

# **Product Specification**

Product Name:	Sound box	
Part Number:	SED-40L8.5-4N3RHC-1	(4Ω 3W)
Version:	Rev. 3	
Date:	2017-11-18	
Note:		

# Company passed ISO 9001 / ISO TS16949 / ISO 14001 Certifications

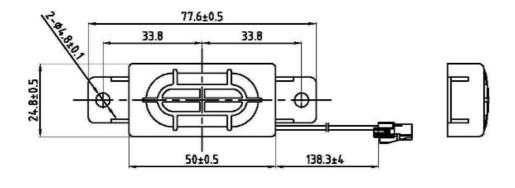
### **Revision History**

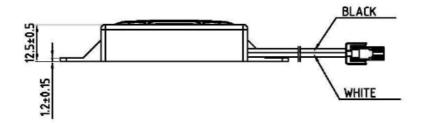
Rev.	Description	Author/Date	Checked By	Approver			
1	Released Lv Wenbin Nov. 20. 2015		Zhao Pengsen	Wang Jiancheng			
2	M1:Modification SPL	Lv Wenbin Dec. 10. 2015	Zhao Pengsen	Wang Jiancheng			
3	Change the company name to East Electronics	SYSTEM Nov. 18. 2017					

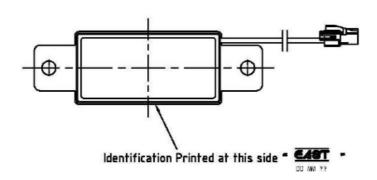
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### 1. Part Number: SED-40L8.5-4N3RHC-1

### 2. Dimension Drawing: (Unit: mm)







Connector housing	JST PARP-02V
Connector retainer	JST PMS-02V-S
Connector terminal	JST SPA-001T-P0.5
Wire	UL1007-24AWG

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### 3. Specification:

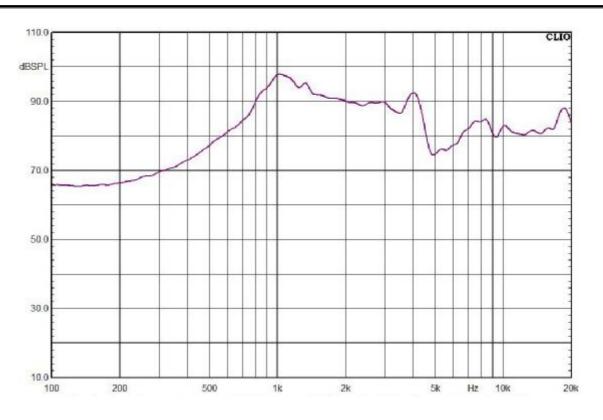
No.	Items	Specification
3-1	Rated impedance	$4\Omega$ ± 15 % at 2.0kHz
3-2	SPL normal power input M1	92± 3 dB 0.3M / 1W (1.6K,1.8K,2.0K,2.2K Hz average) 2.0V
3-3	Frequency range	800Hz ~ 20kHz SPL-10dB 2.0V
3-4	Distortion	< 10 % at 1kHz 2.0V
3-5	Normal power	3.0 W  @ Rated noise power operating continuously for 100 hours 3.46V
3-6	Maximum power	4.0 W  @ Stimulant program signal for 1 min. on & 2 min. off, cycling for 10 times 4.0V
3-7	Appearance normal	@ A.T. 15~35°C, H.M. 25~75%, B.P. 86~106kPa
3-8	Buzzes & rattles no appearance	@ 0.3m with sine wave from 500Hz to 20kHz input/rated noise power 2.91V
3-9	Diaphragm material	Waterproof membrane
3-10	Weight	15g

#### NOTES:

- 1. Test in anechoic room and use the IEC standard baffler which size at: 1350 mm (W) X 1650 mm (H)
- 2. Test should be made under the conditions of room temperature ( $20 \pm 10$  °C), relative humidity ( $60 \pm 20$ %) and normal atmospheric pressure. In this case, however, that the judgment is questionable, the test conditions are to be changed to room temperature  $20 \pm 2$  °C, relative humidity  $60 \sim 70$ % and normal atmospheric pressure.

## 4. Typical Frequency Response Curve:

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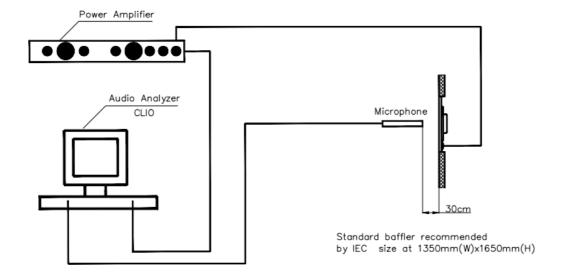
# 5. Reliability Test:

No.	Item	Method of Test	Tolerance after Testing
5-1	Operating temperature	-25 °C ~ +85 °C	
5-2	High-temperature loading & storage	@ $1/4$ rated noise power /85 ± 2 °C operating for 16 hours then depositing for 2 hours at constant temperature, completing testing within 1 hour after withdrawing.	Meet requirements of appearance, Buzzes & rattles after test
5-3	Low-temperature loading & storage	@ $1/4$ rated noise power/-10 $\pm$ 3 °C operating for 1 hours, depositing @ -25 $\pm$ 3 °C for 2 hours, then resuming at normal atmosphere conditions (GB/T9396-1996 4.2) for 4 hours.	Meet requirements of appearance. Buzzes & rattles, solderability after test
5-4	Static humidity /temperature	@ A.T. $40 \pm 2$ °C, H.M. $93 \pm 2$ % depositing for 48 hours, then resuming @ normal atmosphere conditions (GB/T9396-1996 4.2) for 24 hours.	Meet requirements of appearance, Buzzes & rattles, insulation resistance, bearing voltage after test
5-5	Temperature (high and low) cycle test	Storage in -25 °C $\pm$ 5 °C for 2 hours, in 20 °C $\pm$ 5 °C for 2 hours, in 85 °C $\pm$ 5 °C for 2 hours then back in 20 °C $\pm$ 5 °C 2 hours, as one cycle. 12 cycle in total.	Appearance: no
5-6	Drop test	Drop a product naturally from the height of 1000 mm onto the surface of 100 mm thick wooden board. Two directions: upper and side of the product are to be applied for this drop test once respectively.	obviously damage Tone: no obviously noise
5-7	Life test in the room temperature	Input the signal with the valid frequency range on the speaker in continuously for 100 hours, the room temperature should control in 15 °C to 35 °C.	SPL±3dB F0±20%
5-8	Vibration test	Conduct the test for the directions of X Y and Z for 0.5 hour each (total 1.5 hours). To-and Fri sweep time(from 10 to 55 Hz and then 55 to 10) under single amplitude of 0.75 mm is 3 minute, then expose to the room temperature for 2 hours.	ACR ±15%

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**NOTE**: The frame is allowed to deform after drop test.

### 6. Electrical Testing Method:



### 7. Packing Information:

