


**MODEL:** CMS-321437-24SP-X8 | **DESCRIPTION:** SPEAKER

**FEATURES**

- IPX8 rated
- rated 2.0 W
- 4  $\Omega$

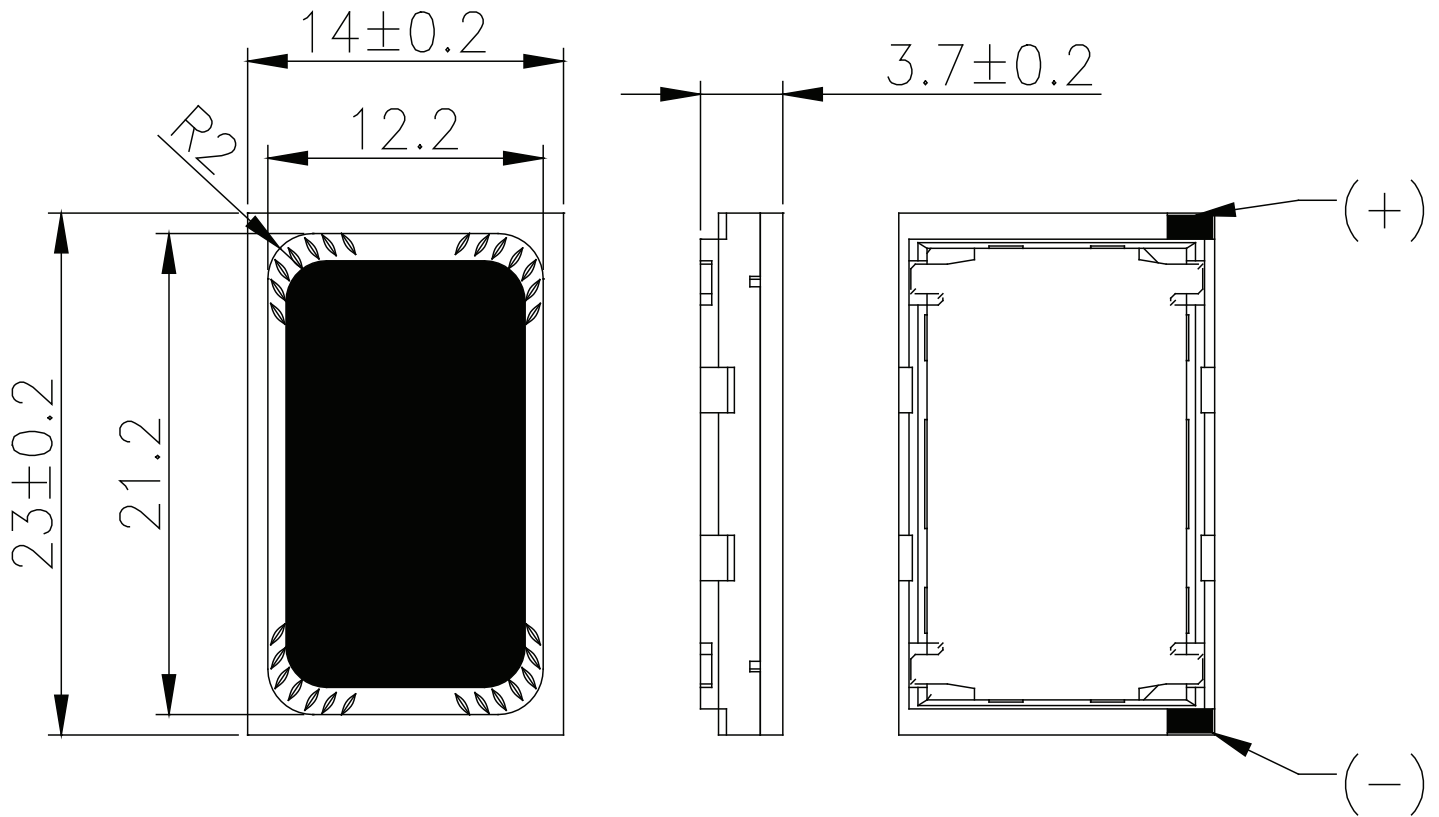

**SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
input power	max power: as per IEC-268-5, in 1 cc box		2.0	2.2	W
impedance	at 2.0 kHz, 2.83 Vrms	3.2	4	4.8	$\Omega$
resonant frequency (Fo)	at 2.83 Vrms, 10 cm in 1 cc box	840	1,050	1,260	Hz
frequency response		Fo		20,000	Hz
sound pressure level	at 2.83 Vrms, 10 cm, avg 1.0, 1.18, 1.5 kHz, 1 cc box	101	104	107	dB
distortion	at 2.0 kHz, 2.83 Vrms, 10 cm in 1 cc box			10	%
buzz, rattle, etc.	must be normal at sine wave, 0.2~ 2 kHz in 1 cc box			2.83	V
polarity	cone moves forward w/ positive dc current to "+" terminal				
dimensions	23 x 14 x 3.7				mm
magnet	Nd-Fe-B				
frame material	PBT				
cone material	PEEK				
terminal	solder pads				
weight			1.5		g
operating temperature		-20		70	$^{\circ}\text{C}$
storage temperature		-40		85	$^{\circ}\text{C}$
hand soldering	for maximum 3 seconds			380	$^{\circ}\text{C}$
RoHS	yes				
IP level	IPX8 (front side)				

Notes: 1. All specifications measured at 15~35 $^{\circ}\text{C}$ , humidity at 25~75%, under 86~106 kPa pressure, unless otherwise noted.

## MECHANICAL DRAWING

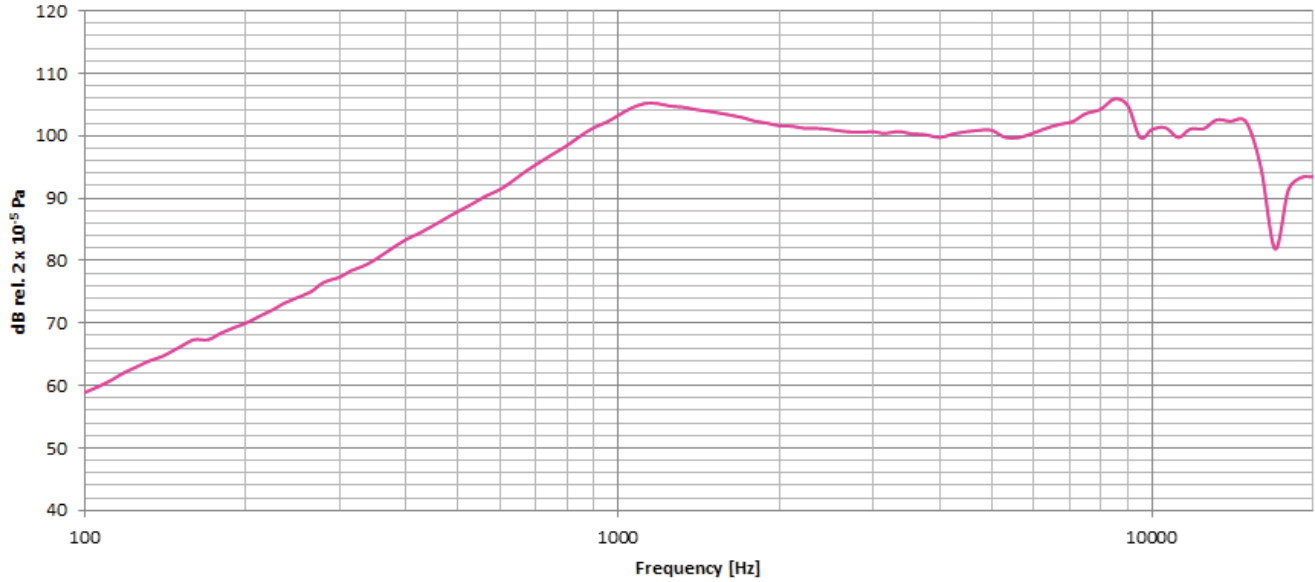
units: mm  
tolerance:  $\pm 0.2$  mm



## RESPONSE CURVES

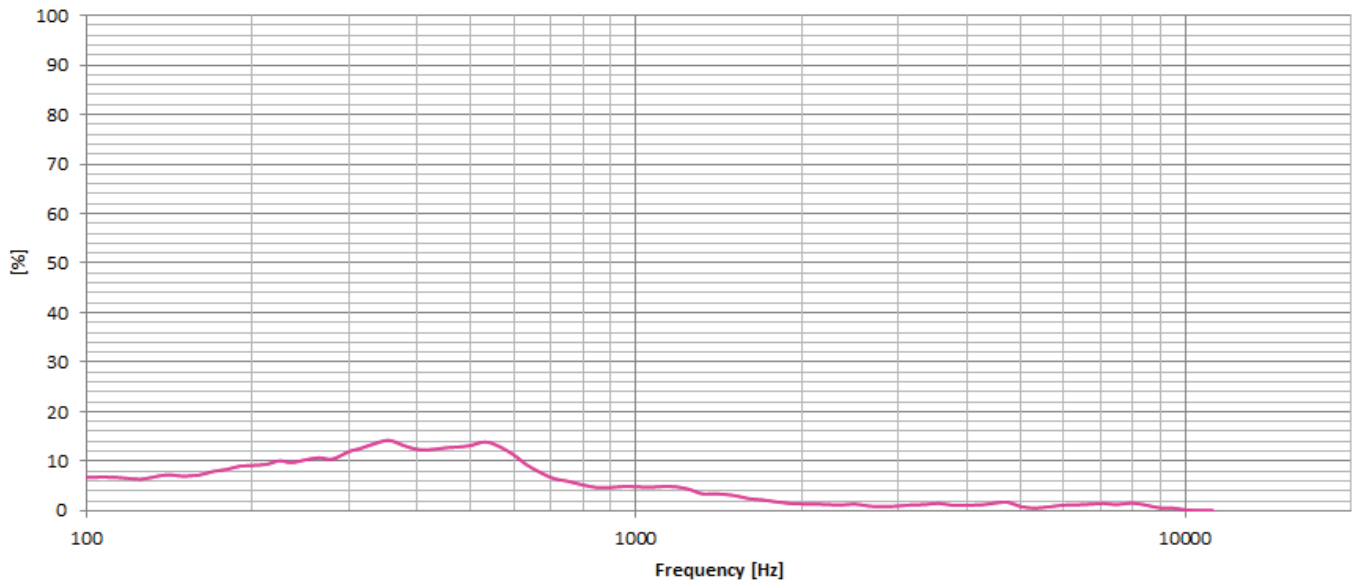
### Frequency Response Curve

Test Conditions: 2.83 Vrms / 10 cm in 1 cc box



### Total Harmonic Distortion Curve

Test Conditions: 2.83 Vrms / 10 cm in 1 cc box



## THIELE-SMALL PARAMETERS

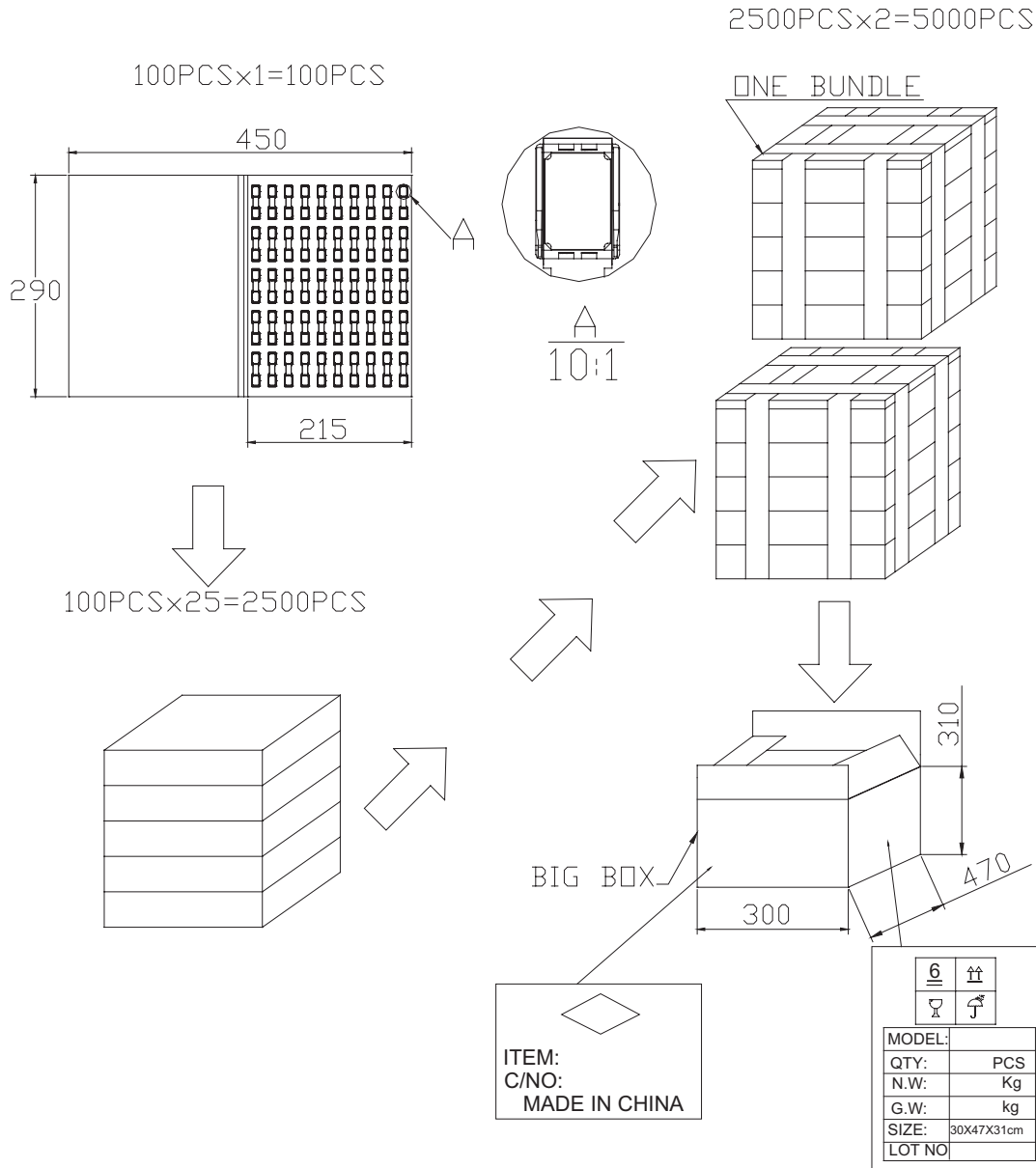
parameter	conditions/description	typ
Mechanical Q Factor	Qms	1.98
Electrical Q Factor	Qes	2.801
Total Q Factor	Qts	1.16
Compliance Equivalent Volume	Vas	0.0046

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

## PACKAGING

units: mm

Tray QTY: 100 pcs per tray  
 Carton Size: 470 x 300 x 310 mm  
 Carton QTY: 5,000 pcs per carton



## REVISION HISTORY

rev.	description	date
1.0	initial release	03/22/2023
1.02	CUI Devices rebranded to Same Sky	09/11/2024
1.03	added Thiele-Small Parameters	03/26/2025
1.04	SPL correction	02/16/2026

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



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