

MESSRS.

SPECIFICATION FOR APPROVAL**承 認 书**

PRODUCT	WATERPROOF TYPE RECEIVER
PART NO.	HDR-120632ZA-3P7 (ROHS)
CUSTOMER	
CUSTOMER PART NO.	

APPROVED BY	CHECKED BY	MADE BY
王台平 NOV-07-2017	曹丽萍 NOV-07-2017	LILY NOV-07-2017

常 州 华 龙 电 子 有 限 公 司
Changzhou Dragon State Electronic Co., Ltd

中国江苏省常州市新区电子园新四路 36 号

TEL: +86-519-85110078. 86-519-85106698, FAX: +86-519-85101081

EDITION:1.1

1. Specification

HDR-120632ZA-3P7 (RoHS)

ITEMS.		SPECIFICATIONS
01	Type	Dynamic 12 x 6mm receiver unit
02	Sensitivity (S.P.L)	112dB $\pm$ 3 dB at 1kHz 0.8V
03	Impedance.	32 Ohm $\pm$ 15% at 1KHz
	DC Resistance	27 Ohm $\pm$ 10%
04	Resonance Frequency (FO)	400HZ $\pm$ 20% AT FO, 1V
05	Magnet Field Intensity.	Axial – dB , Radial –dB at 1KHz
06	Nominal Input Power	20mW
07	Max. Input Power.	Must be normal at a white noise, 40mW for 1 minute.
08	Total Harmonics Distortion	Max 10 % at 1K Hz.
09	Dustproof And Waterproof	IP68 (2 meters 1 hour)
10	Operation temperature	-30°C to +70°C
11	Storage temperature	-40°C to +80°C
12	Weight.	0.3g $\pm$ 5%

2. Measuring method

2-1. Test Condition

Standard

Temperature : 15 ~ 35°C

Relative humidity : 45% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

Judgement

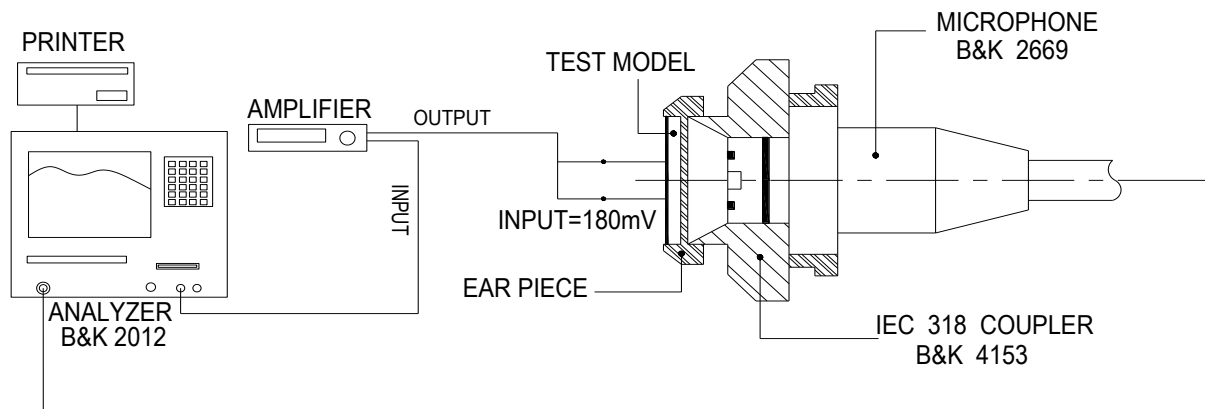
 Temperature : 20 $\pm$ 3°C

Relative humidity : 60% ~ 70%,

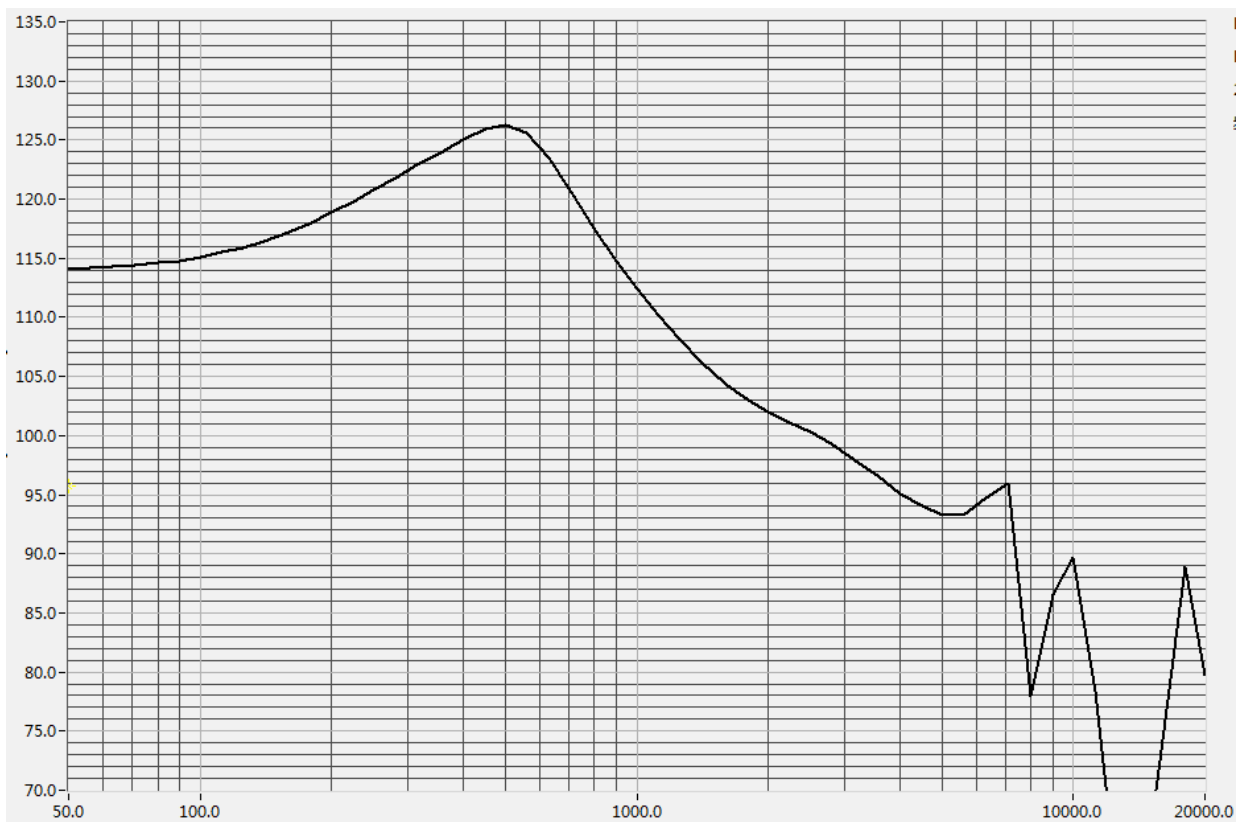
Atmospheric pressure : 860mbar to 1060mbar

2-2. Standard Test Fixture

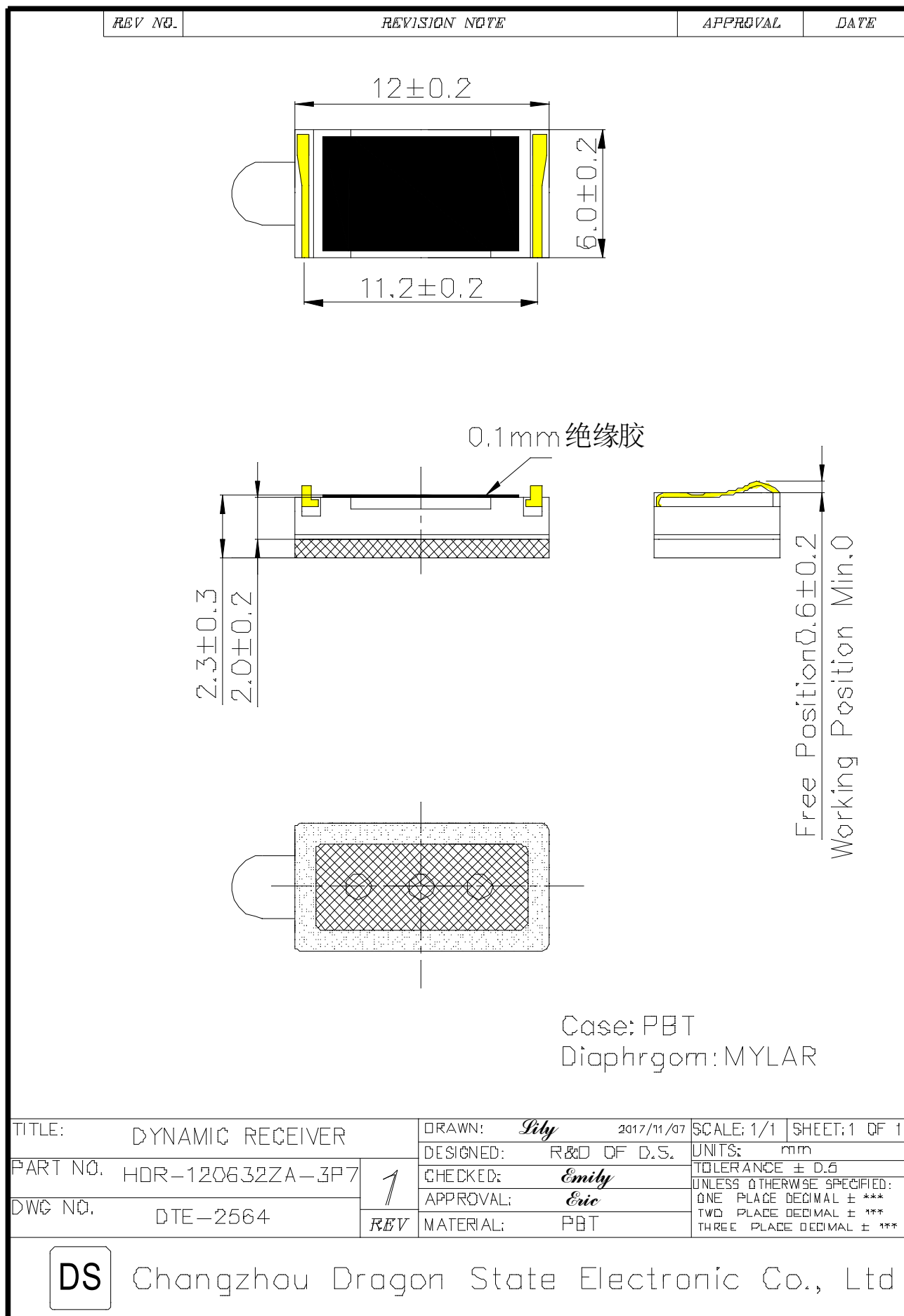
Input signal : 0.8V



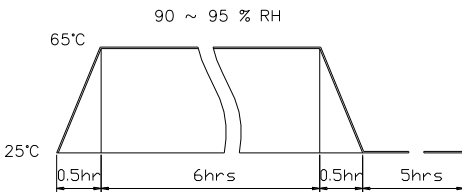
2.3 Frequency Response Curve



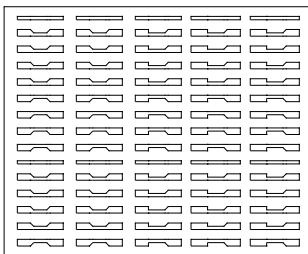
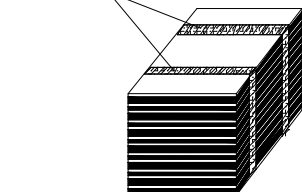
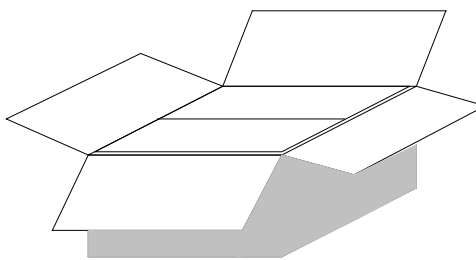
3.Dimension



4. Reliability Test

ITEMS.		SPECIFICATIONS
01	High temp. Test	Keep 96 hours at $+80^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and leave 3 hours in normal temperature and then check
02	Low temp. Test	Keep 96 hours at $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and leave 3 hours in normal temperature and then check
03	Humidity test	Keep 96 hours at $+40^{\circ}\text{C} \pm 3^{\circ}\text{C}$ relative humidity 90% and leave 3 hours in normal temperature and then checked.
04	Temp./humidity cycle	The part shall be subjected 5 cycles. One cycle shall be 12 hours and consist of;  The graph shows a temperature profile over time. It starts at 25°C, ramps up to 65°C in 0.5 hours, holds at 65°C for 6 hours, ramps down to 25°C in 0.5 hours, and then holds at 25°C for 5 hours. Above the 65°C plateau, it indicates 90 ~ 95 % RH.
05	Thermal Cycle Test.	Low temperature: $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$, temperature: $+80^{\circ}\text{C} \pm 3^{\circ}\text{C}$, cycle: 1 hour/cycle each, and then keep 5 cycles in a room.
06	Vibration	10~200~10Hz Sin-Wave Sweep 15min. 5G(Constant) X,Y, Z 3 direction. 2 hours each, total 6 hours.
07	Fix Drop test	Fix on Jig. then drop from 152cm height to the concrete floor X,Y, Z 6 direction. 5 times each, total 30 times.
08	Free Drop test	Free drop from 100cm height to the concrete floor X,y, z 6 direction. 1 times each, total 6 times.
09	Load test	Rated power white noise is applied for 96 hours
10	Protection against liquids	Protected against 1hour of immersion under 2m pressure
11	Max Power test	Max Power 1 min on – 2 min off 10 cycles.

5.Packing

REV NO.	REVISION NOTE	APPROVAL	DATE
	 Cover(285*235*5mm) Material: Paper ↓  Box(285*230*10mm) 150pcs Material: Paper+Epe ↓  Middle(285*230*120mm) 1500pcs(10*150pcs) Material: Paper+Epe ↓  Outer Box(480*360*350mm) 9000pcs(6*1500pcs) Material: Paper 单位: mm		
TITLE: packing		DRAWN: Lily	SCALE: 2:1
PART NO.		DESIGNED: R&D DF D.S.	UNITS: 772111
DWG NO.		CHECKED: Emily	TOLERANCE
		APPROVAL: Eric	20~11 ± 0.3
		MATERIAL: ***	10~5 ± 0.2
REV		<4	± 0.1
DS Changzhou Dragon State Electronic Co., Ltd			