

**MODEL:** CMS-2005-254SP | **DESCRIPTION:** SPEAKER**FEATURES**

- 4 ohm
- rated 2.5 W
- solder pads

**SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
input power	sine wave in free air		2	2.5	W
	square wave in 6 cc box		2	2.5	W
impedance		3.4	4	4.6	$\Omega$
resonant frequency (Fo)	sine wave in free air	400	500	600	Hz
	square wave in 6 cc box	520	650	780	Hz
frequency response		Fo		20,000	Hz
sound pressure level	at 1.0 W, 50 cm, avg 0.8, 1.0, 1.2, 1.5 kHz	79	82	85	dB
distortion	at 1.0 kHz, 1.0 W, 50 cm			5	%
buzz, rattle, etc.	must be normal at sine wave, frequency range			2.83	V
polarity	cone moves forward w/ positive dc current to "+" terminal				
dimensions	$\varnothing 20 \times 5$				mm
magnet	Nd-Fe-B				
frame material	PBT + 15% GF				
cone material	foam + PEI				
terminal	solder pads				
weight			4		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

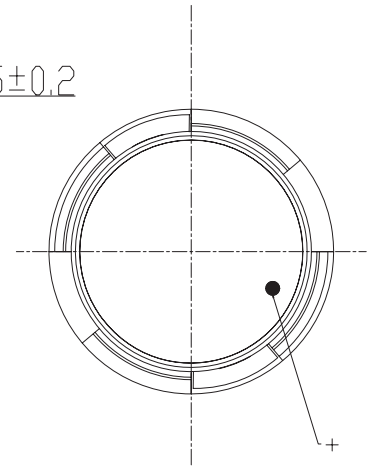
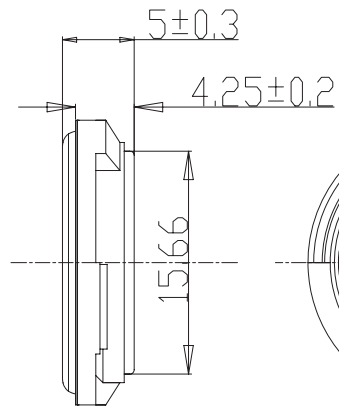
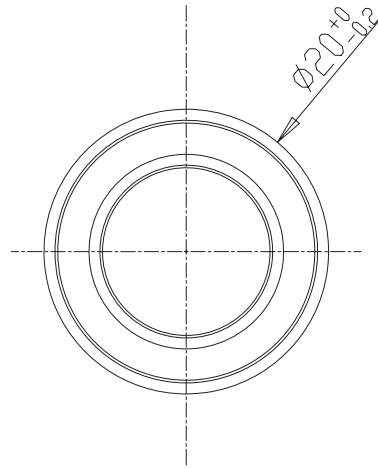
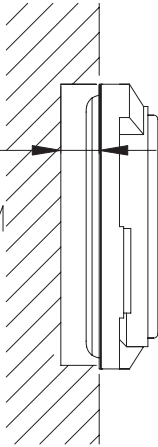
### MOUNTING NOTICE

AT LEAST

FOR 1.2mm

DIAPHRAGM

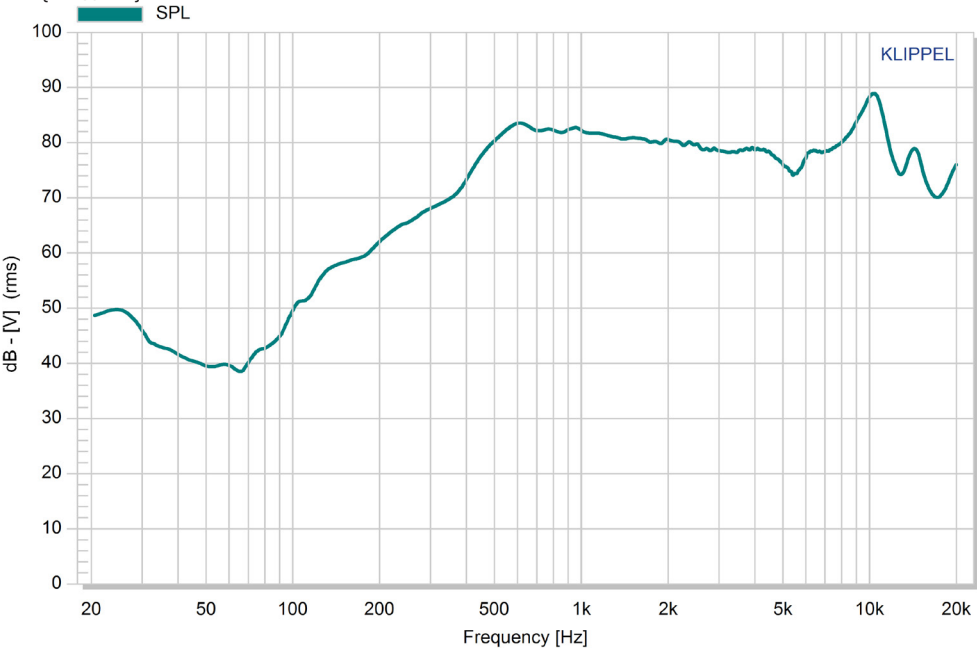
MOVING



RESPONSE CURVES (ON BAFFLE)

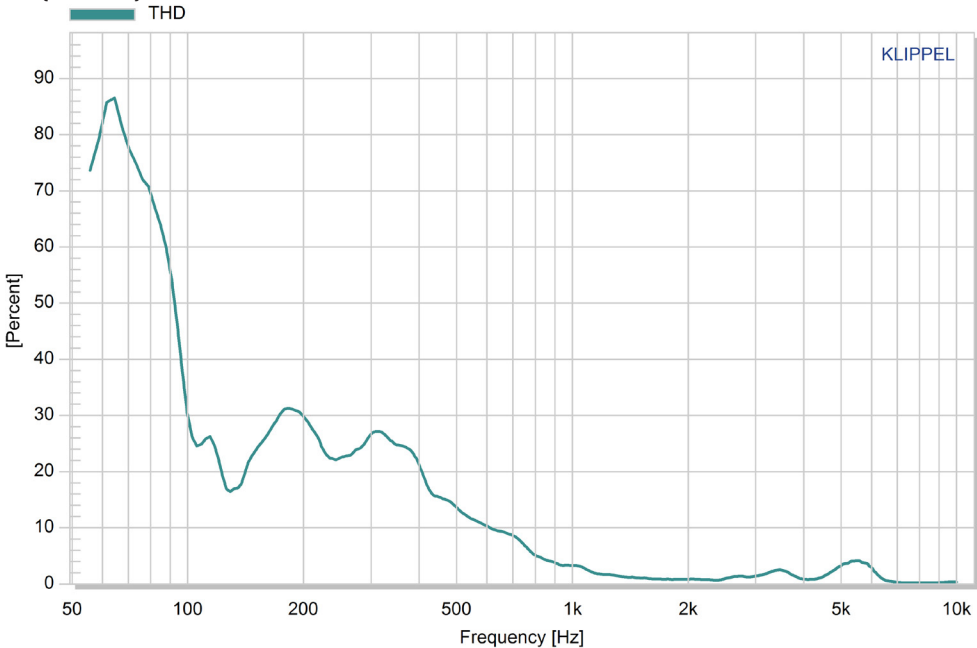
Frequency Response Curve

Test Conditions: 1.0 W / 50 cm (on baffle)



Total Harmonic Distortion Curve

Test Conditions: 1.0 W / 50 cm (on baffle)



THIELE-SMALL PARAMETERS

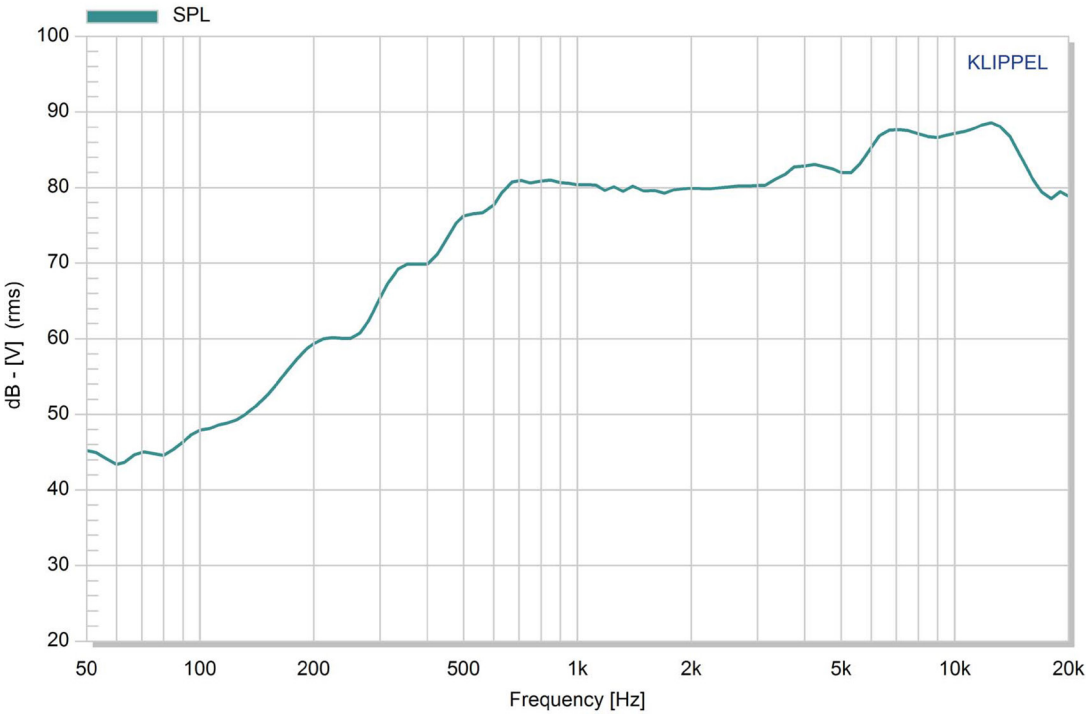
parameter	conditions/description	typ
Mechanical Q Factor	Qms	2.808
Electrical Q Factor	Qes	4.283
Total Q Factor	Qts	1.696
Compliance Equivalent Volume	Vas	0.0044

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

RESPONSE CURVES (6cc BOX IN FREE AIR)

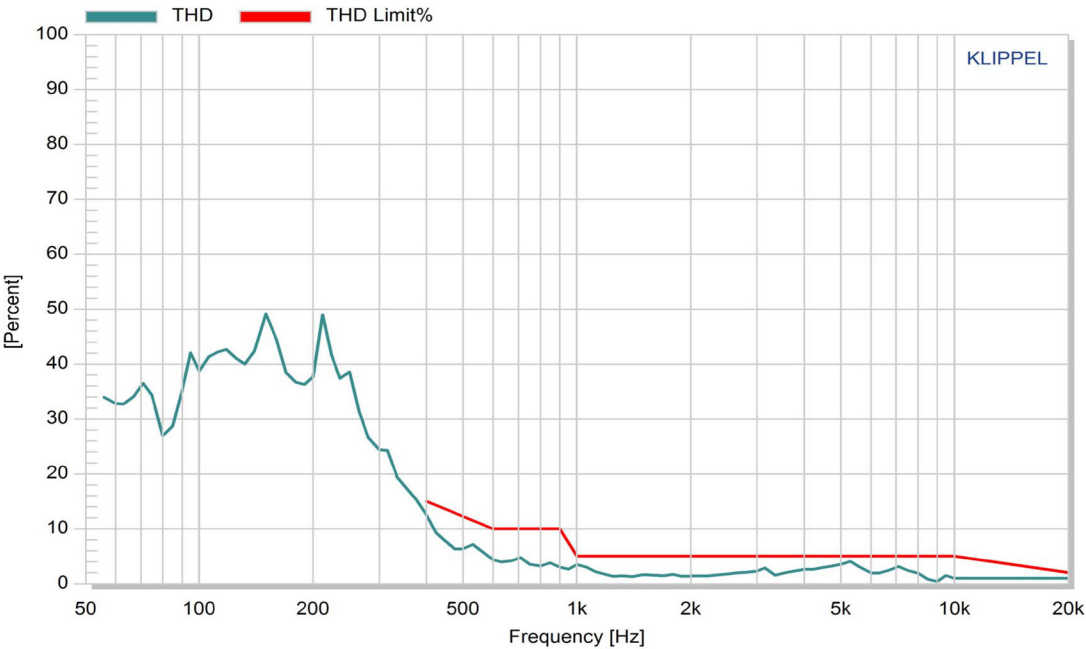
Frequency Response Curve

Test Conditions: 1.0 W / 50 cm



Total Harmonic Distortion Curve

Test Conditions: 1.0 W / 50 cm



REVISION HISTORY

rev.	description	date
1.0	initial release	07/11/2023
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**