

Product specifications

SD150

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Specification for Cellular Portable Phone Receiver

1. Scope

This specification is applied to the dynamic receiver which is used all of the electrical acoustic product.
 --compact, clear sound
 --applications: cord phone

2. General

- 2.1 Out-Diameter:** ϕ 38.0mm
- 2.2 Height :** 21.2mm
- 2.3 Weight :** 35gr.
- 2.4 Operating Temperature range:**
 -20~+60°C without loss of function
- 2.5 Store Temperature range:**
 -20~+65°C without loss of function
- 2.6 Test condition:** 15~35°C, 25%~85%RH, 860~1060hpa

3. Electrical and Acoustic Characteristics.

- 3.1 Impedance:** $150 \Omega \pm 20\%$ (at 1Vrms 1KHz)
- 3.2 Sound Pressure Level:** $98 \pm 2\text{dB}@1\text{KHz}$ (0dB SPL=20 μ Pa)
 Input voltage: 60mV (Sine wave) measured with IEC318 coupler.
- 3.3 Frequency Range:** 300Hz~3.4KHz
- 3.4 Input Power:** Rated 10mW/ Max 30mW
- 3.5 Distortion:** <5% Max. at 300Hz~3400HZ with 60mV
- 3.6 Buzz and Rattle:** Should not be audible buzzes, rattle when feeding the 10mW sine wave signal swept at frequency range.

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4. Reliability Test

After test(1-7item),the receiver S.P.L, difference shall be within $\pm 3\text{dB}$,and the appearance not exist any change to be harmful to normal operation(e.g. cracks, rusts, damages and especially distortion).

4.1 High Temperature Test

After being placed in a chamber with $+60\pm 3^{\circ}\text{C}$ for 96 hours and then being placed in natural condition for 1 hour, receiver shall be measured.

4.2 Low Temperature Test

After being placed in a chamber with $-20\pm 3^{\circ}\text{C}$ for 96 hours and then being placed in natural condition for 1 hour, receiver shall be measured.

4.3 Humidity Test

After being placed in a chamber with 85% to 90%R.H. at $+40\pm 2^{\circ}\text{C}$ for 96 hours and then being placed in natural condition for 1 hour, receiver shall be measured.

4.4 Thermal Shock Test

After being placed in a chamber at $+60^{\circ}\text{C}$ for 1hour, then receiver shall be placed in a chamber at -20°C for 1hour(1 cycle is the below diagram).

After 6 above cycles, receiver shall be measured after being placed in natural condition for 1hour.

4.5 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, receiver shall be measured.

4.6 Drop Test

The receiver when mounted in the jig which weight 85g~100g, shall with stand 6times random drops from a height of 1.0meter to 5mm thick hard wood board and be nothing mechanical damage.

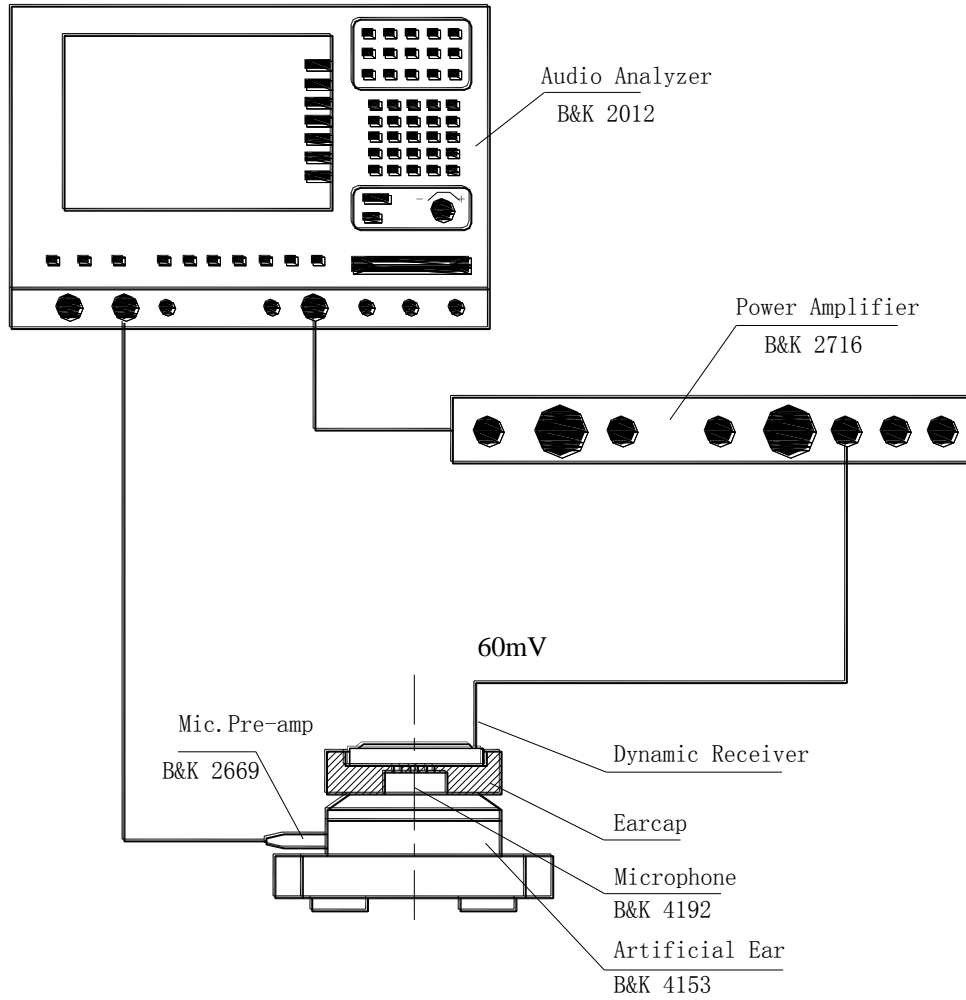
4.7 Load Test

After being applied loading white noise with input power 10mW for 96 hours, then placed in natural condition for 1hour, receiver shall be measured.

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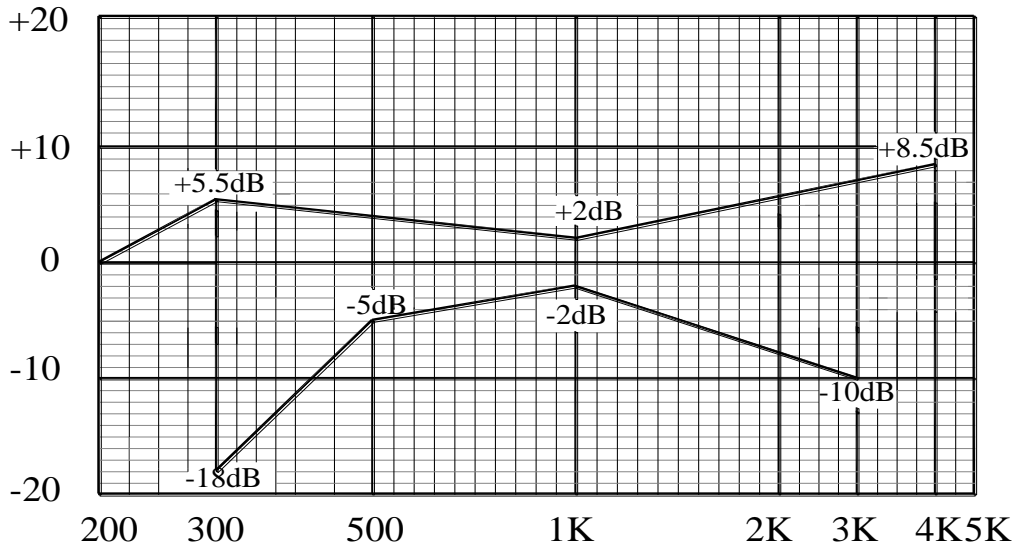
5 Measurement Block Diagram



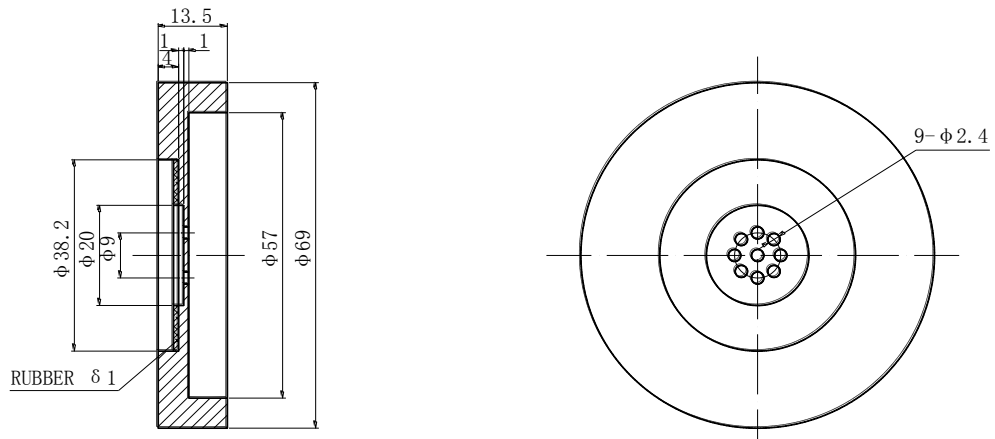
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6. Frequency Response Curve



7. Ear piece

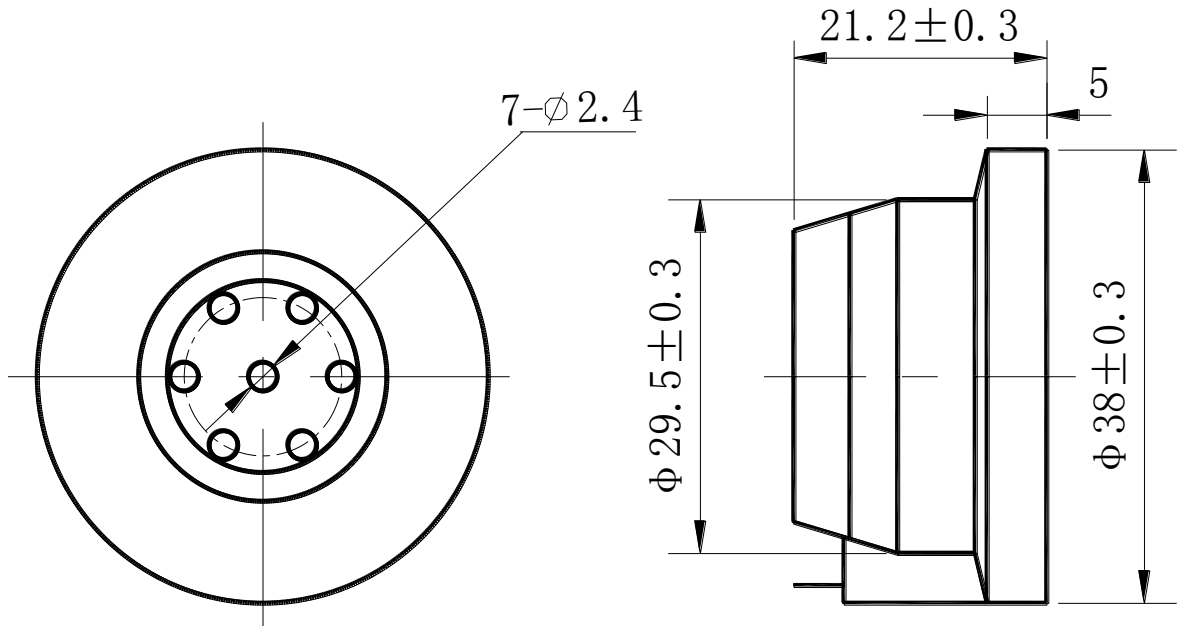


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8. Dimensions

Unit: mm Tolerance: ± 0.2



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Specification for Cellular Portable Phone Receiver

9.Packing



100pcs one layer



Five layers in a carton



500pcs receivers in a carton

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