

SPECIFICATION



TYPE : **Earphone RECIEVER**

Model No. : **SR106560EP01N**

Rev. : **00**

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REVISION HISTORY

REV.	DATE	SHEET No.	Contents	NOTE	BY
0	17.08.28	-	-	1 st release	B.L.Choi
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1. SCOPE

This documents shall be applied to the earphone-reciever.

2. ENVIRONMENTAL REQUIREMENTS

The specification measures up to RoHS version and including all components must be free from lead and other banned or restricted substances.

3. GENERAL REQUIREMENTS

3.1 Operating condition

Temperature : -20 ~ 70 °C without loss of function

3.2 Storage condition

Temperature : -40 ~ 85 °C without loss of function

Caution : Do not keep with pile up

3.3 Points to handling notice

- Do not be around magnet
- Do not heating
- Do not throw against
- Do not dipping in the water

3.4 Appearance and Cleaning

Should not exist any obstacle to be harmful to normal operation can not any remarkable damage, crack and rust which may cause malfunction.
Cleaning under specific condition proposed by manufacturer.

4. ELECTRO-ACOUSTIC CHARACTERISTICS

4.1 Rated Impedance (Z)	16.0 $\Omega \pm 15\%$ @ 2 kHz, 0.28 Vrms
4.2 Voice coil resistance (R)	15 $\Omega \pm 10\%$
4.3 Rated Input Power	5.0 mW (0.28 Vrms)
4.4 Maximum Input Power	25 mW (0.63 Vrms) (Refer to IEC268-5)
4.5 Characteristic Sensitivity (IEC 60318-1 2cc coupler)	95 ± 3 dB @ 1kHz / 1mW (0.127 Vrms)
4.6 Rated Frequency Range	20 ~ 20 kHz
4.7 Total Harmonic Distortion (IEC 60318-1 2cc coupler)	< 10 % @ 100~5000 Hz / 1mW (0.127 Vrms)
4.8 Rub & Buzz (Rated input power / sinusoidal wave / sweep) There shall be no buzzes, rattles nor any spurious acoustic noises	

SPECIFICATION for MICRO SPEAKER

SR106560HP01N

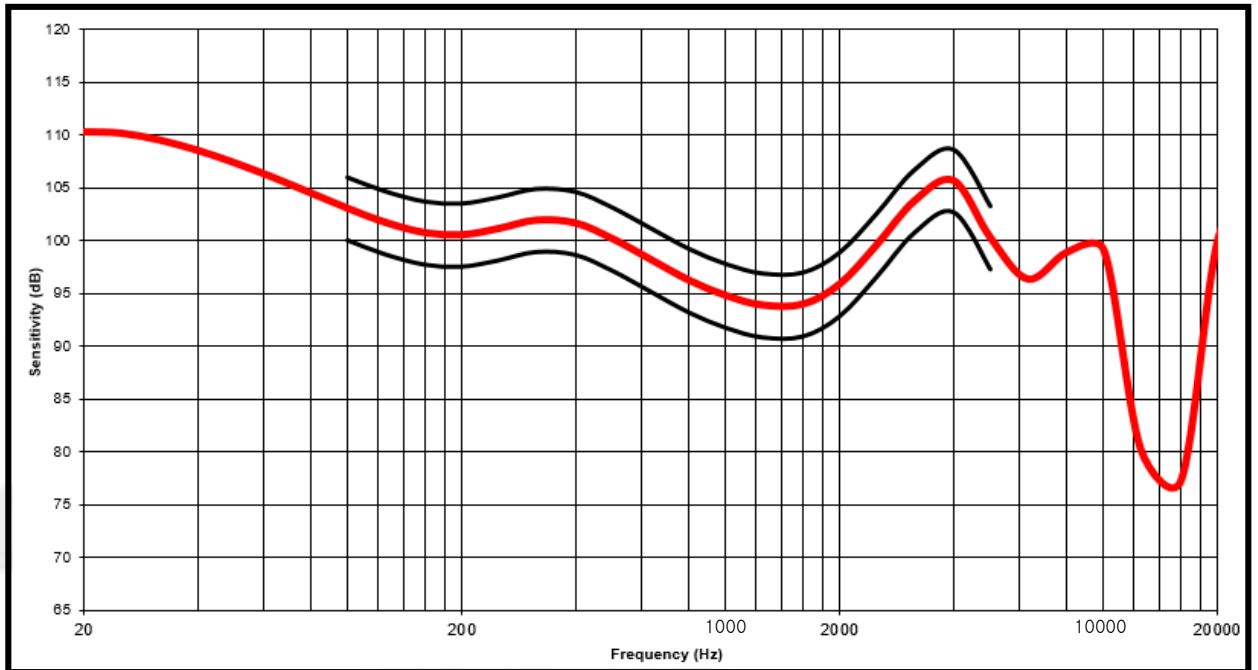
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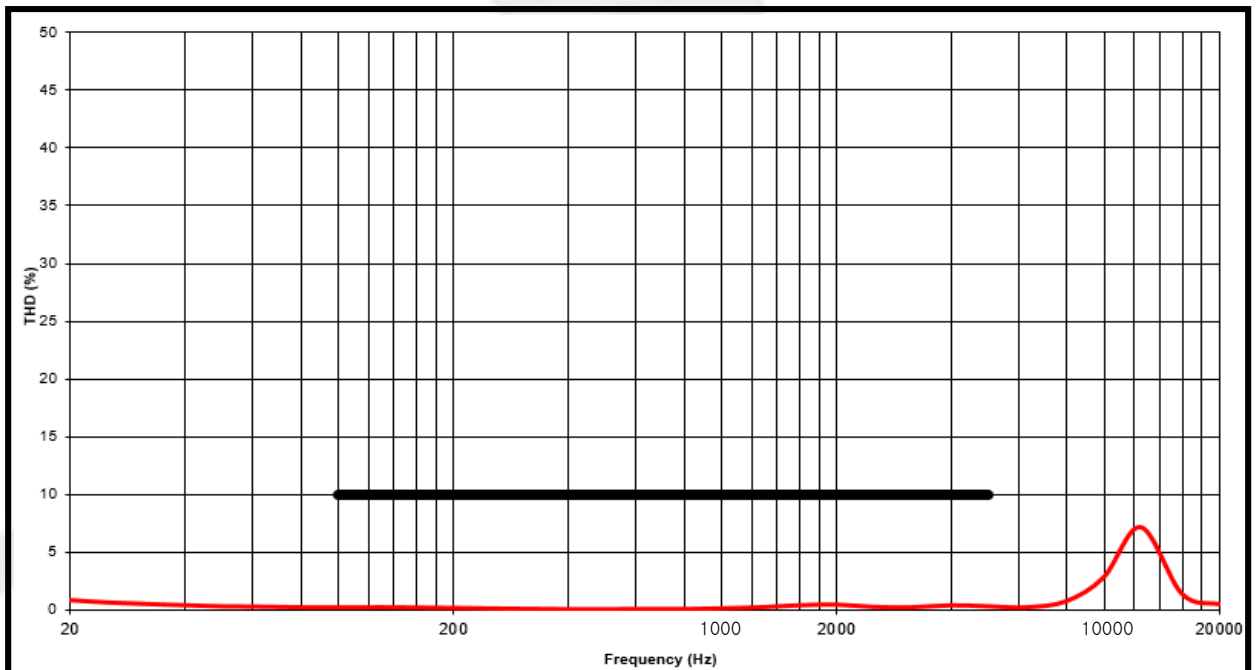
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5. FREQUENCY RESPONSE

5.1 Frequency Response Curve



5.2 Distortion Response Curve



6. TEST METHOD

6.1 Equipment

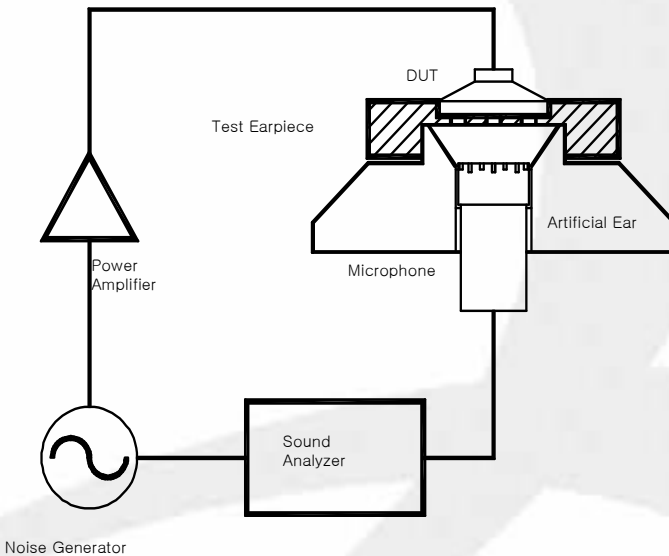
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|---|----------------------------|------------------|
| ☑ | Artificial ear | : B&K Type 4153 |
| ☑ | Sound Analyzer | : B&K Pulse |
| ☑ | Power Amplifier | : B&K Type 2716C |
| ☑ | Pre Amplifier | : B&K Type 2669 |
| ☑ | Microphone (Pressure type) | : B&K Type 4192 |

6.2 Sensitivity and Frequency Response curve

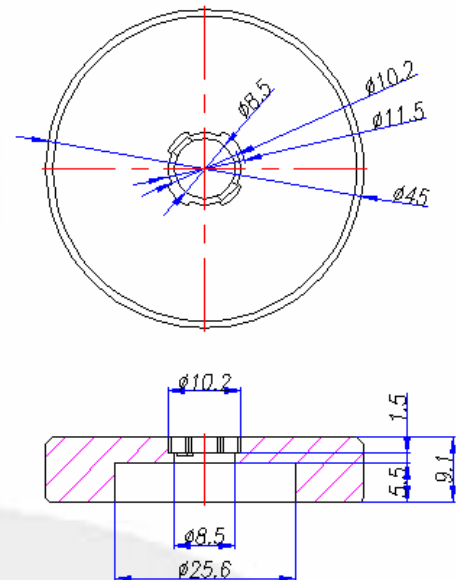
- ☑ The Receiver shall be mounted in a specific earpiece shown test earpiece dimension, and an earpiece shall be placed on an artificial ear.

The input power are 400mV for SPL curve and THD curve.

6.3 Test setup



※ Artificial Ear simulator



SECTION A-A'

Earpiece JIG

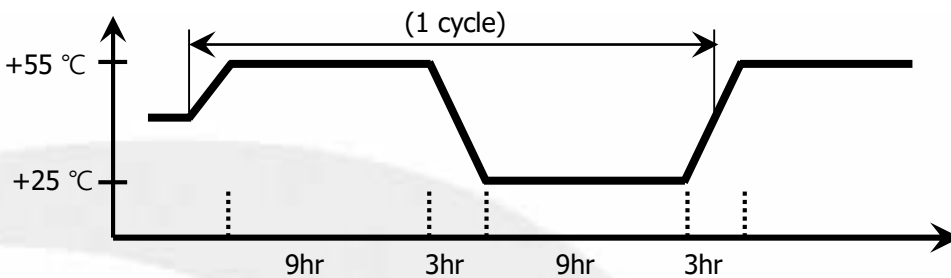
7. RELIABILITY REQUIREMENTS

7.1 Load testing

White noise(EIA) / rating power(5mW, 0.4Vrms), 96hrs

7.2 Humidity endurance Test

5 cycles 60°C , 90% RH , 1cycle=24H,
change Time=3hrs.(IEC60068-2-30 Db)

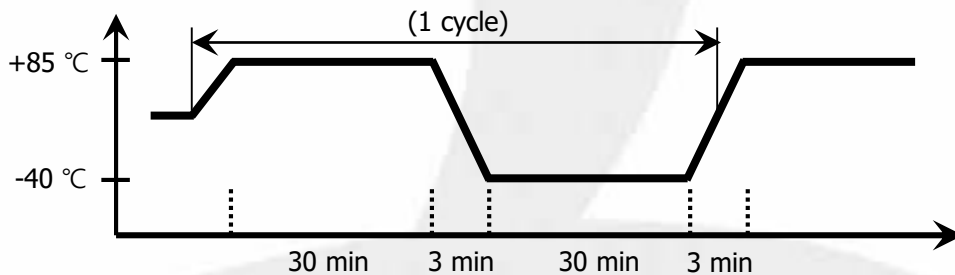


7.3 Damp heat Test

High storage temperature test : +85°C (Temp. change 1°C/min /96 hours)

7.4 Thermal shock Test

-40 ~ +85°C at each 30 min, Total 10 cycles, Max. 3 min. transition time



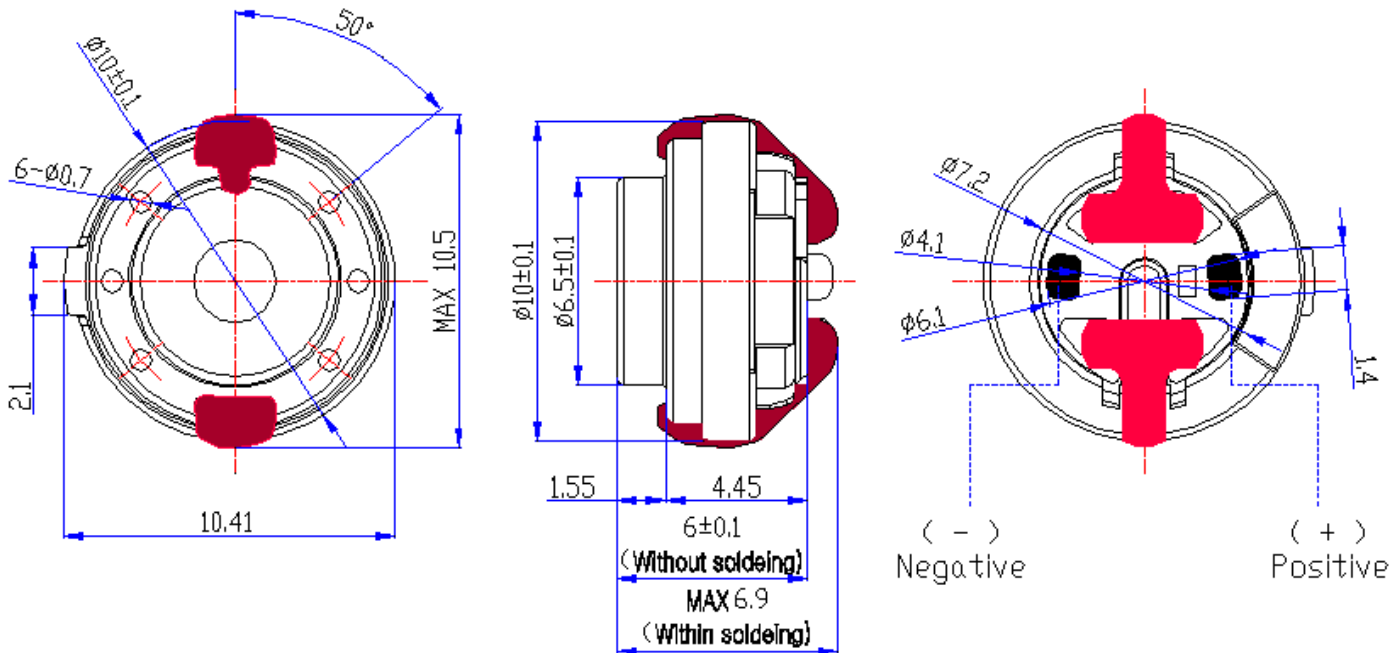
7.5 Drop Test

It falls 5 times random drops by the case 80~100g.

The height is 1.0m from concrete floor.

(After drop, please measure FR and THD, and compare with initial results)

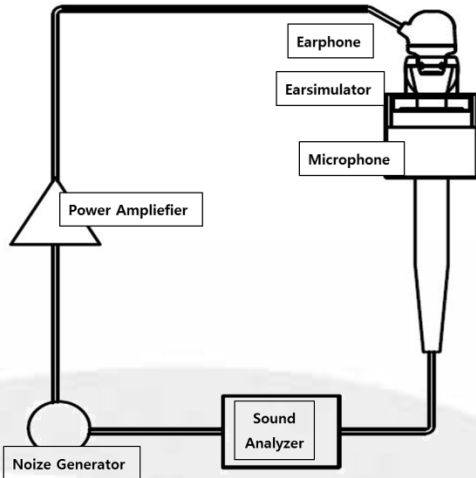
8. MECHANICAL LAYOUT AND DIMENSION



Tolerance unless noted : $\pm 0.15\text{mm}$

9. APPENDIX

9.1 Measurement condition



Measurement equipments

- | | |
|--------------------|-------------|
| 1. Audio analyzer | : B&K Pulse |
| 2. Power amplifier | : B&K 2716C |
| 3. Microphone | : B&K4157 |

Measurement conditions

- | | |
|------------------------|------------------|
| 1. Input voltage | : 0.127 Vrms |
| 2. Frequency range | : 50 Hz ~ 20 kHz |
| 3. Ambient temperature | : 20°C ±5°C |
| 4. Relative humidity | : 25 - 75 % R.H. |

9.2 Frequency Response Curve

