

MESSRS.

SPECIFICATION FOR APPROVAL**承 認 书**

| | |
|-------------------|--------------------------|
| PRODUCT | WATERPROOF TYPE RECEIVER |
| PART NO. | HDR-080932ZA-3P (ROHS) |
| CUSTOMER | |
| CUSTOMER PART NO. | |

| | | |
|--------------------|--------------------|---------------------|
| APPROVED BY | CHECKED BY | MADE BY |
| 王台平 JUL-12-2018 | 曹丽萍 JUL-12-2018 | LILY JUL-12-2018 |

常 州 华 龙 电 子 有 限 公 司**DRAGONSTATE ELECTRONIC CORPORATION**

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

1. Specification

HDR-080932ZA-3P (RoHS)

| ITEMS. | | SPECIFICATIONS |
|--------|----------------------------|--|
| 01 | Type | Dynamic 08 x 09mm receiver unit |
| 02 | Sensitivity (S.P.L) | 120dB \pm 3 dB at 1kHz 0.8V |
| 03 | Impedance. | 32 Ohm \pm 15% |
| | DC Resistance | 28 Ohm \pm 15% |
| 04 | Resonance Frequency (FO) | 430HZ \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 |
| 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

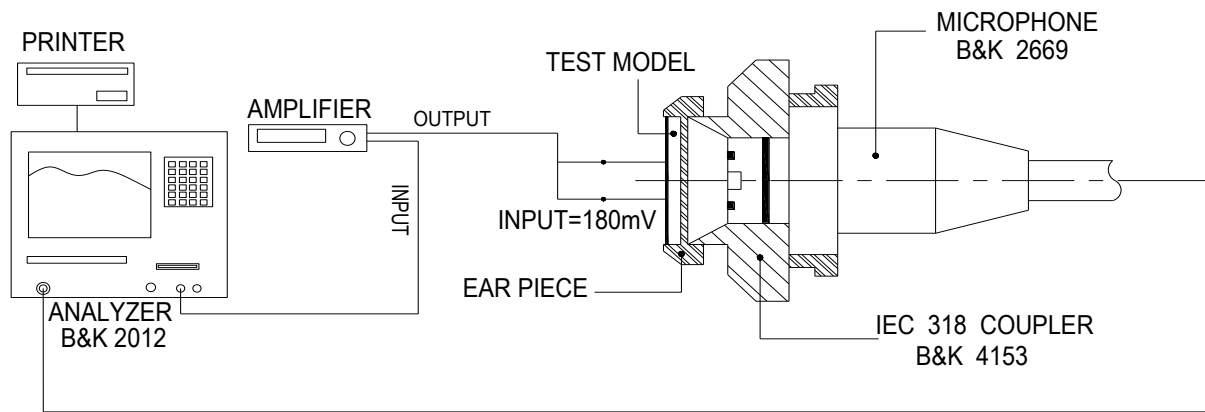
Temperature : 20 \pm 3°C

Relative humidity : 60% ~ 70%,

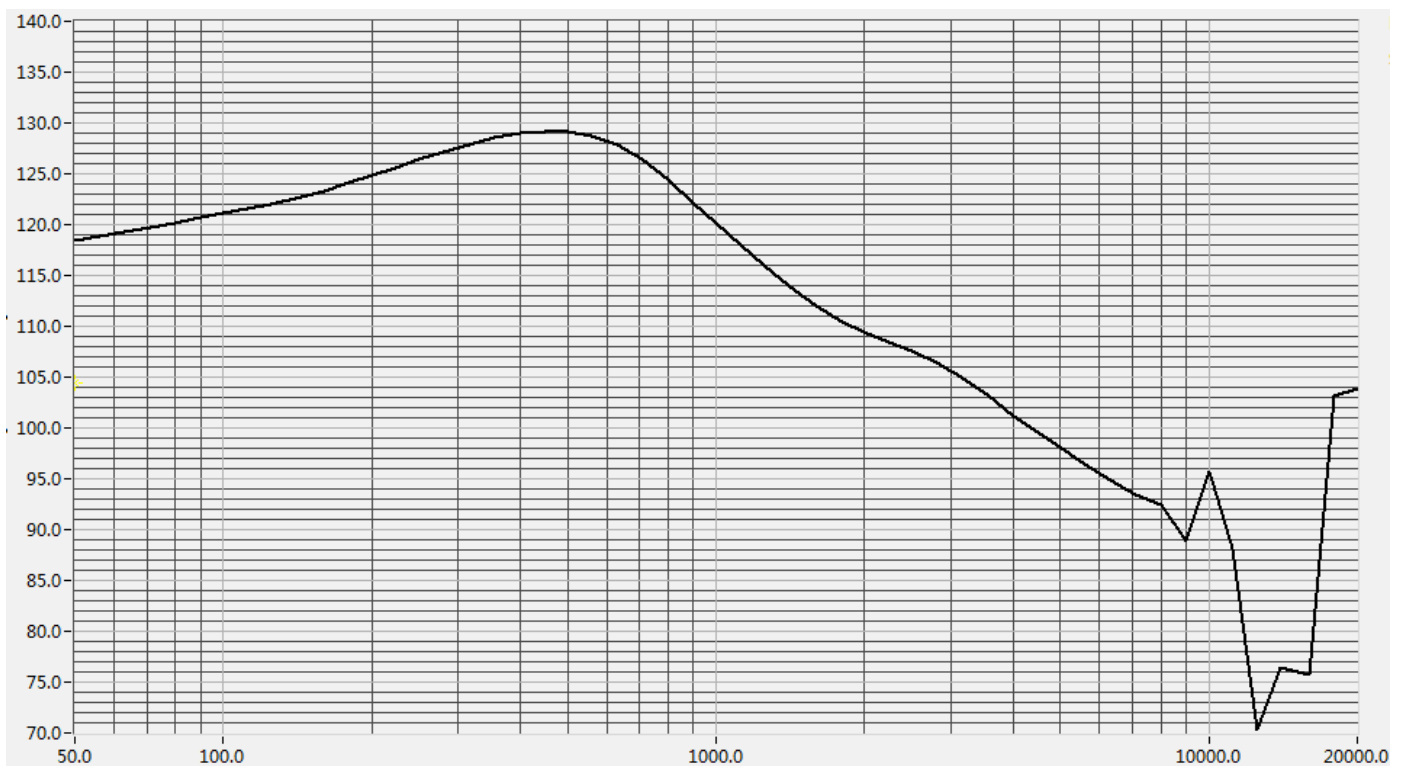
Atmospheric pressure : 860mbar to 1060mbar

2-2. Standard Test Fixture

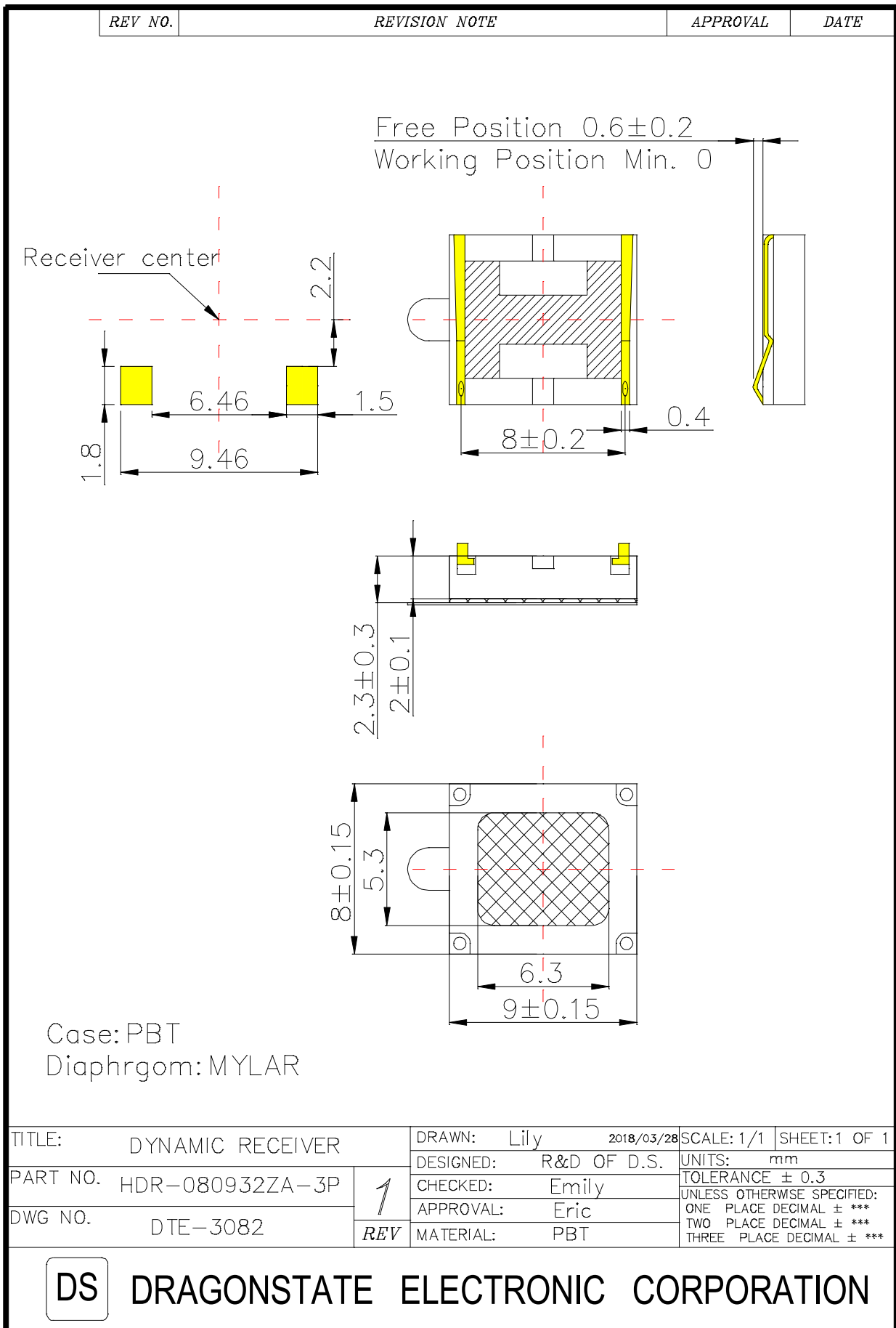
Input signal : 0.8V



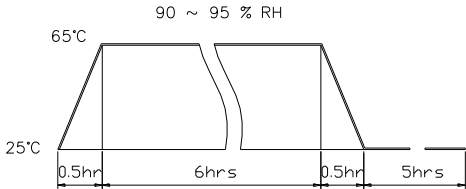
2-3 Frequency Response Curve



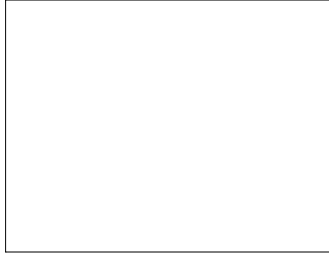
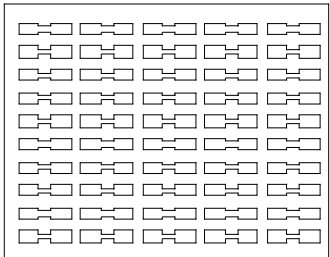
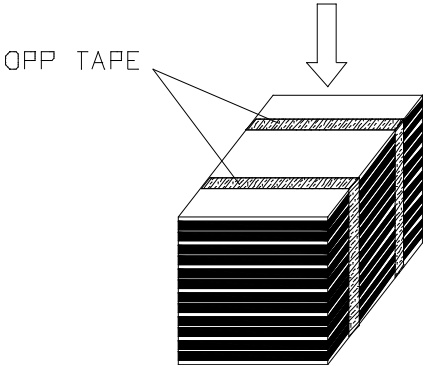
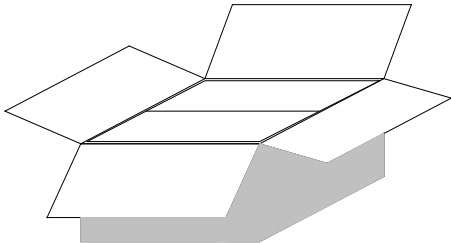
3.Dimension



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 | <p>The part shall be subjected 5 cycles. One cycle shall be 12 hours and consist of;</p>  <p>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. The humidity is indicated as 90 ~ 95 % RH during the 6-hour hold at 65°C.</p> |
| 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 1 hour 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 |
|---|---|-----------------------|---------------|
| |  <p>Cover(290*225*3mm) Material: Paper</p> | | |
| |  <p>Box(290*225*10mm) 100pcs Material: Paper+Epe</p> | | |
| |  <p>Middle(290*225*135mm) 1000pcs(10*100pcs) Material: Paper+Epe</p> | | |
| |  <p>Outer Box(515*320*280mm) 4000pcs(4*1000pcs) Material: Paper</p> | | |
| 单位: mm | | | |
| TITLE: Packing | | DRAWN: Lily | 2012/10/17 |
| PART NO. | | DESIGNED: R&D OF D.S. | SCALE: 2:1 |
| | | CHECKED: Emily | SHEET: 1 of 1 |
| DWG NO. | | APPROVAL: Eric | UNITS: mm |
| | | MATERIAL: | TOLERANCE |
| REV 1 | | 20~11 | ± 0.3 |
| | | 10~5 | ± 0.2 |
| | | <4 | ± 0.1 |
| <div style="display: inline-block; border: 1px solid black; padding: 2px 5px;">DS</div> DRAGONSTATE ELECTRONIC CORPORATION | | | |