

**MODEL:** CDS-5709-254SP | **DESCRIPTION:** SPEAKER**FEATURES**

- 4 ohm
- rated 2.5 W
- solder terminals

**SPECIFICATIONS**

| parameter               | conditions/description                                    | min | typ  | max   | units              |
|-------------------------|-----------------------------------------------------------|-----|------|-------|--------------------|
| input power             |                                                           |     | 2.5  | 3     | W                  |
| impedance               |                                                           | 3.4 | 4    | 4.6   | $\Omega$           |
| resonant frequency [Fo] |                                                           | 360 | 450  | 540   | Hz                 |
| frequency response      |                                                           | Fo  |      | 2,650 | Hz                 |
| sound pressure level    | at 1.0 W, 50 cm, avg 0.8, 1.0, 1.2, 1.5 kHz               | 87  | 90   | 93    | dB                 |
| distortion              | at 1.0 kHz, 1.0 W, 50 cm                                  |     |      | 10    | %                  |
| buzz, rattle, etc.      | must be normal at sine wave, frequency range              |     |      | 3.16  | V                  |
| polarity                | cone moves forward w/ positive dc current to "+" terminal |     |      |       |                    |
| dimensions              | $\varnothing 57 \times 9$                                 |     |      |       | mm                 |
| magnet                  | Nd-Fe-B                                                   |     |      |       |                    |
| frame material          | iron                                                      |     |      |       |                    |
| cone material           | PET                                                       |     |      |       |                    |
| terminal                | solder terminals                                          |     |      |       |                    |
| weight                  |                                                           |     | 16.7 |       | g                  |
| operating temperature   |                                                           | -20 |      | 55    | $^{\circ}\text{C}$ |
| storage temperature     |                                                           | -25 |      | 60    | $^{\circ}\text{C}$ |
| hand soldering          | for maximum 2 seconds                                     | 360 |      | 380   | $^{\circ}\text{C}$ |
| RoHS                    | yes                                                       |     |      |       |                    |

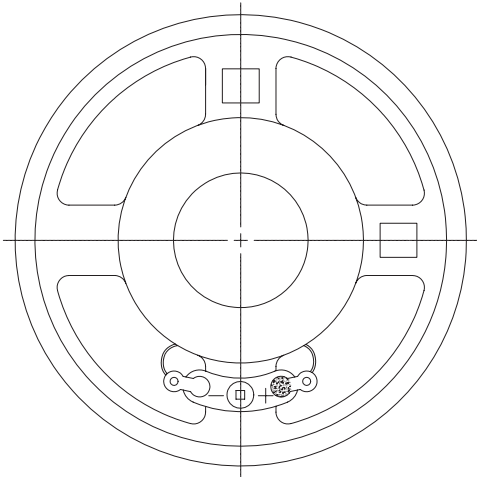
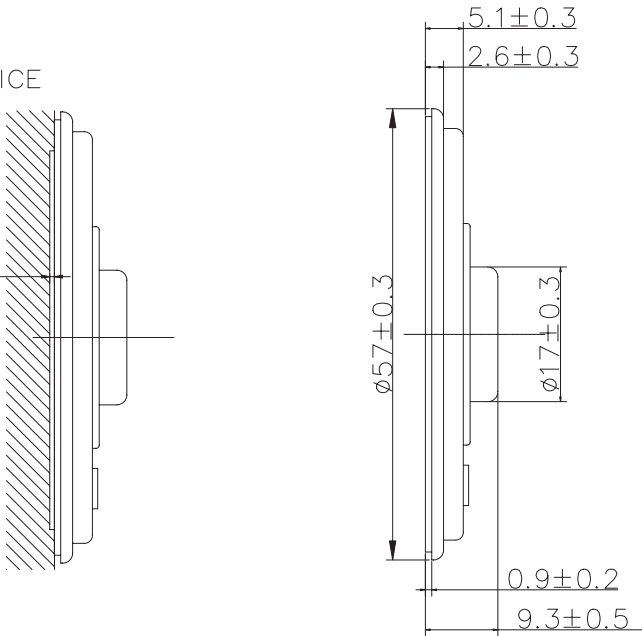
Notes: 1. All specifications measured at 15~35 $^{\circ}\text{C}$ , humidity at 25~75%, unless otherwise noted.

**MECHANICAL DRAWING**

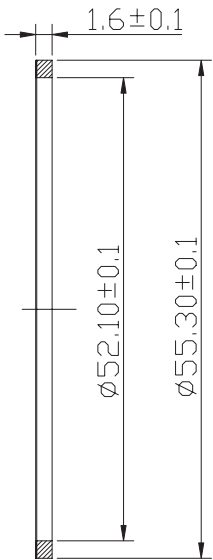
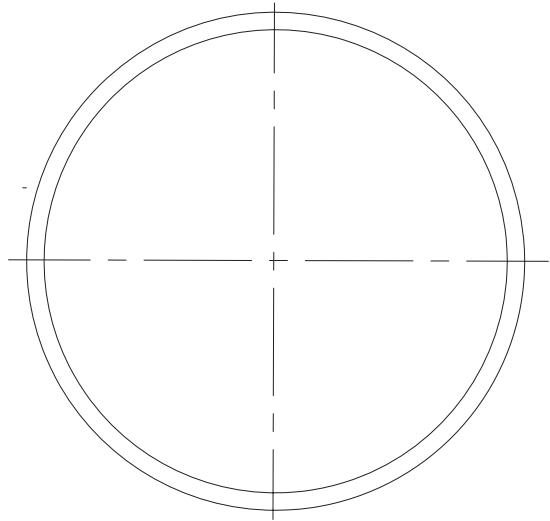
units: mm  
tolerance:  $\pm 0.2$  mm

MOUNTING NOTICE

AT LEAST  
0.8mm  
FOR  
DIAPHRAGM  
MOVING



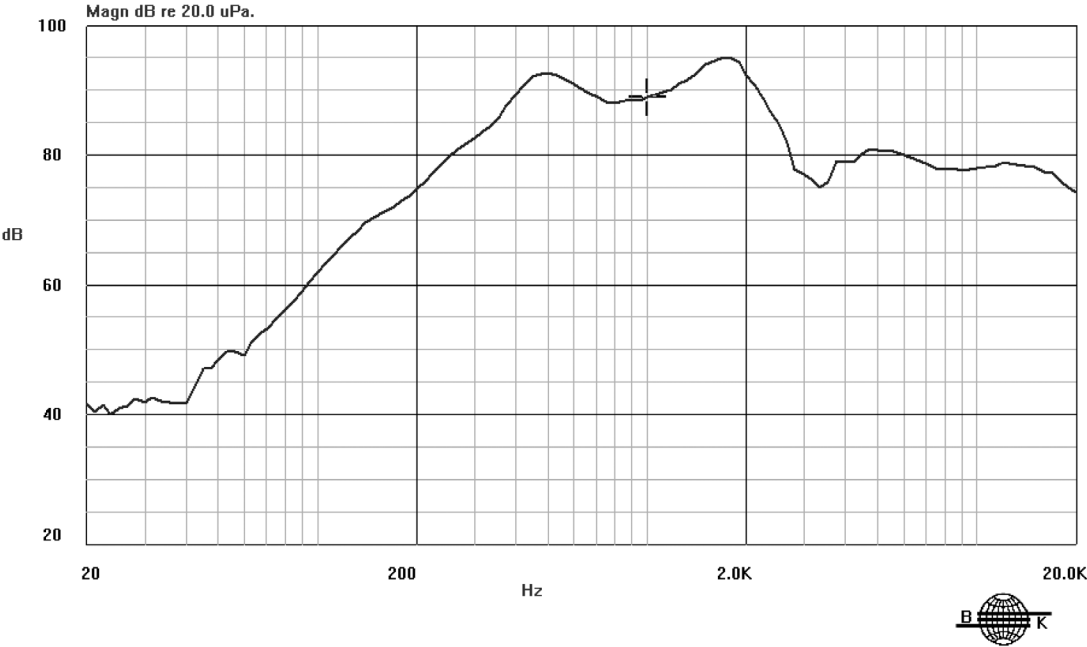
**GASKET**



RESPONSE CURVES

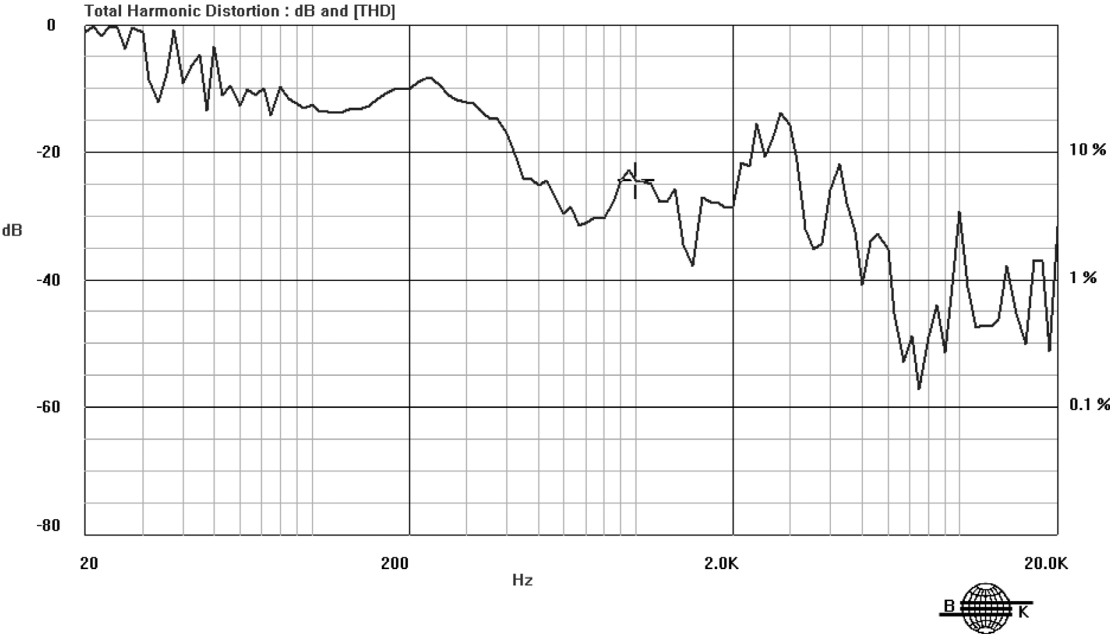
Frequency Response Curve

Test Conditions: 2.0 V/50 cm



Total Harmonic Distortion Curve

Test Conditions: 2.0 V/50 cm



THIELE-SMALL PARAMETERS

| parameter                    | conditions/description | typ    |
|------------------------------|------------------------|--------|
| Mechanical Q Factor          | Qms                    | 9.385  |
| Electrical Q Factor          | Qes                    | 7.306  |
| Total Q Factor               | Qts                    | 4.108  |
| Compliance Equivalent Volume | Vas                    | 0.0582 |

Notes: 2. Results represent typical performance in Free Air conditions.

REVISION HISTORY

| rev. | description                       | date       |
|------|-----------------------------------|------------|
| 1.0  | initial release                   | 07/07/2023 |
| 1.01 | CUI Devices rebranded to Same Sky | 09/11/2024 |
| 1.02 | added Thiele-Small Parameters     | 01/30/2025 |

The revision history provided is for informational purposes only and is believed to be accurate.



Same Sky offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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