

Product Specification

Ningbo East Electronics Limited

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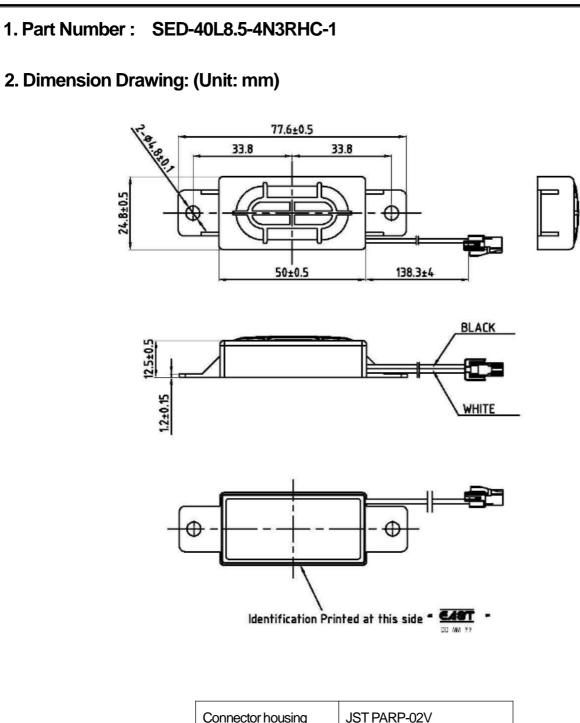
http://www.east-mingtao.com

| 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 | | |



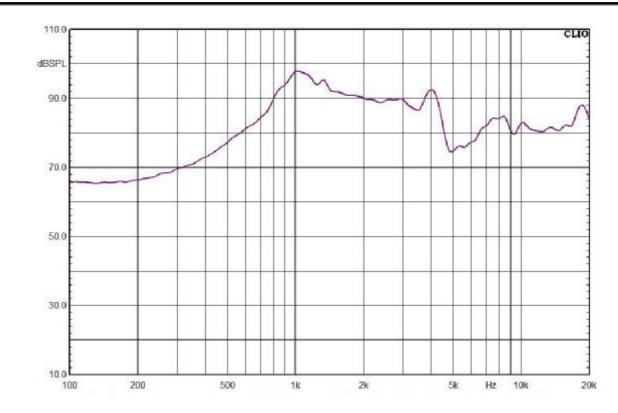
| Connector housing | JST PARP-02V |
|--------------------|-------------------|
| Connector retainer | JST PMS-02V-S |
| Connector terminal | JST SPA-001T-P0.5 |
| Wire | UL1007-24AWG |

| No. | ltems | Specification | | |
|------|--|--|-------------|--|
| 3-1 | Rated impedance | 4Ω ± 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 | 3.0 W | | |
| | power | @ Rated noise power operating continuously for 100 | hours 3.46V | |
| 3-6 | Maximum power | 4.0 W <u>@ Stimulant program signal for 1 min. on & 2 min. off, cycling for 10 times</u> 4.0V | | |
| 3-7 | Appearance normal | @ A.T. 15~35°C, H.M. 25~75%, B.P. 86~106kPa | | |
| | Buzzes & | | | |
| 3-8 | rattles no | @ 0.3m with sine wave from 500Hz to 20kHz input/rated noise power | 2.91V | |
| | appearance | | | |
| 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 ±10 °C), relative humidity (60 ±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 ±2 °C, relative humidity 60~70% and normal atmospheric pressure.

4. Typical Frequency Response Curve:



5. Reliability Test:

| No. | ltem | Method of Test | Tolerance after Testing |
|-----|---------------------------------------|---|--|
| 5-1 | Operating temperature | -25 °C ~ +85 °C | |
| 5-2 | High-temperature loading & storage | @ $\frac{1}{4}$ 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 | @ $\frac{1}{4}$ rated noise power/-10 ± 3 °C operating for 1 hours, depositing @ -25 ± 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 ± 2 °C, H.M.93± 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 ± 5 °C for 2hours, in 20 °C ± 5 °C for 2 hours, in 85 °C ± 5 °C for 2 hours then back in 20 °C ± 5 °C 2 hours, as one cycle. 12 cycle in total. | Appeorance: |
| 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. | Appearance: no 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% |

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

6. Electrical Testing Method:

