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# Component Specification

Product : Speaker Box  
Part Number : CA-SB2040180X  
Drawing No : X140213

## Content

1. General
2. Electrical & Acoustical Characteristics
3. Test Circuit
4. Frequency Response Curve
5. Dimensions & Structure
6. Reliability Test
7. Packing
8. Revision

	Part No.	Drawing No.	Page
	CA-SB2040180X	X140213	2 / 7


## 1. General

Speaker box highly suitable for computer, telecom and office equipment applications.

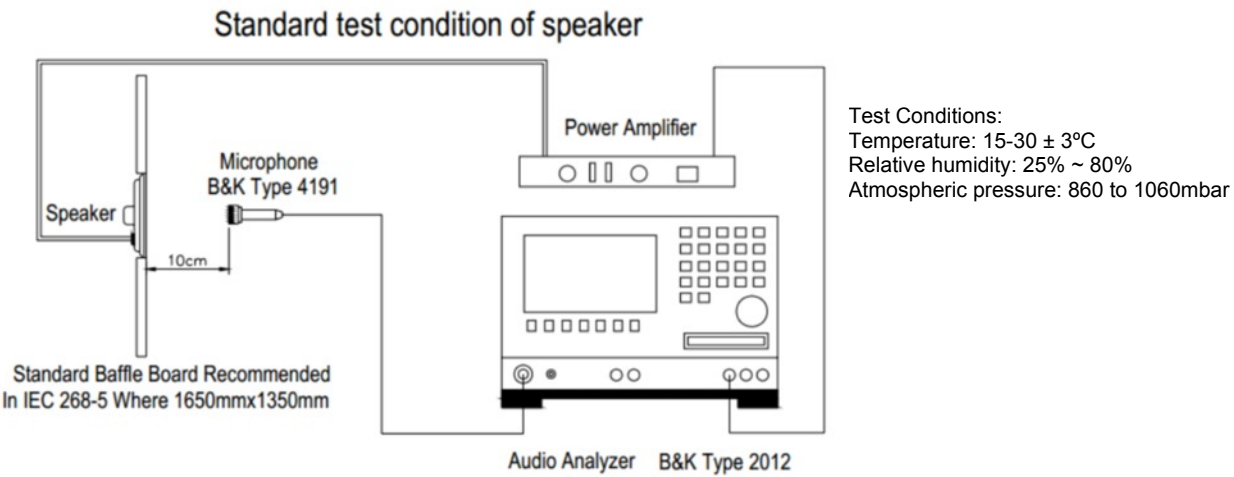
## 2. Electrical and Acoustic Characteristics

No	Items	Specification
	Impedance	8Ω ± 15%
	Sound Pressure Level (S.P.L)	94dB ± 3dB (0.1W/0.1M)– at ave 0.8,1.0,1.2,1.5kHz)
	Resonance Frequency	750Hz ± 20%
	Frequency Range	750Hz~6KHz
	Input Power	Rated 2W / Max.3W
	Distortion	< 5% Max. at 1kHz at rated power
	Buzz and Rattle	Should not be audible at 4.9V sine wave signal between F0 to 20 KHz
	Polarity	When supplied plus D.C. Voltage to (+) terminal, the cone diaphragm must move to the front.
	Dimensions	63,5x22,4x18mm
	Weight	8.5 g
	Operating Temperature range	-20~+70 °C
	Store Temperature range	-30~+80 °C

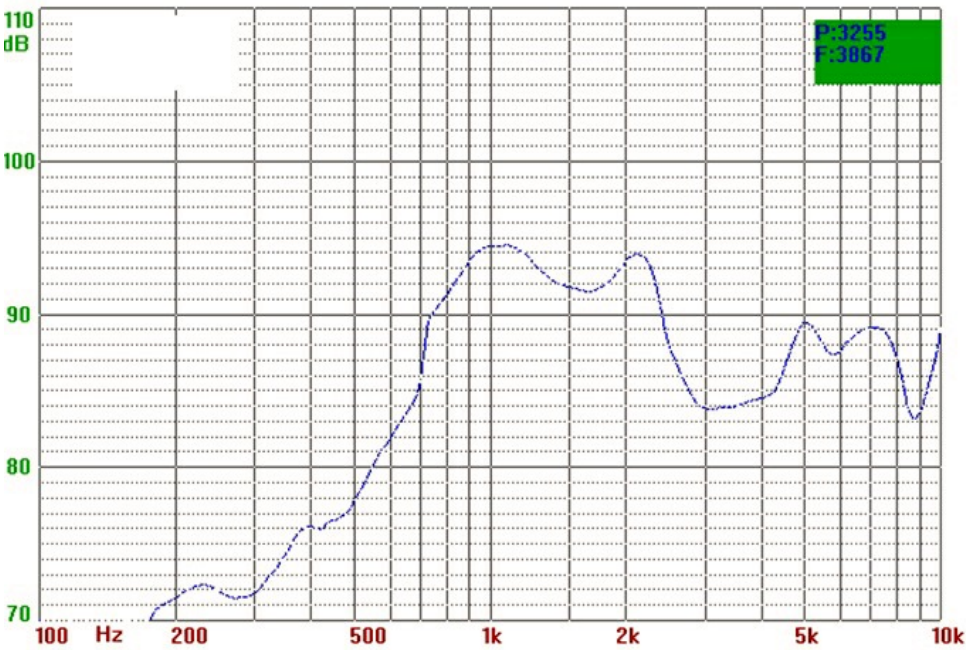
11	28/04/14	Production release	L. Chen	S. Ge	Wang Xu
10	13/02/14	Preliminary samples	L. Chen	S. Ge	G. Schubert
Revision	Date	Notes	Drawn by	Checked by	Approved by

	Part No.	Drawing No.	Page
	CA-SB2040180X	X140213	3 / 7


3. Test Circuit



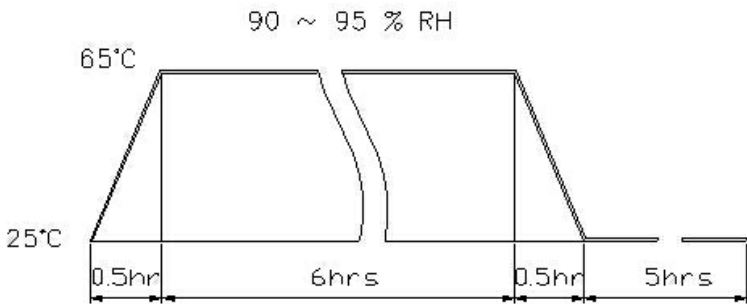
4. Frequency Response Curve



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	Part No.	Drawing No.	Page
	CA-SB2040180X	X140213	4 / 7

## 6. Reliability Test

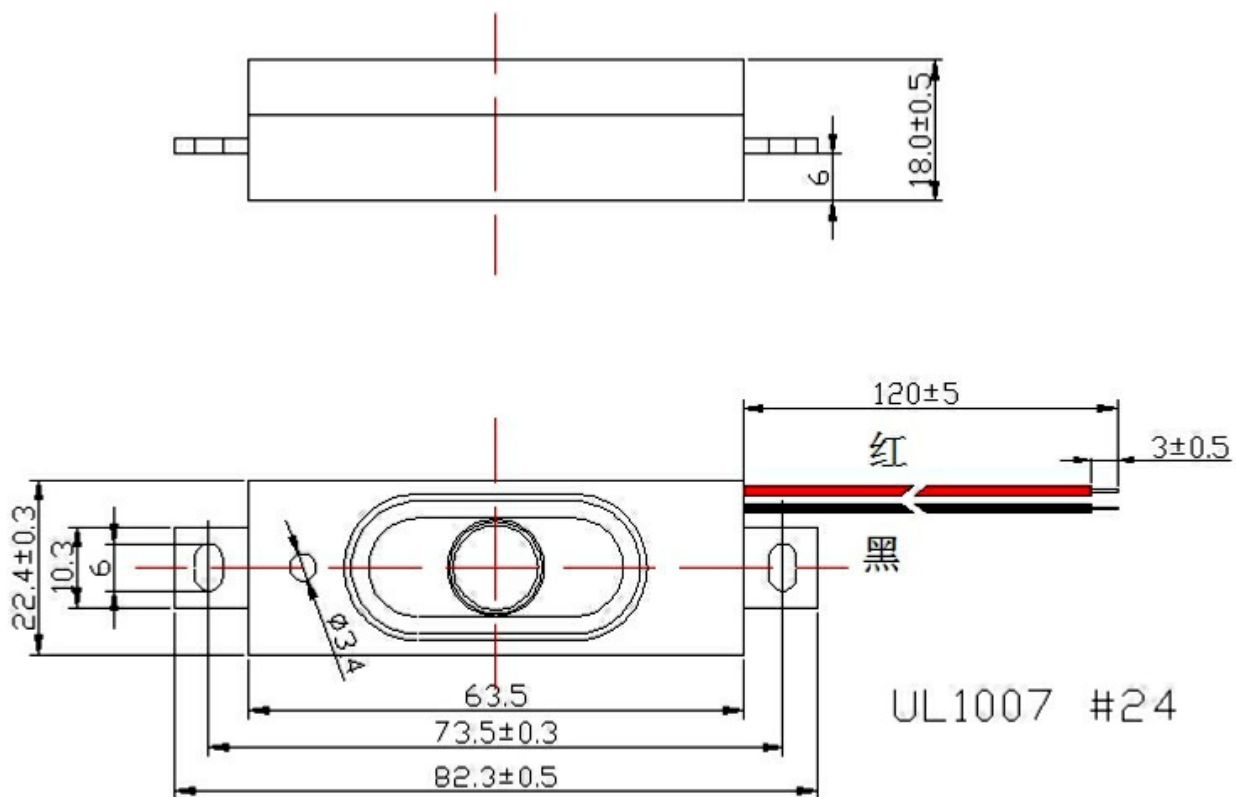
No	Items	Specification
1	High Temperature Test	Keep 96 hours at +70 °C $\pm$ 3°C and leave 6 hours in normal temperature and then check
2	Low Temperature Test	Keep 96 hours at -30°C $\pm$ 3°C and leave 6 hours in normal temperature and then check
3	Humidity Test	Keep 96 hours at + 40°C $\pm$ 3°C relative humidity 92-95% and leave 3 hours in normal temperature and then checked
4	Thermal Shock Test	<p>The part shall be subjected 5 cycles. One cycle shall be 6 hours and</p> 
5	Vibration Test	10~55~10Hz sin-wave sweep 15min. 5G(constant) X,Y, Z 3 direction. 2 hours each, total 6 hours.
6	Drop Test	Drop the speakers contained in normal box onto the board 40mm thick 10 times from the height of 75cm
7	Load test	Rate power white noise is applied for 96 hours at room temperature
8	Lead wire pull strength	The pull force shall be applied to double lead wire: horizontal 3.0N for 30 seconds, Vertical 2.0N for 30 seconds

After test the speaker S.P.L. Difference shall be within  $\pm 3$ dB.

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	Part No.	Drawing No.	Page
	CA-SB2040180X	X140213	5 / 7

## 5. Dimension

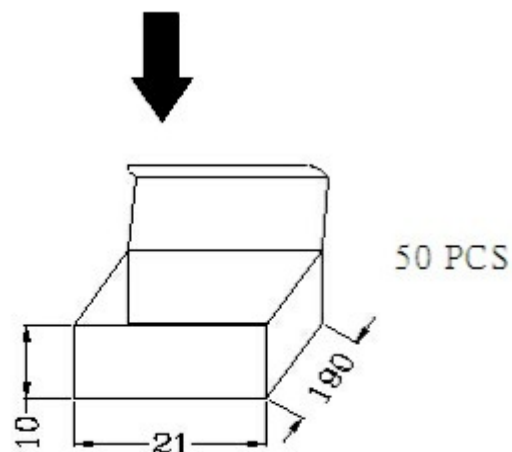
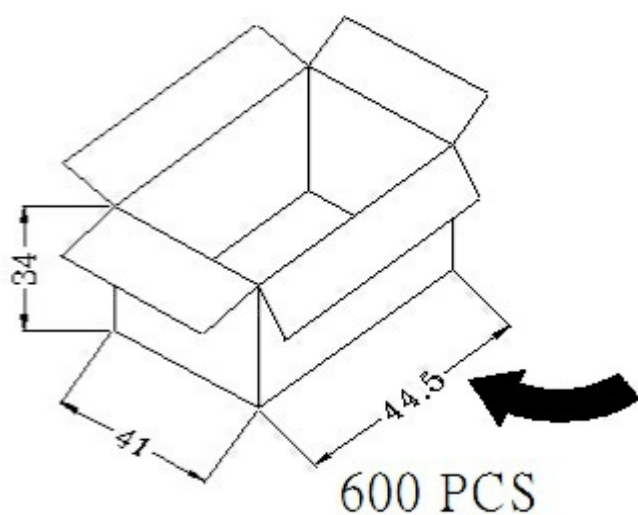
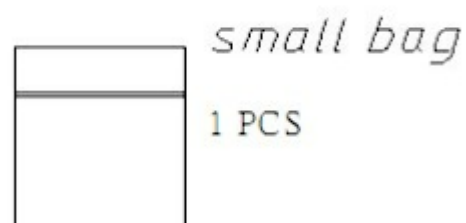


9	Box	1	ABS	
8	wire	2	UL1007 24#	
7	Cap	1	paper	
6	Diaphragm	1	cloth	
5	Voice coil	1	CU	
4	Plate	1	SPCC	
3	Magnet	1	NdFeB	
2	PCB terminal	1	Paper+ CU	
1	Frame	1	ABS	
No.	Part Name	Qty	Material	Remarks

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	Part No.	Drawing No.	Page
	CA-SB2040180X	X140213	6 / 7

## 7. Packing



### Remark:


1 pcs per small bag

50pcs for per carton

Total:600 pcs per box

Size:44.5\*41\*34cm

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	Part No.	Drawing No.	Page
	CA-SB2040180X	X140213	7 / 7

8) Revision

Rev. No	Date	Page	Description	Sign
10	13/02/14	all	Preliminary samples	G.Schubert
11	28/04/14	all	Production release	Wang.Xue

11	28/04/14	Production release	L. Chen	S. Ge	Wang Xu
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