

**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                                                       |     |      |       |                    |

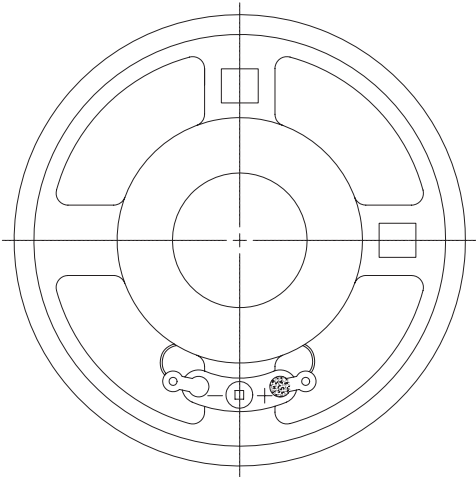
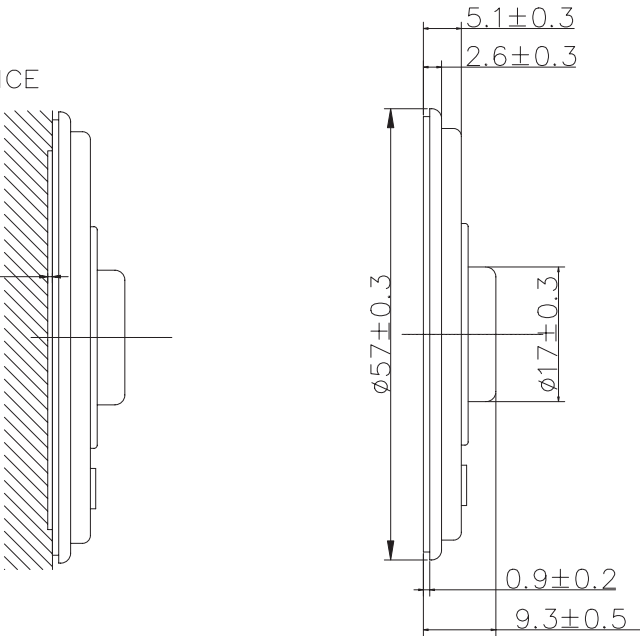
Notes: 1. All specifications measured at 15~35 $^{\circ}\text{C}$ , humidity at 25~75%, unless otherwise noted.

**MECHANICAL DRAWING**

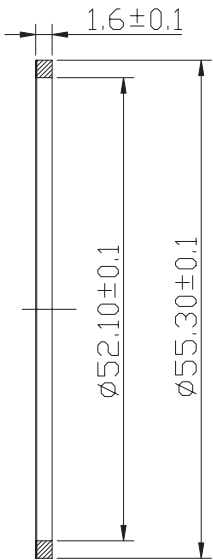
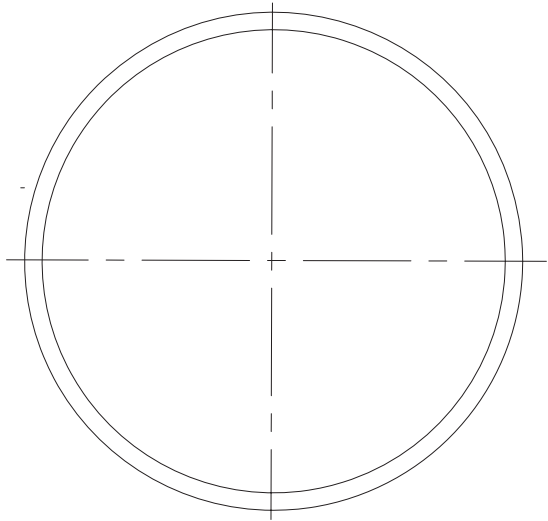
units: mm  
tolerance:  $\pm 0.2$  mm

MOUNTING NOTICE

AT LEAST  
0.8mm  
FOR  
DIAPHRAGM  
MOVING



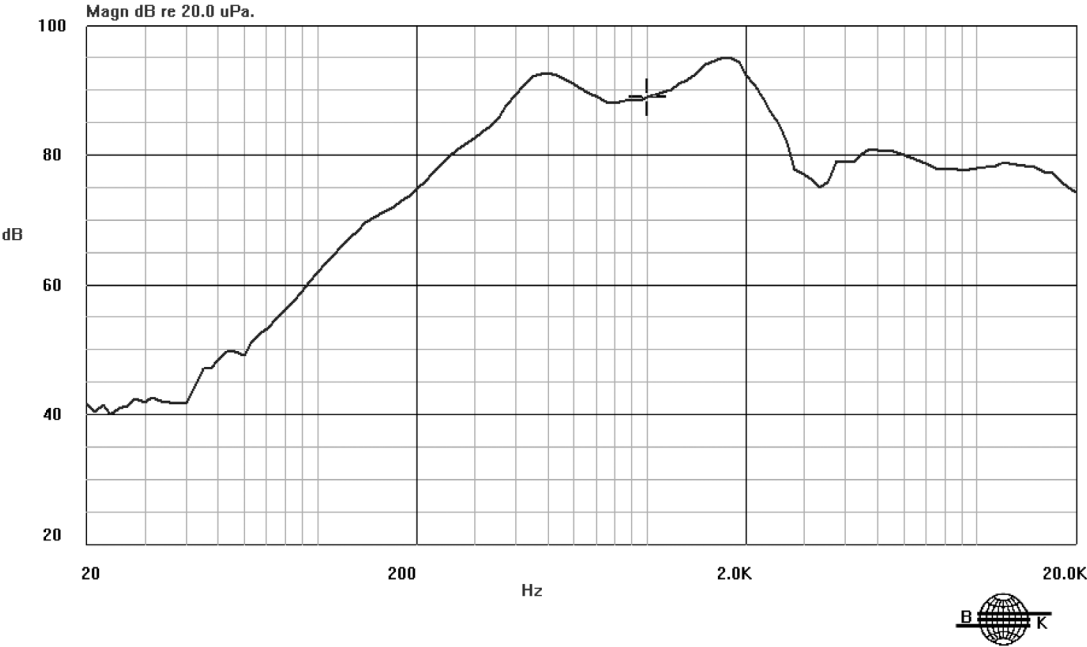
**GASKET**



RESPONSE CURVES

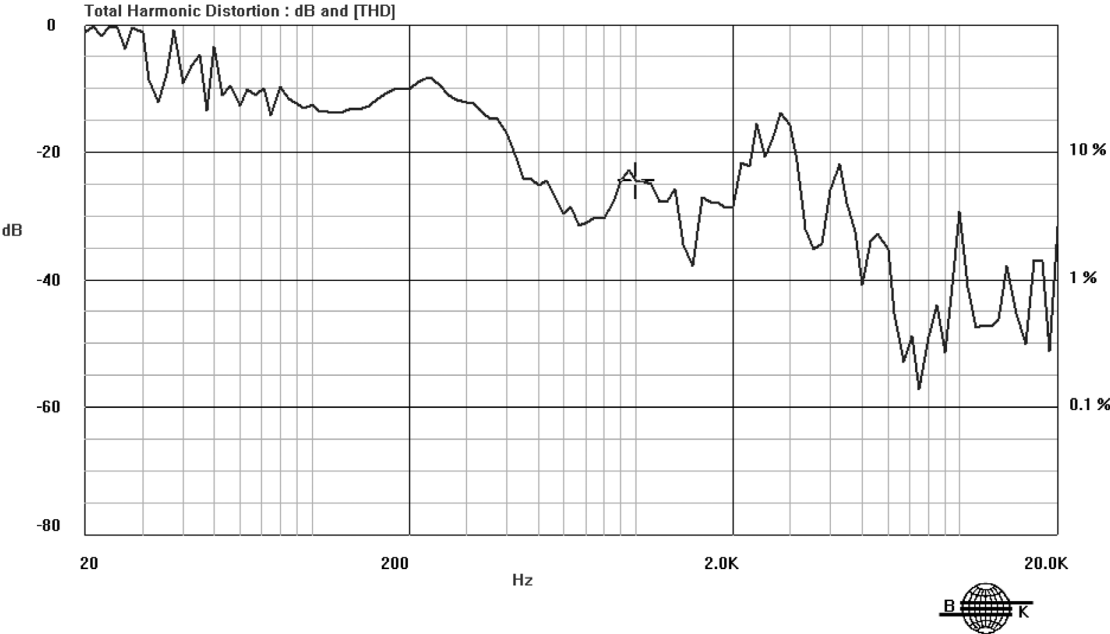
Frequency Response Curve

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.

Same Sky reserves the right to make changes to the product at any time without notice. Information provided by Same Sky is believed to be accurate and reliable. However, no responsibility is assumed by Same Sky for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

Same Sky products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

**sameskydevices.com**

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Same Sky:](#)

[CDS-5709-254SP](#)