Miniature Speaker 8ohm, 2W, 40x20x6mm	Part No.	ABS-216-RC
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1. ELECTRICAL AND ACOUSTICAL SPECIFICATION

	Item	Specifications
1-1	**Dimension**	40×20.0×5.8t
1-2	**Rated Input Power**	2.0W
1-3	**Max Input Power**	3.0W
1-4	**Rated Impedance**	8±15% Ω /1KHz/1V
1-5	**Resonance Frequency(f0)**	400±20% Hz/1V
1-6	**Sound Pressure Level**	83±3 dB at (AVG 0.8,1.0,1.2,1.5)KHz 1W/0.5M
1-7	**Frequency Range**	200HZ ~ 20KHz
1-8	**Total Harmonic Distortion**	5%MAX. at 1KHz, 1V
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 source 2.0W.
1-12	**Buzz,Rattle,etc.**	Should not be audible at 4.0 V sine wave between (200 Hz ~ 20KHz)
1-13	**Weight**	7.6g
1-14	**Voice Coil Diameter**	Φ11.75mm
1-15	**Magnet (NdFeB)**	Φ11×1.5t mm
1-16	**Appearance**	Should not exist any obstacle to be harmful to normal operation;damages,cracks,rusts and distortions,etc.
1-17	**Operating Temp. Range**	-20℃～+60℃
1-18	**Storage Temp. Range**	-30℃～+70℃

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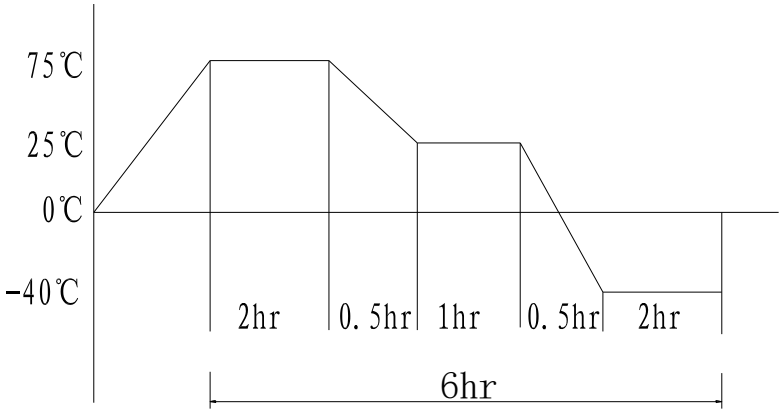
2.ENVIRONMENTAL TEST

	Item	Specifications
2-1	**High temp. Test**	Keep 96 hours at +75℃±3℃ and leave 3 hours in normal temperature and then check
2-2	**Low temp. Test**	Keep 96 hours at -40℃±3℃ and leave 3 hours in normal temperature and then check
2-3	**Humidity test**	Keep 96 hours at + 40℃±3℃ relative humidity 90%~95% and leave 3 hours in normal temperature and then checked.
2-4	**Thermal cycle test.**	Low temperature: -40℃±3℃, temperature:+75℃±3℃, 1 cycle: total 5cycles and then keep 6 hours in a room. 
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 48 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 : 23 ~ 25℃

Relative humidity : 55% MAX,

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)

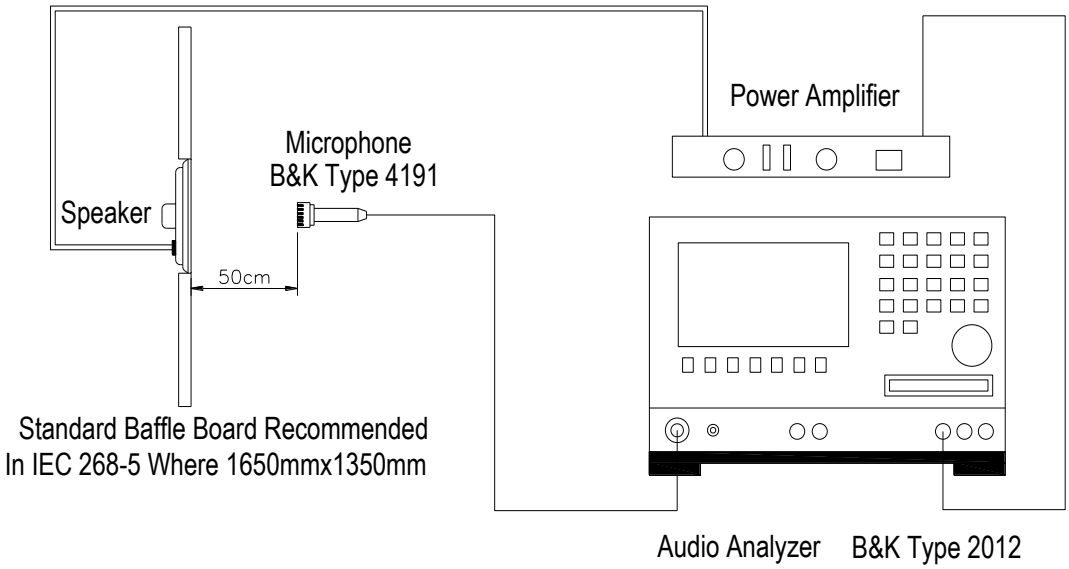
2.Zero Level : -dB

3.Mode : TSR

4.potentiometer Range : 50dB

5.Sweep Time : 0.5sec

Standard test condition of speaker



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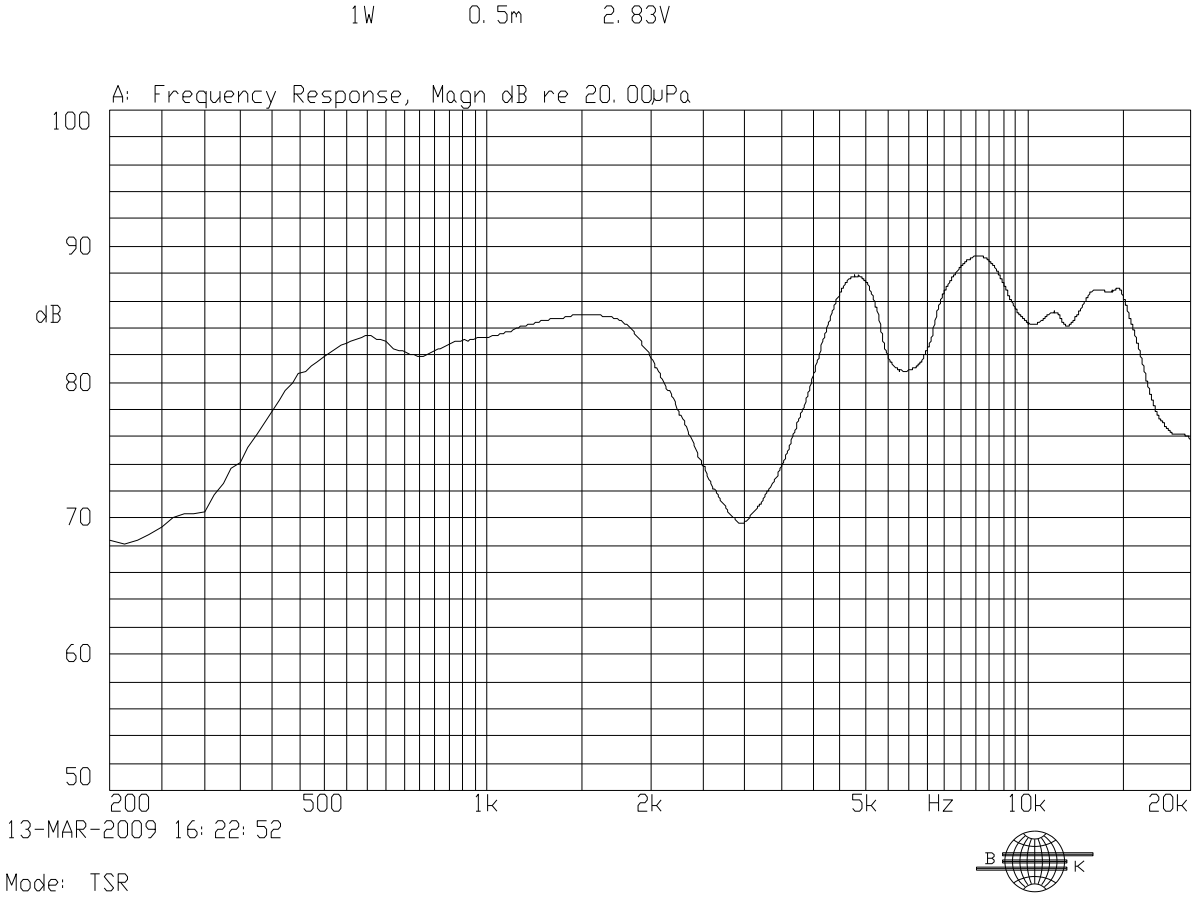
4.FREQUENCY RESPONSE CURVE



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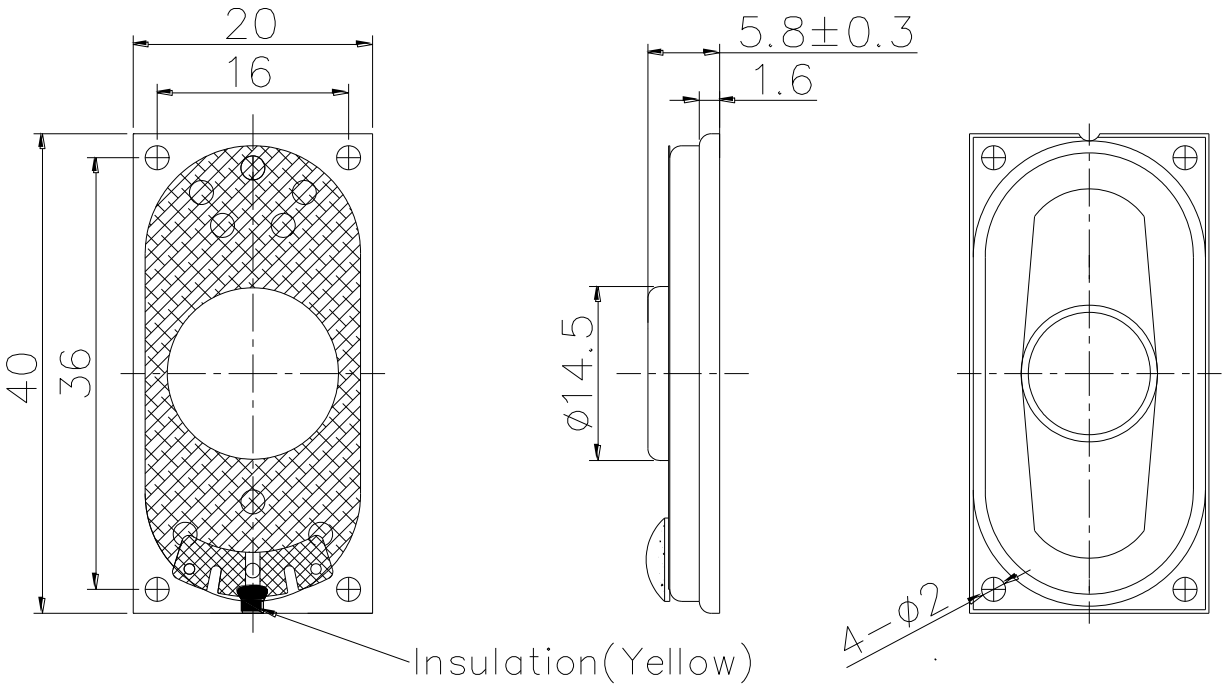
5.DIMENSIONS

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



7	Frame	1	SPCC	
6	PCB	1	EPOXY	
5	Plate	1	0.8t	
4	Magnet	1	NdFeB	
3	Cloth conel	1	Cloth	
2	Dust cap	1	PAPER	
1	Voice coil	1	Self bonding wire	
PART NO.	PART NAME	Q'TY	MATERIAL	REMARK

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