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Component Specification

Product : Speaker
Part Number : CA-SB4533A-0820W305C
Drawing No : CE9384SB3


Content

1. General
2. Electrical & Acoustical Characteristics
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Notes:

This specification is subject to change or withdrawel without notice

This part is RoHs 2011/65/EU compliant

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1. General

Speaker highly suitable for industrial applications.

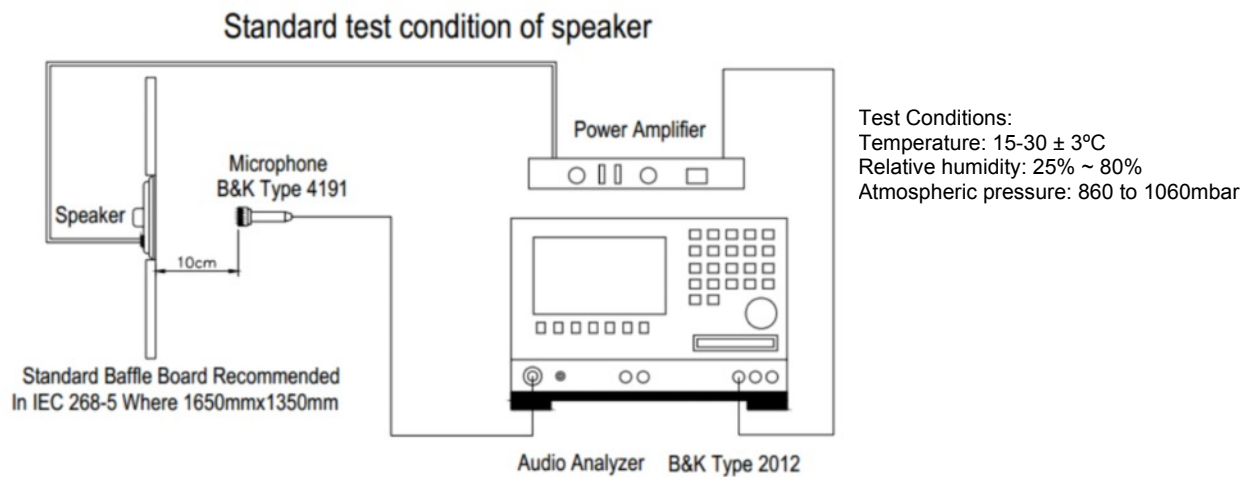
2. Electrical and Acoustic Characteristics

No	Items	Specification
	Impedance	8Ω ± 15% (1Vrms a 2Khz)
	Sound Pressure Level	90dB ± 3dB (0.1W/0.1M average at 1.0,1.2,1.5,2kHz)
	Resonance Frequency	350Hz ± 20%
	Frequency Range	f0~10KHz
	Input Power	Rated 2W / Max. 3W
	Distortion	10% Max. at 2kHz 2W
	Buzz and Rattle	Should not be audible buzzes, rattles when the 4V sine wave signal swept at frequency range.
	Polarity	When supplied plus D.C. Voltage to (+) terminal, the cone diaphragm must move to forward.
	Pull	Each wire to speaker box must withstand force of 5 lbs minimum. Each wire to terminal housing must withstand pull force of 5 lbs minimum
	Dimensions	45x33x19 mm
	Weight	27g
	Operating Temperature range	-20~+60 °C
	Store Temperature range	-40~+65 °C

1.0	16/10/15	Preliminary	L. Chen	S. Ge	G. Schubert
Revision	Date	Note	Drawn by	Checked by	Approved by

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3. Test Circuit

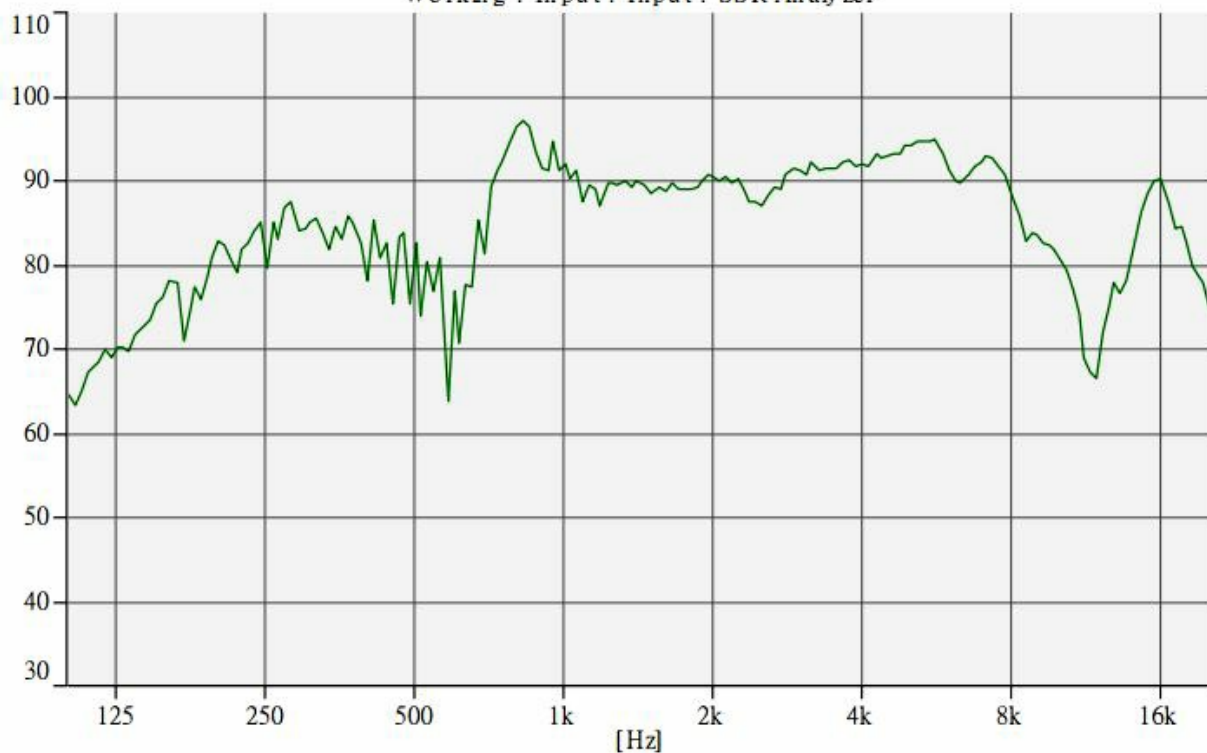


4. Frequency Response Curve


[dB/20.0u Pa]

Output Response(Signal 1) - Input (Magnitude)

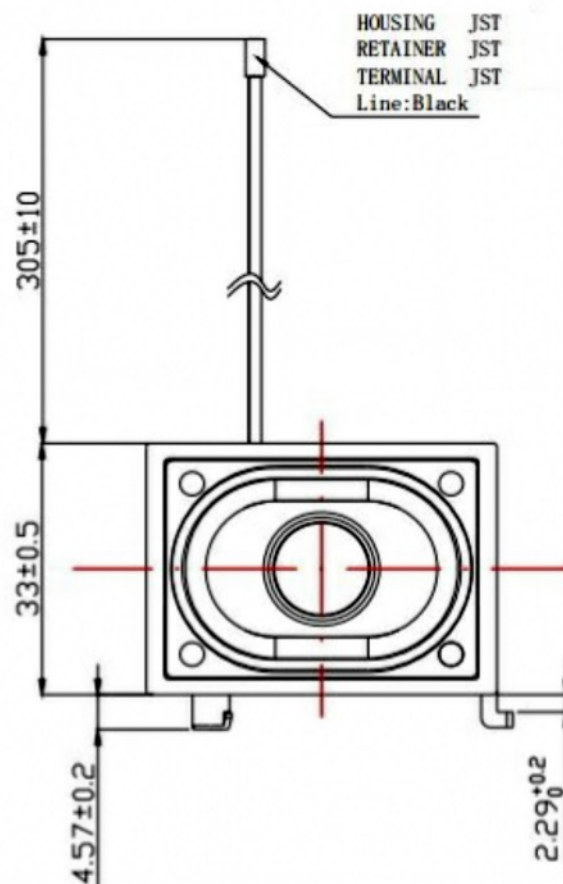
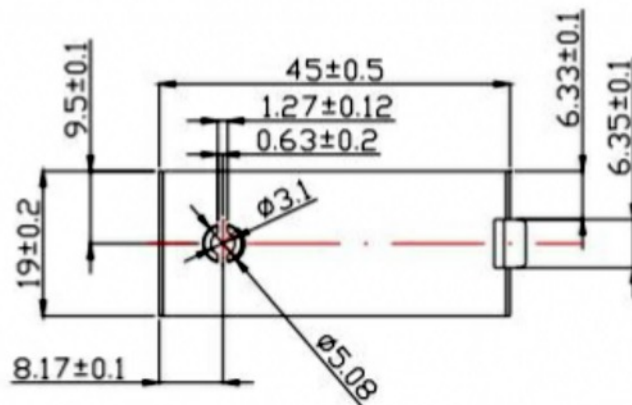
Working : Input : Input : SSR Analyzer




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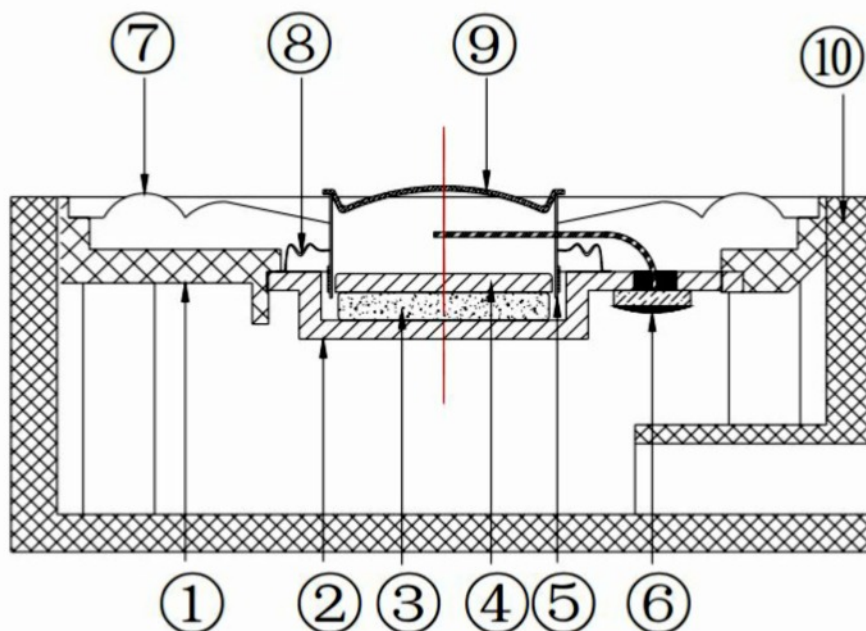
5. Dimension



1 . 0	16/08/13	Preliminary	L. Chen	S. Ge	G. Schubert
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6. Structure

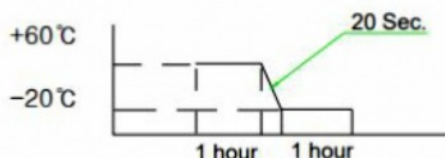


10	Box	1	ABS	
9	Dust Cap	1	Kraft Paper	
8	Damper	1	Silk	
7	Diaphragm	1	Tetoron	
6	Terminal	1	White Fiber	
5	V-coil	1	Lock bobbin	
4	Plate	1	SPCC	
3	Magnet	1	Nd-Fe-B	
2	YOKE	1	SPCC	
1	Frame	1	ABS	
No.	Part Name	Qty	Material	Remarks

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7. Reliability Test

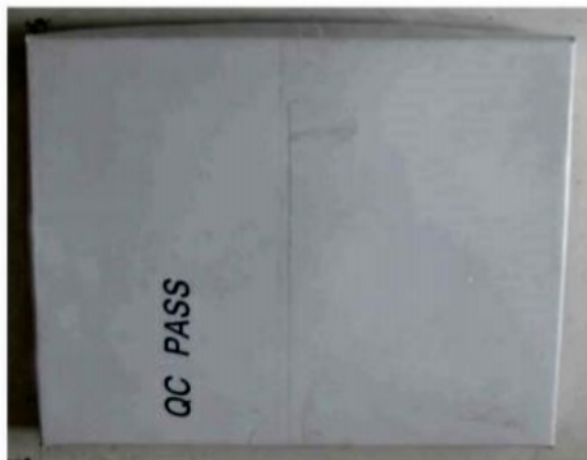
No	Items	Specification
1	High Temperature Test	After being placed in a chamber with $65\pm 3^{\circ}\text{C}$ for 96 hours and then being placed in natural condition for 1 hour, speaker shall be Measured.
2	Low Temperature Test	After being placed in a chamber with $-40\pm 3^{\circ}\text{C}$ for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured.
3	Humidity Test	After being placed in a chamber with 85 to 90%R.H. at $+40\pm 3^{\circ}\text{C}$ for 96 hours and then being placed in natural condition for 3 hour, speaker shall be measured.
4	Thermal Shock Test	<p>After being placed in a chamber at $+60^{\circ}\text{C}$ for 1 hour, then speaker shall be placed in a chamber at -20°C for 1 hour(1 cycle is the below diagram). After 6 above cycles, speaker shall be measured after being placed in natural condition for 1 hour.</p> 
5	Vibration Test	After being applied vibration of amplitude of 1.5mm with 10 To 55Hz band of vibration frequency to each of 3 perpendicular directions for 1 hour, then placed in natural condition for 1 hour, speaker shall be measured.
6	Drop Test	The speaker shall stand 6 times random drops from a height of 1 meter to a concrete floor faced with 5mm thick hard wood board.and be nothing mechanical damage.
7	Load test	After being applied loading white noise with input power 2W(4Vrms.) for 96 hours, then placed in natural condition for 1 hour, speaker shall be measured.
8	Isulation test	When they are measured with DC 100V the insulation resistance between v.c. terminal and frame must be more than 1 MΩ

After test the speaker S.P.L. Difference shall be within $\pm 3\text{dB}$, and the appearance not exist any change to be harmful to normal operation (e.g. Cracks, rusts, damages and distortion)

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8. Packing



42PCS



10

QTY:42X10=420pcs
460x295x220mm

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9) Revision

Rev. No	Date	Page	Description	Sign
10	16/08/13	all	Preliminary	Wang.Xue

1 . 0	16/08/13	Preliminary	L. Chen	S. Ge	G. Schubert
Revision	Date	Notes	Drawn by	Checked by	Approved by