# SPECIFICATION FOR APPROVAL

| Product  | TELEPHONE RECEIVER |
|----------|--------------------|
| Part No. | AR-0942U32-1T      |
| Customer |                    |
| Approval |                    |

| Approved By | Checked By | Made By |
|-------------|------------|---------|
|             |            |         |
|             |            |         |



## A & B COMPONENTS

HTTP://WWW.SPEAKER-TW.COM

#### **1. SPECIFICATION**

#### AR-0942U32-1T

|    | ITEMS.                     | SPECIFICATIONS                                      |
|----|----------------------------|---|
| 01 | Туре                       | Dynamic 9 mm receiver unit                          |
| 02 | Sensitivity (S.P.L)        | 108dB ±3 dB at 1kHz 180mV with IEC 318 coupler      |
| 03 | Impedance.                 | 32 Ohm ±15% at 1KHz                                 |
| 04 | Magnet Field Intensity.    | Axial – dB , Radial –dB at 1KHz                     |
| 05 | Nominal Input Power        | 1mW   |
| 06 | Max. Input Power.          | Must be normal at a white noise , 2mW for 1 minute. |
| 07 | Total Harmonics Distortion | Max 10 % at 1K Hz.                                  |
| 08 | Operation temperature      | -20°C to +60°C                                      |
| 09 | Storage temperature        | -30℃ to +70℃  |
| 10 | Net Weight.                | 0.5g  |

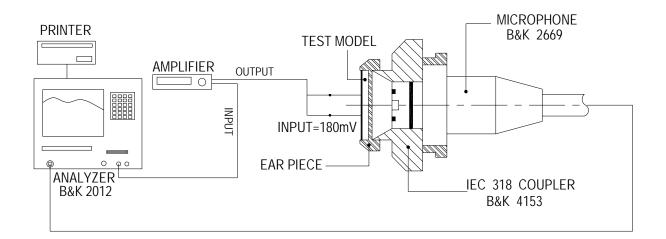
#### 2. MEASURING METHOD

2-1. Test Condition STANDARD Temperature :  $15 \sim 35^{\circ}$ C Relative humidity :  $45\% \sim 85\%$ , Atmospheric pressure : 860mbar to 1060mbar.

JUDGEMENT Temperature :  $20\pm3^{\circ}$ C Relative humidity :  $60\% \sim 70\%$ , Atmospheric pressure : 860mbar to 1060mbar

#### 2-2. Standard Test Fixture

#### Input signal : 180mV



#### 2.3 Frequency Response Curve



Mode: Receiver

|          | REV NO. |          | REVI,    | SION NOTE              |                         |     | APPROVAL                                    | DATE            |
|----------|---------|----------|----------|------------------------|-------------------------|-----|---|-----------------|
|          |         |          |          |                        |                         |     |   |                 |
| TITLE:   | DYNAMIC | RECEIVE  | ER       | DRAWN:<br>DESIGNED:    | <b>Richard</b><br>R & D |     | SCALE: *** SI<br>UNITS: mi                  | n               |
| PART NO. | AR-0942 | U32 - 1T | 1        | CHECKED:               |                         |     | TOLERANCE ±<br>UNLESS OTHERM                | VISE SPECIFIED: |
| DWG NO.  | DTR-1   | 1084     | "<br>REV | APPROVAL:<br>MATERIAL: | ****                    | *   | ONE PLACE DE<br>TWO PLACE DE<br>THREE PLACE | CIMAL ± ***     |
|          |         | A &      | B        | Comp                   | oone                    | nts |   |                 |

### 4. RELIABLITY TESTS

|    | ITEMS.               | SPECIFICATIONS  |  |  |
|----|----------------------|---|--|--|
| 01 | High temp. Test      | Keep 96 hours at $+70^{\circ}C \pm 3^{\circ}C$ and leave 3 hours in normal temperature and then check   |  |  |
| 02 | Low temp. Test       | Keep 96 hours at -20 $^\circ\!\mathrm{C}\pm3^\circ\!\mathrm{C}$ and leave 3 hours in normal temperature and then check  |  |  |
| 03 | Humidity test        | Keep 96 hours at + $40^{\circ}C \pm 3^{\circ}C$ 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;<br>$90 \sim 95 \% RH$<br>$25^{\circ}C$<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr<br>0.5hr |  |  |
| 05 | Thermal Cycle Test.  | Low temperature: $-40^{\circ}$ C $\pm 3^{\circ}$ C, temperature: $+70^{\circ}$ C $\pm 3^{\circ}$ 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)<br>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<br>X,y, z 6 direction. 1 times each, total 6 times.   |  |  |
| 09 | Load test            | Rated power white noise is applied for 96 hours   |  |  |
| 10 | Max Power test       | Max Power 1 min on – 2 min off 10 cycles.   |  |  |