

# SPECIFICATION

## Micro Dynamic Speaker

**RoHS Compliance & Halogen Free**

**Product : SPK**

**GETTOP P/N : SC360052WA01**

**Customer Code : /**

**Version : P/0**

| Designed by | Checked by | Confirmed by | Approved by | Released date |
|-------------|------------|--------------|-------------|---------------|
| Elvis       | Kevin      | Karl         | Ethan       | 2025.05.13    |



CUSTOMER APPROVAL

**IATF 16949 : 2016**

**ISO 9001 : 2015**

**ISO 14001: 2015**

**ISO 45001 : 2018**

**QC080000 :2017**



## Revision History

| Date       | Version | Description     | Controller |
|------------|---------|-----------------|------------|
| 2025-05-13 | P/0     | Initial Release | Elvis      |
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# Contents

|                                          |   |
|------------------------------------------|---|
| 1. Scope .....                           | 3 |
| 2. Product type .....                    | 3 |
| 3. Electro-Acoustic Specifications ..... | 3 |
| 4. Typical curve .....                   | 4 |
| 5. Test method .....                     | 5 |
| 6. Structural dimension .....            | 6 |

## 1. Scope

Speaker

## 2. Product type

Product number: SC360052WA01

Product Description: Speaker

## 3. Electro-Acoustic Specifications

Test Condition: 25±2°C, 25%~75% RH, 86~106kPa

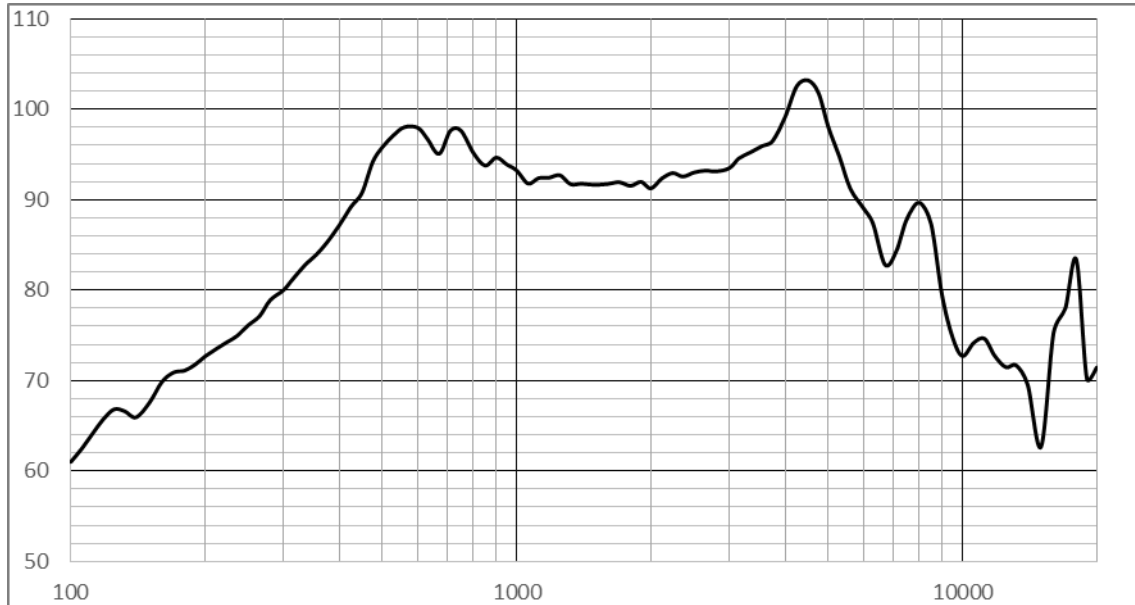
| NO.  | Parameter                      | Technical Specifications                                                                                                                            | Cpmditions                                                                                                                                          | Unit |
|------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 3.1  | Sound Pressure Level           | 92dB                                                                                                                                                | 1W/30cm/ on baffle/ (300-3.4K) Hz (AVE)                                                                                                             | dB   |
| 3.2  | Maximum Continuous noise Power | 2.0                                                                                                                                                 |                                                                                                                                                     | W    |
| 3.3  | Maximum Short Term Power       | 3.0                                                                                                                                                 |                                                                                                                                                     | W    |
| 3.4  | DC Resistance                  | 7.5±20%                                                                                                                                             |                                                                                                                                                     | Ω    |
| 3.5  | Rated Impedance                | 8±20%                                                                                                                                               | 1W/2KHz/30cm/on baffle                                                                                                                              | Ω    |
| 3.6  | Resonance Frequency            | 600±20%                                                                                                                                             | 1W/30cm/on baffle                                                                                                                                   | Hz   |
| 3.7  | Typical Frequency              | See Fig 4-1                                                                                                                                         | 1W/30cm/on baffle                                                                                                                                   |      |
| 3.8  | Total Harmonic Distortion      | Max 30%                                                                                                                                             | 1W/30cm/on baffle/ (F0-3.4K) Hz                                                                                                                     |      |
| 3.9  | Listening condition            | No noise                                                                                                                                            | The speaker under test is fixed in place, voltage 4.0Vrms, 100 – 2KHz Sine Wave, 2 cycles, single - sweep for 1s, 30 - 40cm away from the human ear |      |
| 3.10 | Polarity                       | When a DC source's "+"polarity is attached to speaker's "+"polarity, "-"polarity is attached speaker's "-"polarity, the membrane will move forward. |                                                                                                                                                     |      |
| 3.11 | Waterproof rating              | IPX7 (diaphragm surface waterproof)                                                                                                                 |                                                                                                                                                     |      |

**Table 3-1 Electro-Acoustic Specifications**

## 4. Typical curve

### 4.1 Typical Frequency Response

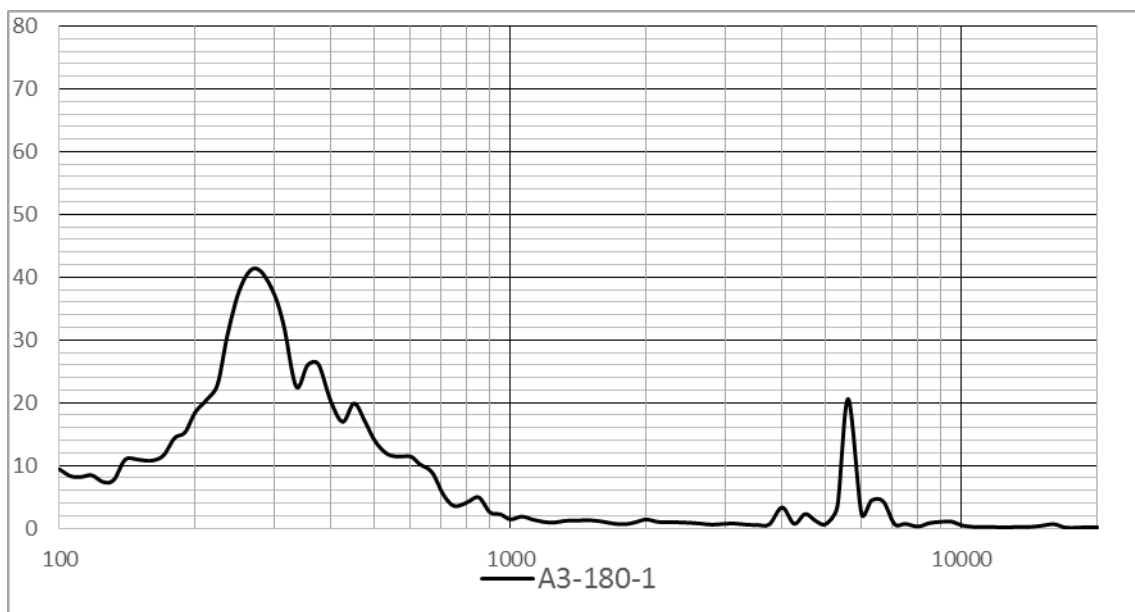
Test condition: sine wave, 100Hz~20KHz、1/12 Oct、2.83Vrms



**Figure 4-1 Frequency Response and Frequency Response Limit Template**

### 4.2 Total Harmonic Distortion

Test condition: sine wave, 100Hz~20KHz、1/12 Oct、2.83Vrms 2-5 harmonic



**Figure 4-2: Total Harmonic Distortion and THD Limit Template**

## 5. Test method

### 5.1 Test condition

Test signal: Sine wave, Sweep

Frequency Range: 100Hz~20KHz

Test Step: 1/12 Octave

Test Distance:  $d=10\text{cm}$

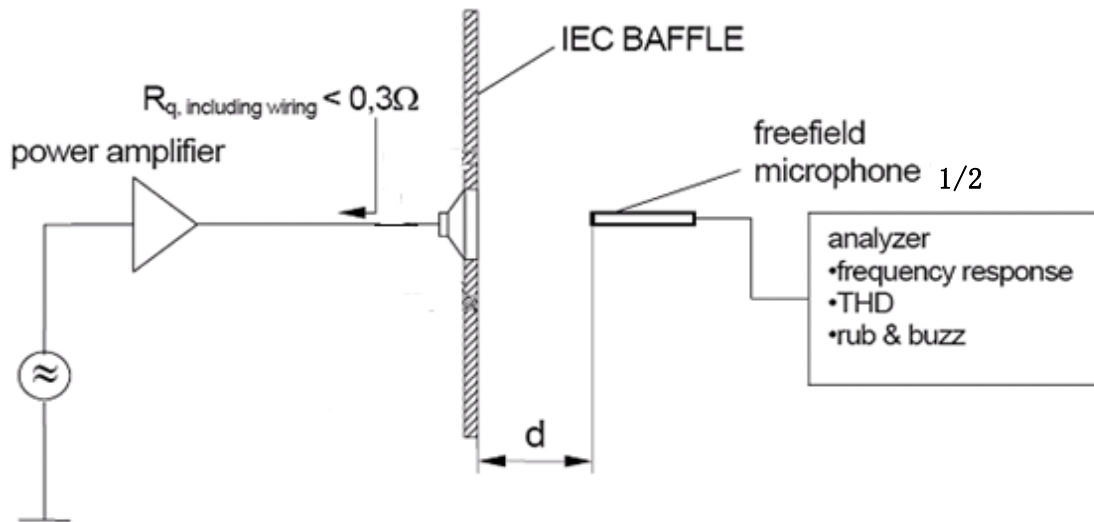


Figure 5-1 Test condition

### 5.2 Test environment

Environment temperature:  $15^\circ\text{C} \sim 35^\circ\text{C}$ , Arbitration Condition:  $23^\circ\text{C} \pm 1^\circ\text{C}$

Relative humidity:  $25\% \sim 75\%$

Air pressure:  $86\text{kPa} \sim 106\text{kPa}$

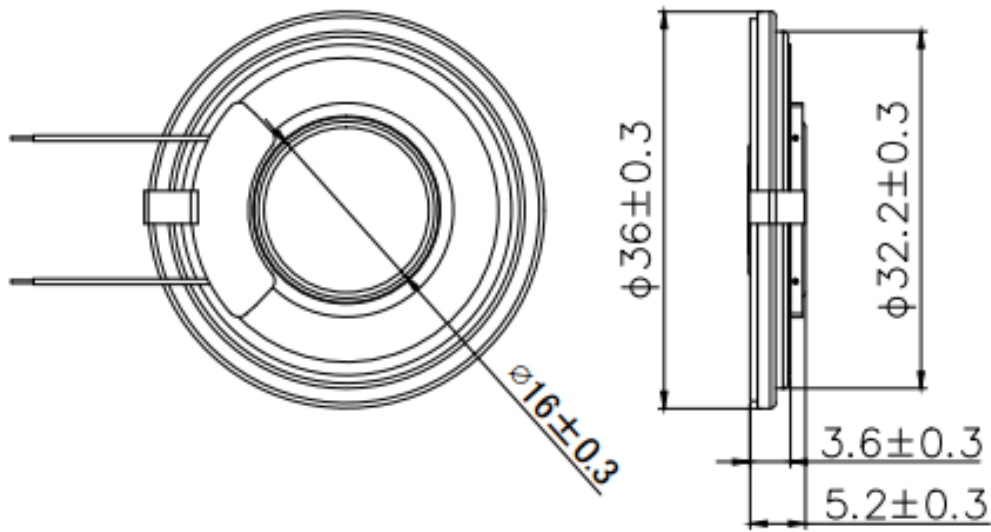
### 5.3 Test fixture

The shape and dimension of test fixture shall be in accordance with unified requirements of the customer

The sound hole of the test fixture is located in the center, and the sound hole between the fixture and the device is sealed with foam.

## 6. Structural dimension

### 6.1 2D Drawing



**Figure 6-1: 2D Drawing**

Remark:

1. Unit: mm;
2. The 2D drawings in the specification are only used for incoming size measurement, appearance and accessories shall be subject to the sealing sample;
3. Tolerance:  $\pm 0.3\text{mm}$