

Specification for Receiver	Page	2/10
Model No. : KPDR-157BH-1-5729	Revision No.	1.0
	Drawing No.	KFC5729

CONTENTS

1. Scope
2. General
3. Electrical and Acoustic Characteristics.
4. Reliability Test
- 5.1. Measurement Block Diagram
- 5.2. Response curve
- 6.1 HAC Measurement Block Diagram
- 6.2 HAC Response curve
7. Structure
8. Packing
9. Revision

Specification for Receiver		Page	3/10
		Revision No.	1.0
Model No. :	KPDR-157BH-1-5729	Drawing No.	KFC5729

1. Scope

This specification covers a dynamic receiver unit KPDR-157BH-1-5729 for phone use

2. General

- 2.1 Out-Diameter : \varnothing 20mm
- 2.2 Height : 4.0mm
- 2.3 Weight : 2.0gr.
- 2.4 Operating Temperature range:
-25~+65°C without loss of function
- 2.5 Store Temperature range:
-25~+65°C without loss of function

3. Electrical and Acoustic Characteristics.

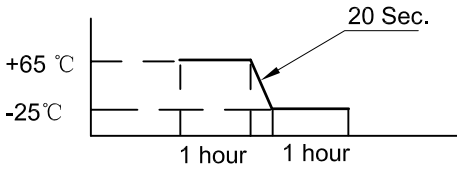
Test condition : 20 ± 2 °C, 60% ~ 70% RH, 860~1060 mbar

	Items	Specification
1	Impedance	150 Ω \pm 20%(at 1Vrms,1kHz)
2	Sound Pressure Level	88dB \pm 2dB(1kHz/60mV with IEC 381coupler)
3	Frequency Range	300Hz~3.4KHz
4	Input Power	Rated 30mW / Max. 250mW
5	Buzz and Rattle	Should not be audible buzzes,rattles when the 30mw sine wave signal swept at frequency range.

Specification for Receiver		Page	4/10
Model No. : KPDR-157BH-1-5729		Revision No.	1.0
		Drawing No.	KFC5729

4. Reliability Test

After test(1~7item), the speaker S.P.L . difference shall be within $\pm 2\text{dB}$, and the appearance not exist any change to be harmful to normal operation(e.g. cracks,rusts,damages and especially distortion).

	Item	Specification
1	High Temperature Test	After being placed in a chamber with $+65\pm 3\text{ }^\circ\text{C}$ 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 $-25\pm 3\text{ }^\circ\text{C}$ 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 90%R.H. at $+40\pm 2\text{ }^\circ\text{C}$ for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured.
4	Thermal Shock Test	<p>After being placed in a chamber at $+65\text{ }^\circ\text{C}$ for 2 hour, then speaker shall be placed in a chamber at $-25\text{ }^\circ\text{C}$ for 2 hour(1 cycle is the below diagram).</p> <p>After 2 above cycles, speaker shall be measured after being placed in natural condition for 1 hour.</p>  <p>The diagram shows a temperature profile starting at $+65\text{ }^\circ\text{C}$ for a 1-hour dwell. It then ramps down to $-25\text{ }^\circ\text{C}$ over a 20-second period. At $-25\text{ }^\circ\text{C}$, it dwells for 1 hour before returning to $+65\text{ }^\circ\text{C}$ for another 1-hour dwell.</p>
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 2 hours each axes, speaker shall be measured.
6	Drop Test	Drop a unit contained in normal box into a board 5mm . (3 Place each 1 time)form a height of 1.5m and then a unit must have no abnormality
7	Load test	The receiver after being applied loading white noise with input power (30mw) for 24 hours, then placed in natural condition for 1 hour, speaker shall be measured.
8	Insulation test	When they are measured with DC 100V the insulation resistance between v.c. terminal and frame must be more than 1 $\text{M}\Omega$

Model No. : KPDR-157BH-1-5729	Specification for Receiver	Page	5/10
		Revision No.	1.0
		Drawing No.	KFC5729

4. Reliability Test

Appendix

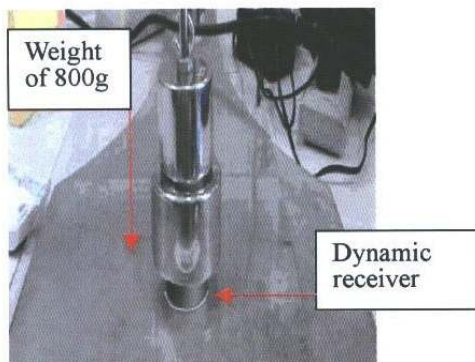
Procedure of test of the Adhesive of Dynamic Receiver:

A. Test of the Adhesive of Dynamic Receiver by pulling both lead wires to up:

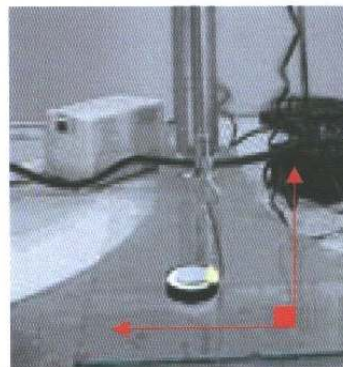
1. The dynamic receiver must be dressed on the straight glass surface and pressed for 2 seconds for 800gr or 8N of weight on the top of the dynamic receiver (Picture 1).
2. After this, it should be applied one traction using one dynamometer pulling both lead wires to up, forming one angle of 90° of the glass (Picture 2), the lead wires can support less than 0.5Kgf (5N) force. When the force is more than 0.5Kgf (5N), the lead wires would be off from the PCB (Picture3).

B. Test of the Adhesive of Dynamic Receiver Without pulling both lead wires to up (by pulling the capsule):

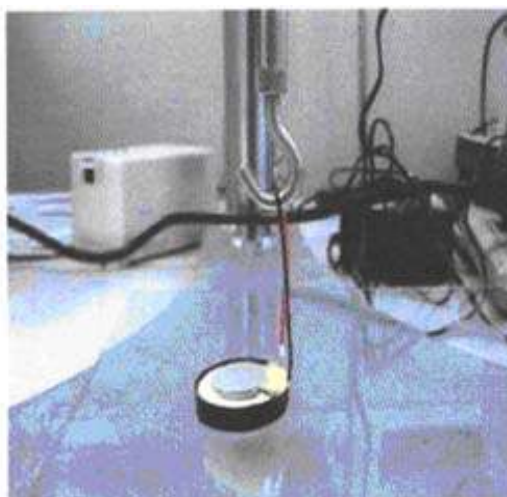
1. The dynamic receiver must be dressed on the straight glass surface and pressed for 2 seconds for 800gr or 8N of weight on the top of the dynamic receiver (Picture 1)
2. After this, it should be applied one traction using one dynamometer pulling the capsule. The dynamic receiver should supports one traction force more than 2Kgf or 20N of peak (Picture 4).



Picture 1: Dynamic receiver being pressed with 800g for 2 seconds



Picture 2: Dynamic receiver pulled up forming one angle of 90° with the glass



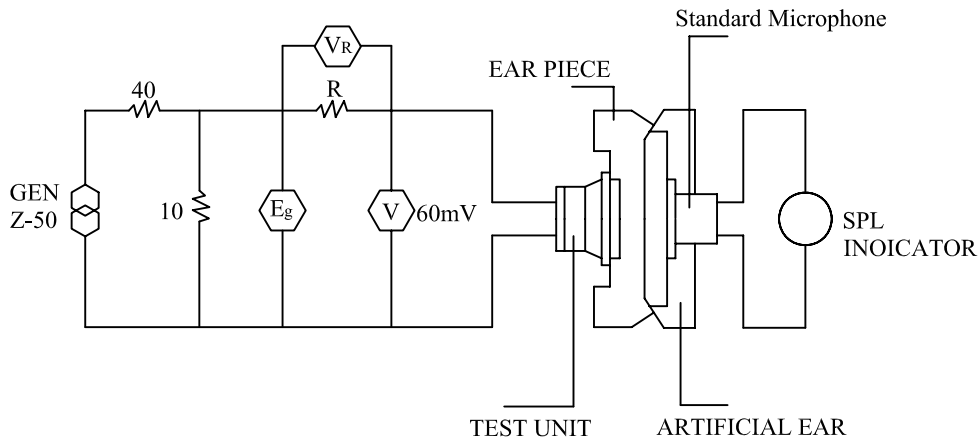
Picture 3: Dynamic receiver leaving the glass, if it left with more than 0.5Kgf force or 5N, it is OK. If it left the glass with less than 0.5Kgf force or 5N, it is NOK.



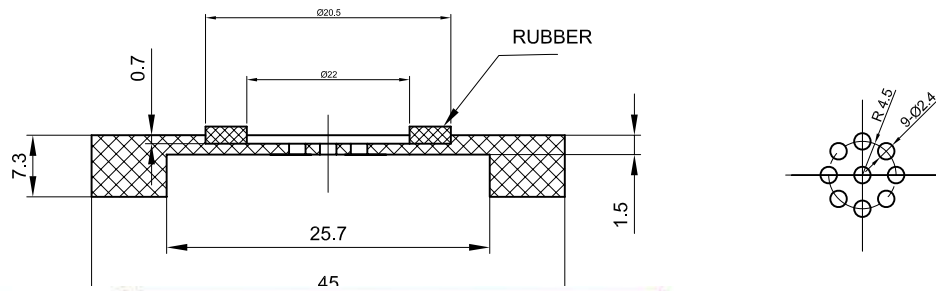
Picture 4: Dynamic receiver leaving the glass, if it left with more than 2Kgf force or 20N, it is OK. If it left the glass with less than 2Kgf force or 20N, it is NOK.

Specification for Receiver	Page	6/10
	Revision No.	1.0
Model No. : KPDR-157BH-1-5729	Drawing No.	KFC5729

5. Measurement Block Diagram & Response curve



EAR PLACE



受话器

JH6160(R)型电声测试仪

05/21/2010 16:43

产品型号: 157BH-1

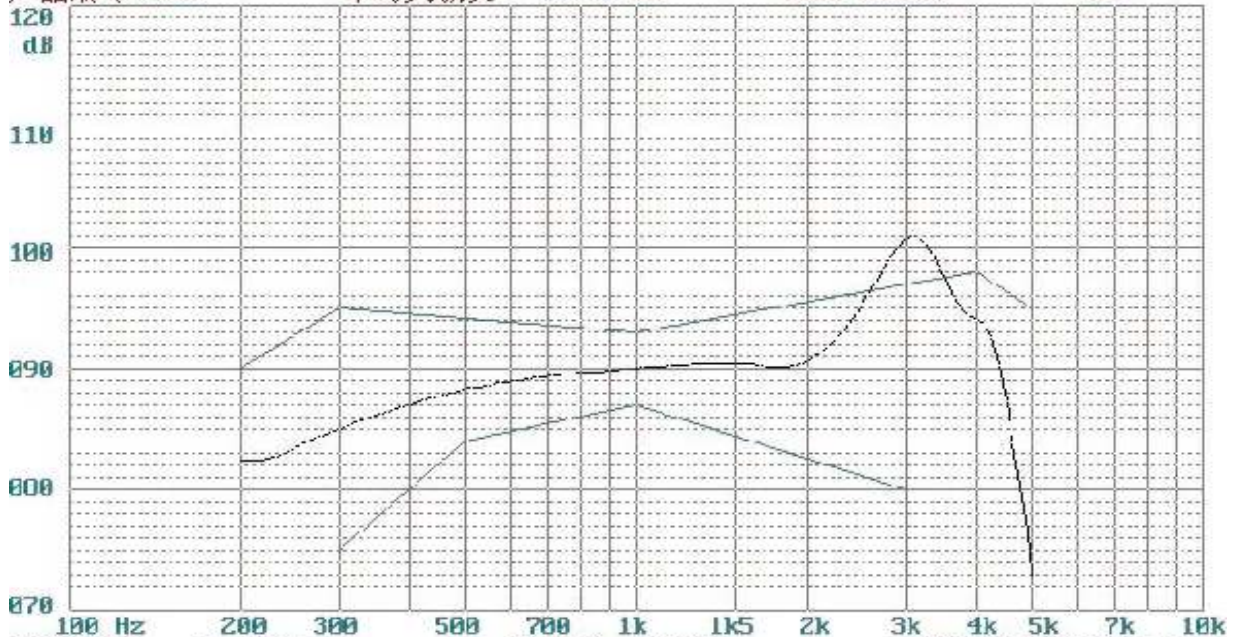
1kHz灵敏度: 890.8 dB PASS

1kHz阻抗: 159.8 Ω PASS

产品编号: 0001

平均灵敏度: 888.6 dB

1kHz H.A.C. dB



测试电压: 60 nVAC

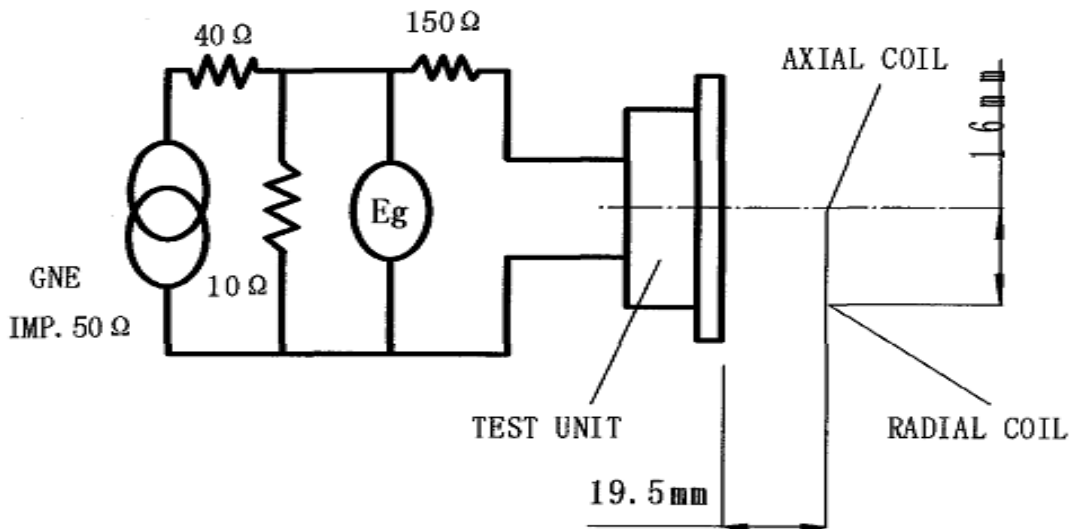
仿真耳: IEC318

零dB参考值 20.0 μPa

↑:速度 F1:设置 F2:下一项 F3:记忆 F4:打印 F5:保存 F6:中/英 ESC:退出

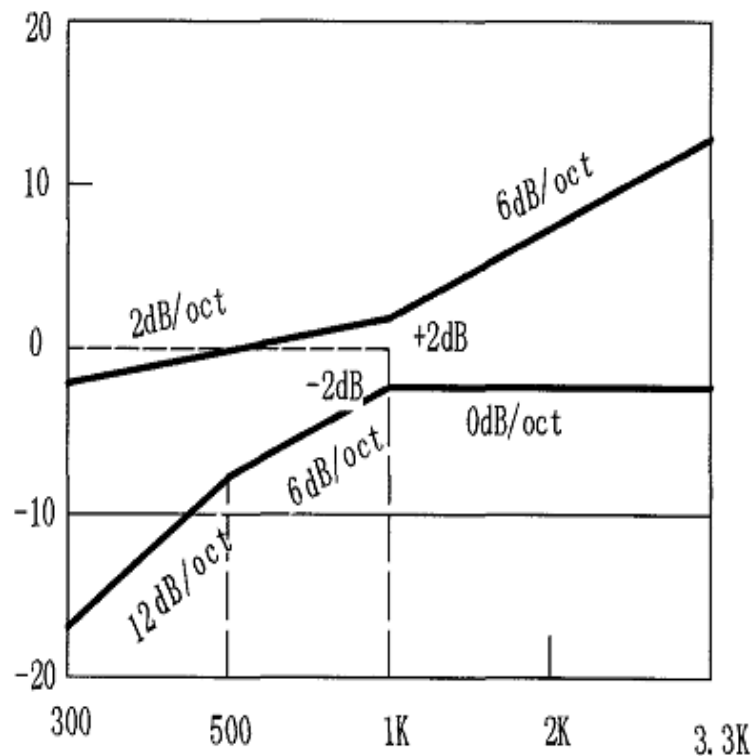
Specification for Receiver		Page	7/10
		Revision No.	1.0
Model No. : KPDR-157BH-1-5729	Drawing No.		KFC5729

6.1 HAC Measurement Block Diagram



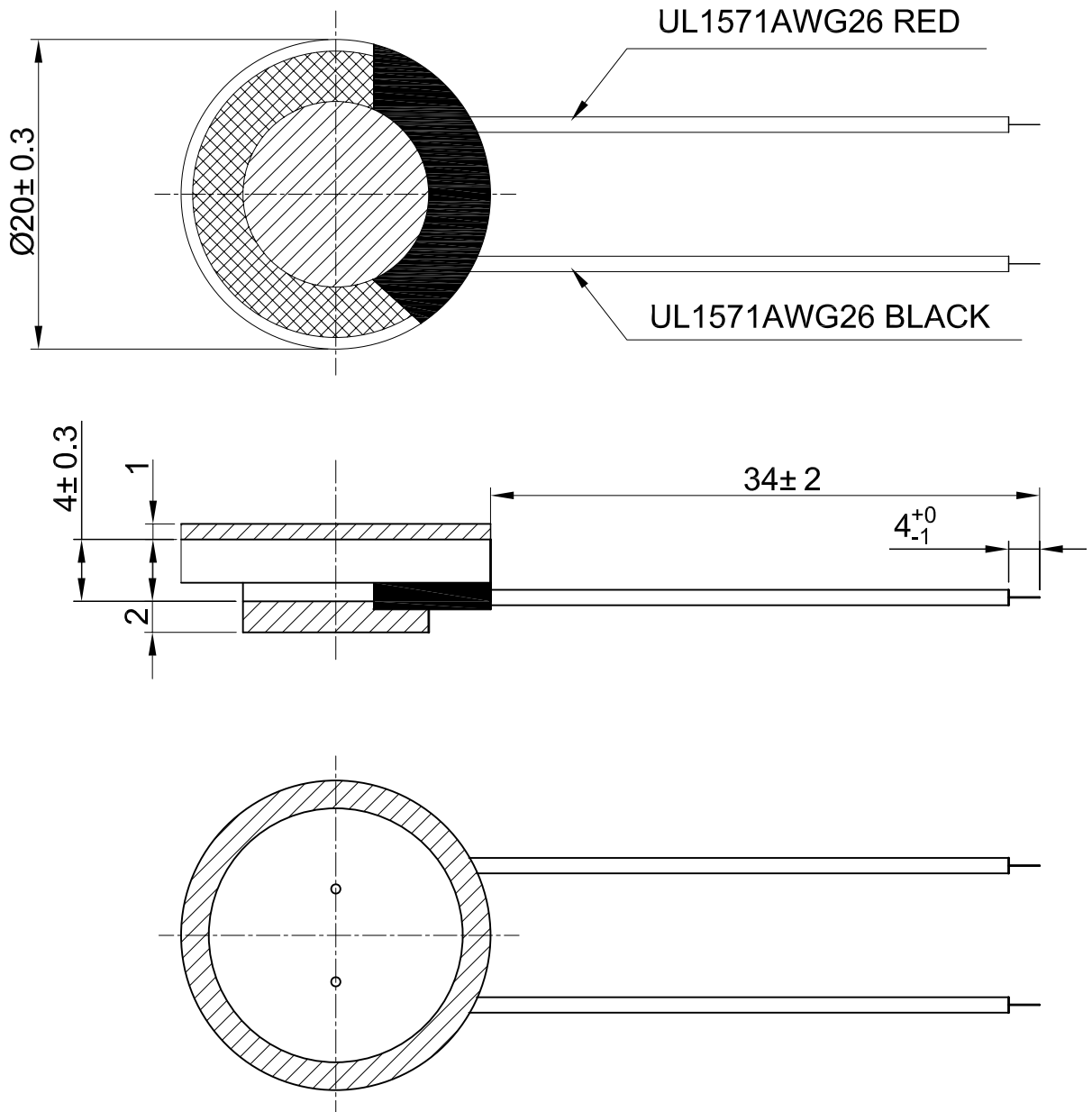
6.2 HAC Response curve

MF Intensity axial ≥ -19 dB at 1KHz 0dB 1A/m
 MF Intensity radial ≥ -27 dB at 1KHz 0dB 1A/m
 SchematicDiagram2

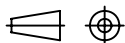


Specification for Receiver	Page	8/10
	Revision No.	1.0
Model No. : KPDR-157BH-1-5729	Drawing No.	KFC5729

7. Dimensions



FIRST ANGLE PROJECTION



UNIT : mm
Tolerance : ± 2

Specification for Receiver	Page	9/10
	Revision No.	1.0
Model No. : KPDR-157BH-1-5729	Drawing No.	KFC5729

8. Packing

