

Component Specification

Drawing No : X120611

Product : Speaker Box Part Number : CA-SB2828134X

Content

1. General

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



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)	89dB ± 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 3W / Max.4W
	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 supplyed plus D.C. Voltage to (+) terminal, the cone diaphragm must move to the front.
	Dimensions	28x28x13,4mm
	Weight	-
	Operating Temperature range	-20~+70 °C
	Store Temperature range	-30~+80 °C

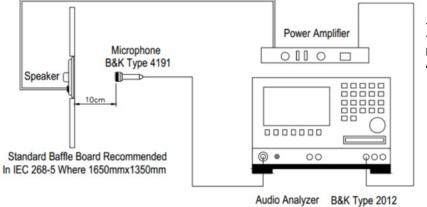
11	17/09/12	Production release	S. Ge	S. Ge	Wang Xu
10	11/06/12	Preliminary samples	L. Chen	S. Ge	G. Schubert
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Part No.	Drawing No.	Page
CA-SB2828134X	X120611	3/6

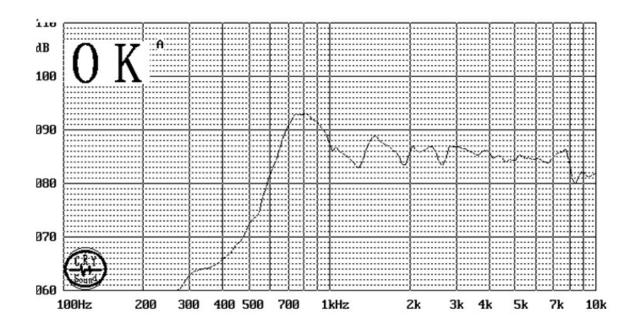
3. Test Circuit

Standard test condition of speaker



Test Conditions: Temperature: 15-30 ± 3°C Relative humidity: 25% ~ 80% Atmospheric pressure: 860 to 1060mbar

4. Frequency Response Curve



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6. Reliability Test

No	Items	Specification
1	High Temperature Test	Keep 96 hours at +70 $^{\circ}C3^{\circ}C$ and leave 6 hours in normal temperature and then check
2	Low Temperature Test	Keep 96 hours at $-30^{\circ}C3^{\circ}C$ and leave 6 hours in normal temperature and then check
3	Humidity Test	Keep 96 hours at $+40^{\circ}C3^{\circ}C$ relative humidity 92-95% and leave 3 hours in normal temperature and then checked
4	Thermal Shock Test	The part shall be subjected 5 cycles. One cycle shall be 6 hours and $90 \sim 95 \%$ RH $65^{\circ}C$ $25^{\circ}C$ 0.5hr 6hrs 0.5hr 5hrs 0.5hr 0.5
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 stength	The pull force shall be applied to double lead wire: horizontal 3.0N for 30 seconds, Vertical 2.0N for 30 seconds

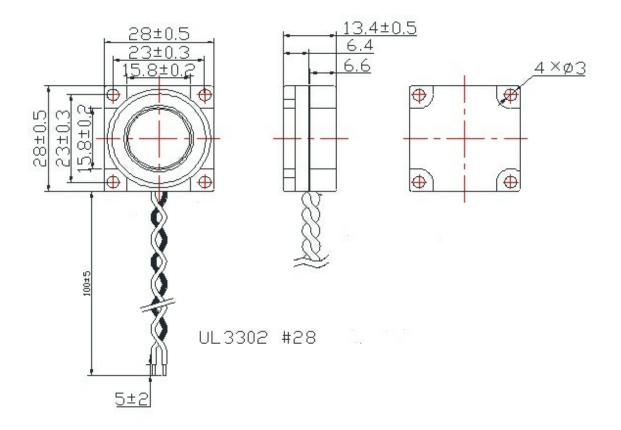
After test the speaker S.P.L. Difference shall be within \pm 3dB.

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Part No.	Drawing No.	Page
CA-SB2828134X	X120611	5/6

5. Dimension



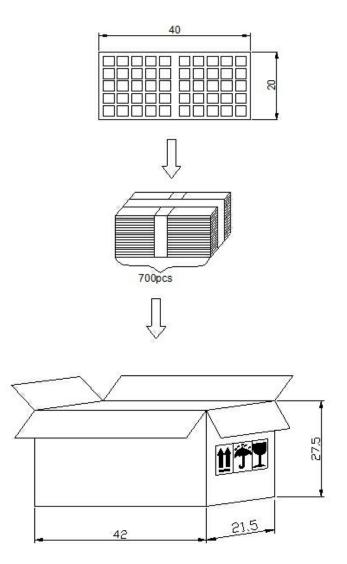
7	wire	2	UL3302 #28	
6	Diaphragm	1	Foam-edge	
5	Voice coil	1	CU-paper	
4	Plate	1	SPCC	
3	Magnet	1	NdFeB	
2	PCB terminal	1	FR4	
1	Frame	1	ABS	
No.	Part Name	Qty	Material	Remarks

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Part No.	Drawing No.	Page
CA-SB2828134X	X120611	6/6

7. Packing



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Revision	Date	Notes	Drawn by	Checked by	Approved by



Part No.	Drawing No.	Page
CA-SB2828134X	X120611	7/6

8) Revision

Rev. No	Date	Page	Description	Sign
10	11/06/12	all	Preliminary samples	G.Schubert
11	17/09/12	all	Production release	Wang.Xue

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