15min. 5G(constant) X,Y, Z 3 direction. 2 hours each, total 6 hours.
2-6	**Drop test**	Free drop a unit from 100cm height to a board of 20mm thick x,y, z 6 direction. 1 times each, total 6 times.
2-7	**Load test**	Rated Power white noise is applied for 96 hours
2-8	**Max Power test**	Max power 1 min on – 2 min off 10 cycles.
2-9	**Terminal strength test**	Capable of withstand 1kg load for 15seconds without resulting in any damage or rejection.

PASS CRITERION :

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

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3.MEASURING METHOD

3-1 .Test Condition

STANDARD

Temperature : 15 ~ 35℃

Relative humidity : 45% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

JUDGEMENT

Temperature : 20±3℃

Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

3-2 . Standard Test Fixture

1.Input Power : 1.0W(2.83V)

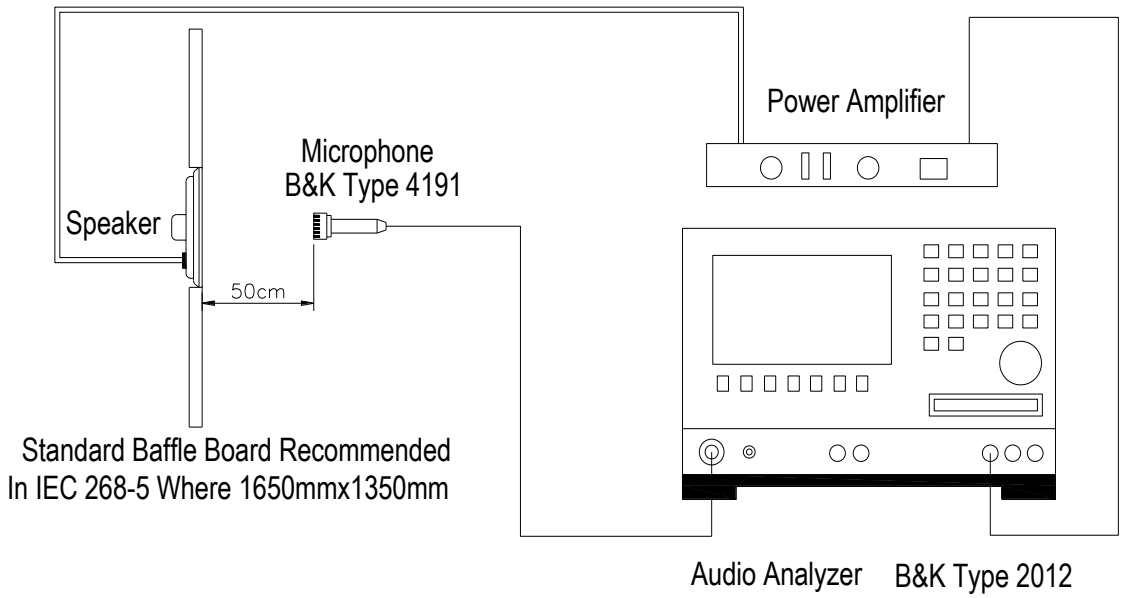
2.Zero Level : -dB

3.Mode : TSR

4.potentiometer Range : 50dB

5.Sweep Time : 0.5sec

Standard test condition of speaker



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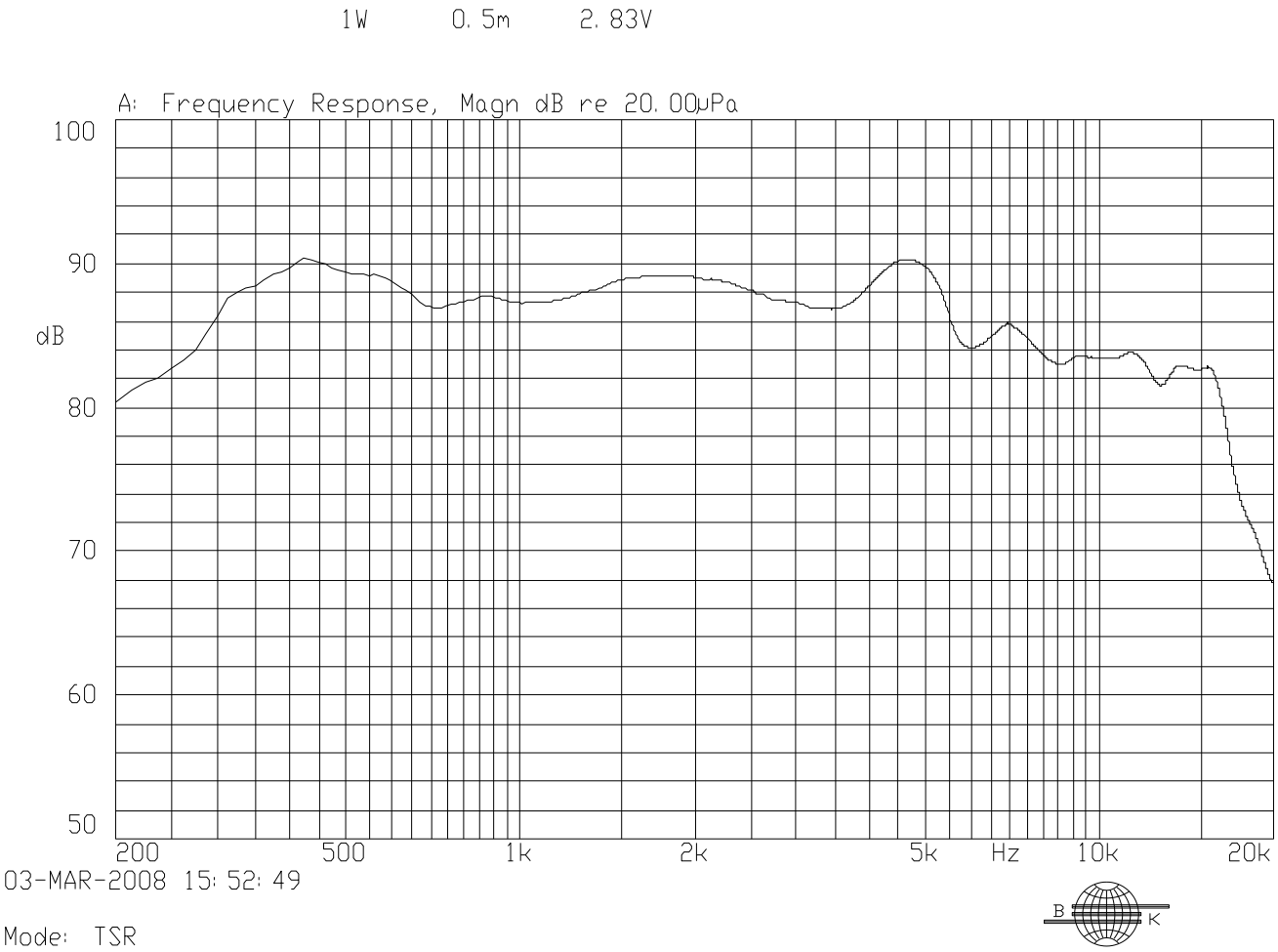
SPECIFICATIONS	Part No.	ABS-235-RC
	Page	4/5

4.FREQUENCY RESPONSE CURVE



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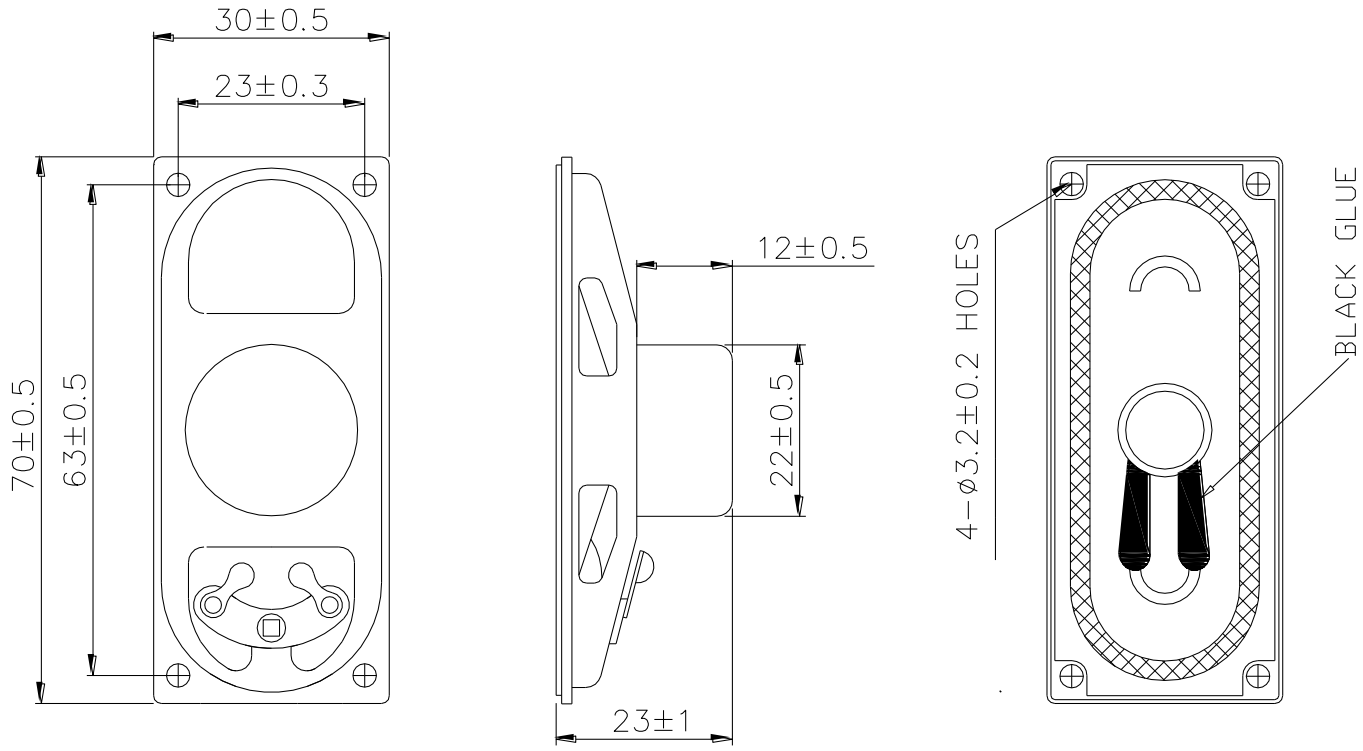
SPECIFICATIONS	Part No.	ABS-235-RC
	Page	5/5

5.DIMENSIONS

Unless otherwise specified,tolerance:±0.5 (unit:mm)



10	Frame	1	SPCC	
8，9	Plate	1	SPCC	
7	Magnet	1	Nd-Fe-B	
6	Shrapne	1	Silk cloth	
5	Dust cap	1	Paper	
4	Conel	1	Paper	
3	Yoke	1	1.5T	
2	Voice coil	1	CU	
1	PCB	1	EPOXY	
PART NO.	PART NAME	Q'TY	MATERIAL	REMARK

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