

Contitec Electronics Ltd. Schatzbogen 33 81829 München

Tel. +49 89 99 81 86 30 Fax. +49 89 3219 50 75 eMail: sales@contitec.com web: www.contitec.com

# **Component Specification**

Product : Speaker
Part Number : CA-SM2860-0815W-100

Drawing No : KF3.001.396.02

#### Content

- 1. General
- 2. Electrical & Acoustical Characteristics
- 3. Test Circuit
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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 1Khz)
	Sound Pressure Level	88dB ± 3dB (1.5W/0.3M at 1k,1.2k,1.5k,2.0kHz AGE)
	Resonance Frequency	500Hz ± 20%
	Frequency Range f0~20KHz	
	Input Power Rated 1.5W / Max. 2W for 1 min	
	Distortion	<5% Max. at 1kHz/2Vrms
	Buzz and Rattle	Should not be audible buzzes, rattles when the 3.46V sine wace signal swept at frequency range.
	Polarity	When supploed plus D.C. Voltafe to (+) terminal, the once diaghragm must move to forward.
	Dimensions	28x6 mm
	Weight	5.4g
	Operating Temperature range	-20~+60 °C
	Store Temperature range	-20~+70 °C

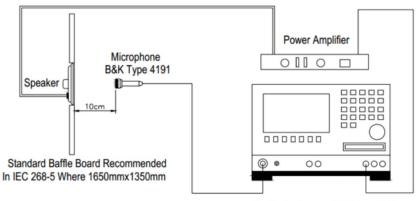
1.0	16/10/15	Preliminary	L. Chen	S. Ge	G. Schubert
Revision	Date	Note	Drawn by	Checked by	Approved by



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#### 3. Test Circuit

#### Standard test condition of speaker

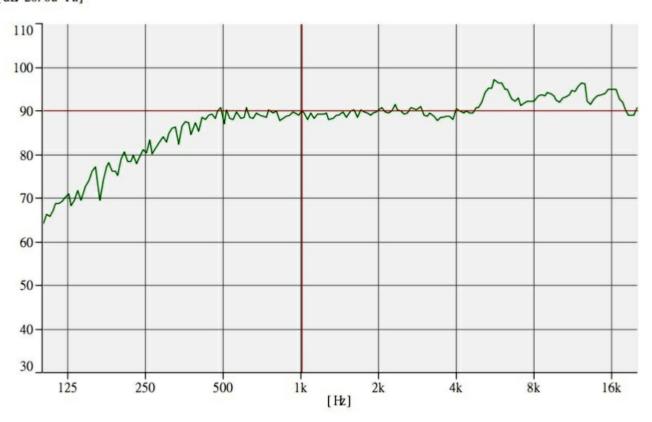


Test Conditions: Temperature: 15-30 ± 3°C Relative humidity: 25% ~ 80% Atmospheric pressure: 860 to 1060mbar

Audio Analyzer B&K Type 2012

### 4. Frequency Response Curve

[dB/20.0u Pa]

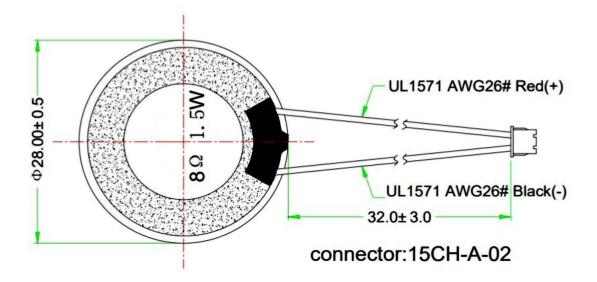


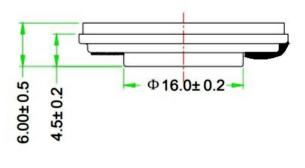
1.0	05/05/11	Preliminary	L. Chen	S. Ge	G. Schubert
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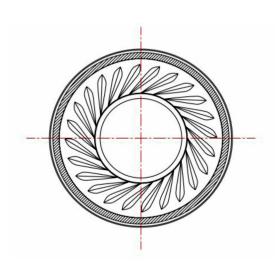


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# 5. Dimension





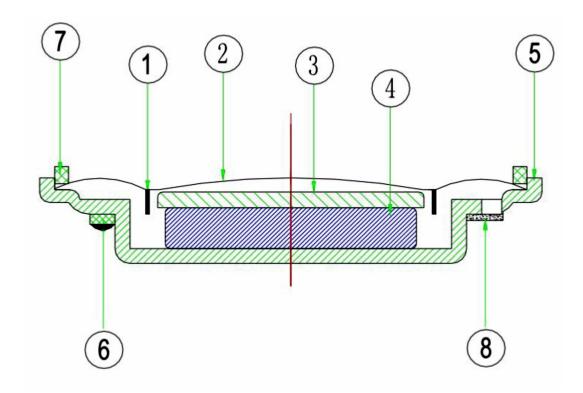


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# 6. Structure



8	Screen	1	3B	
7	Gasket	1	PPA	
6	Terminal PCB	1	PCB	
5	Frame	1	SPCC	
4	Magnet	1	Nd-Fe-B	
3	Plate	1	SPCC	
2	Diaphragm	1	PET	
1	V-coil	1	Со	
No.	Part Name	Qty	Material	Remarks

1.0	05/05/11	Preliminary	L. Chen	S. Ge	G. Schubert
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# 7. Reliability Test

No	Items	Specification		
1	High Temperature Test	After being placed in a chamber with 70±3 °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 -20±3C 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±3C for 96 hours and then being placed in natural condition for 3 hour, speaker shall be measured.		
4	Thermal Shock Test	After being placed in a chamber at +60°C for 1 hour, then speaker shall be placed in a chamber at -20°C for 1 hour(1 cycle ).  After 6 above cycles, speaker shall be measured after being placed in natural condition for 1 hour.  20 Sec.  1 hour 1 hour		
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 when mounted in the jig which weight 85g~100g, shall with stand 15 times random drops from a height of 1.5 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 1.5W(3.46Vrms.) 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 $M\Omega$		

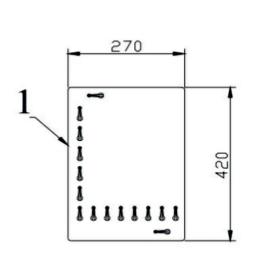
After test the speaker S.P.L. Difference shall be within  $\pm$  3dB, and the appearance not exist any change to be harmful to normal operation (e.g. Cracks, rusts, damages and distortion)

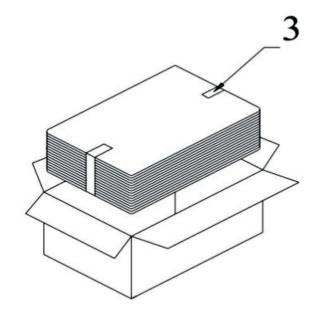
1.0	05/05/11	Preliminary	L. Chen	S. Ge	G. Schubert
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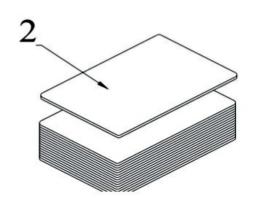
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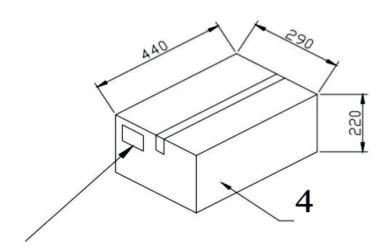
# 8. Packing





75Pcs





QTY: 1350Pcs 440 x290 x220

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# 9) Revision

Rev. No	Date	Page	Description	Sign
10	05/05/11	all	Preliminary	Wang.Xue

1.0	05/05/11	Preliminary	L. Chen	S. Ge	G. Schubert
Revision	Date	Notes	Drawn by	Checked by	Approved by