

**MODEL:** CDS-25148 | **DESCRIPTION:** SPEAKER**FEATURES**

- micro-speaker
- small footprint
- rated 1.5 W

**SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
input power	maximum power: IEC-60268-5, filter 60s on/120s off, 10 cycles at room temp		1.5	2.0	W
impedance	at 1.4 kHz, 1.0 V	6.8	8	9.2	Ω
resonant frequency (Fo)	at 1.0 V	600	750	900	Hz
frequency response	output SPL ± 10 dB	Fo		20,000	Hz
sound pressure level	at 1.5 W, 0.1 m ave, at 1.0, 1.2, 1.5, 2.0 kHz	91	94	97	dB
	at 1.0 W, 1.0 m ave, at 1.0, 1.2, 1.5, 2.0 kHz	70	73	76	dB
distortion	at 1.4 kHz, 1.5 W			5	%
buzz, rattle, etc.	must be normal at sine wave between Fo ~ 20 kHz		3.46		V
polarity	cone will move forward with positive dc current to "+" terminal				
dimensions	25 x 14.0 x 4.5				mm
magnet	Nd-Fe-B, $\varnothing 6.8 \times 1.5$				mm
material	ABS UL-94 1/16" HB (black)				
cone material	cloth				
terminal	solder pads				
weight			1.72		g
operating temperature		-20		55	$^{\circ}\text{C}$
storage temperature		-30		70	$^{\circ}\text{C}$
RoHS	yes				

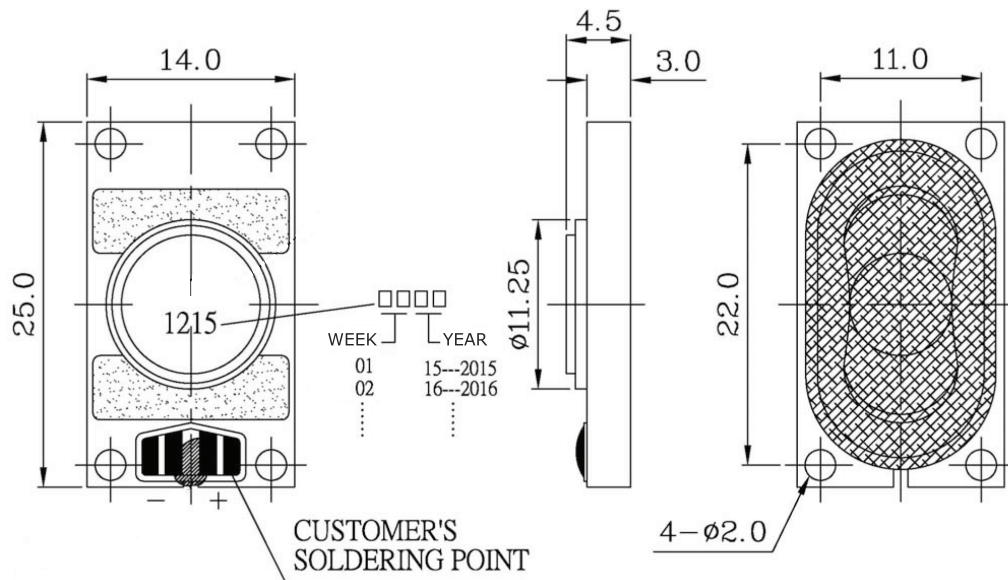
Notes: 1. All specifications measured at 5-35 $^{\circ}\text{C}$, humidity at 45-85%, under 86-106kPa pressure, unless otherwise noted.

SOLDERABILITY

parameter	conditions/description	min	typ	max	units
hand soldering	for maximum 3 ± 1 seconds	360	370	380	$^{\circ}\text{C}$

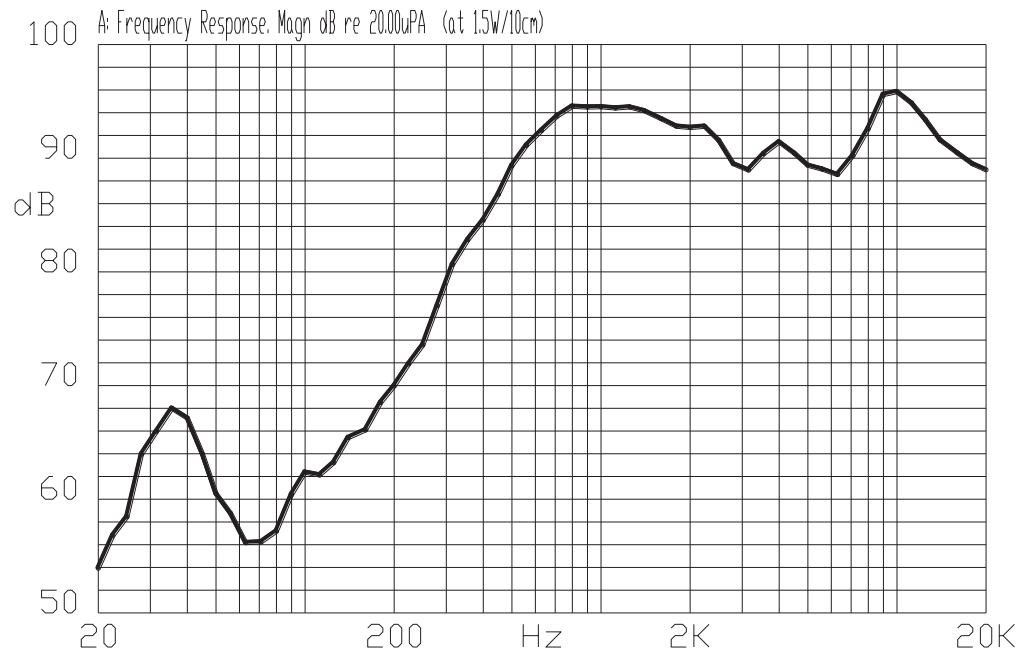
MECHANICAL DRAWING

units: mm
tolerance: ± 0.3 mm

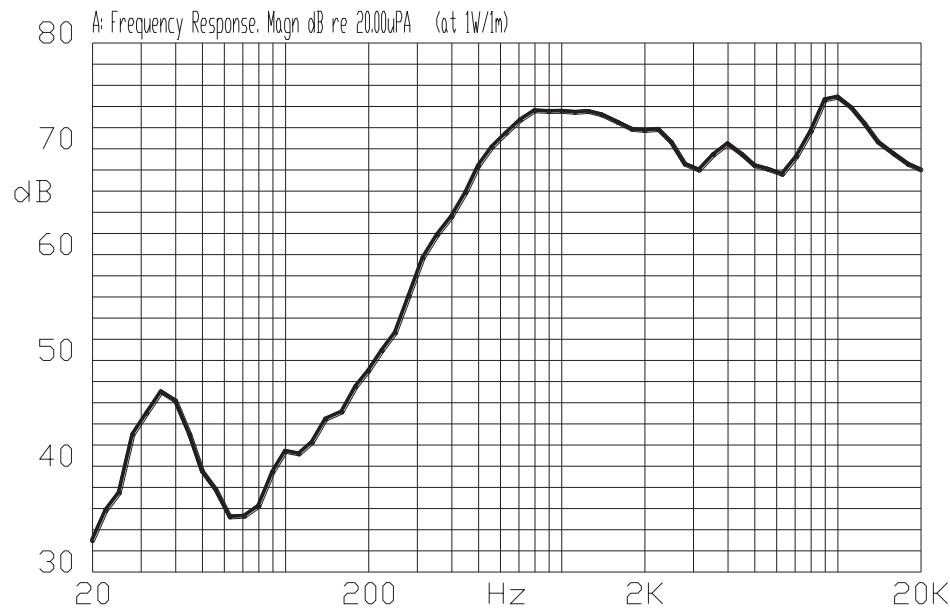


RESPONSE CURVES

Frequency Response Curve (1.5 W, 0.1m)



Frequency Response Curve (1.0 W, 1.0m)



THIELE-SMALL PARAMETERS

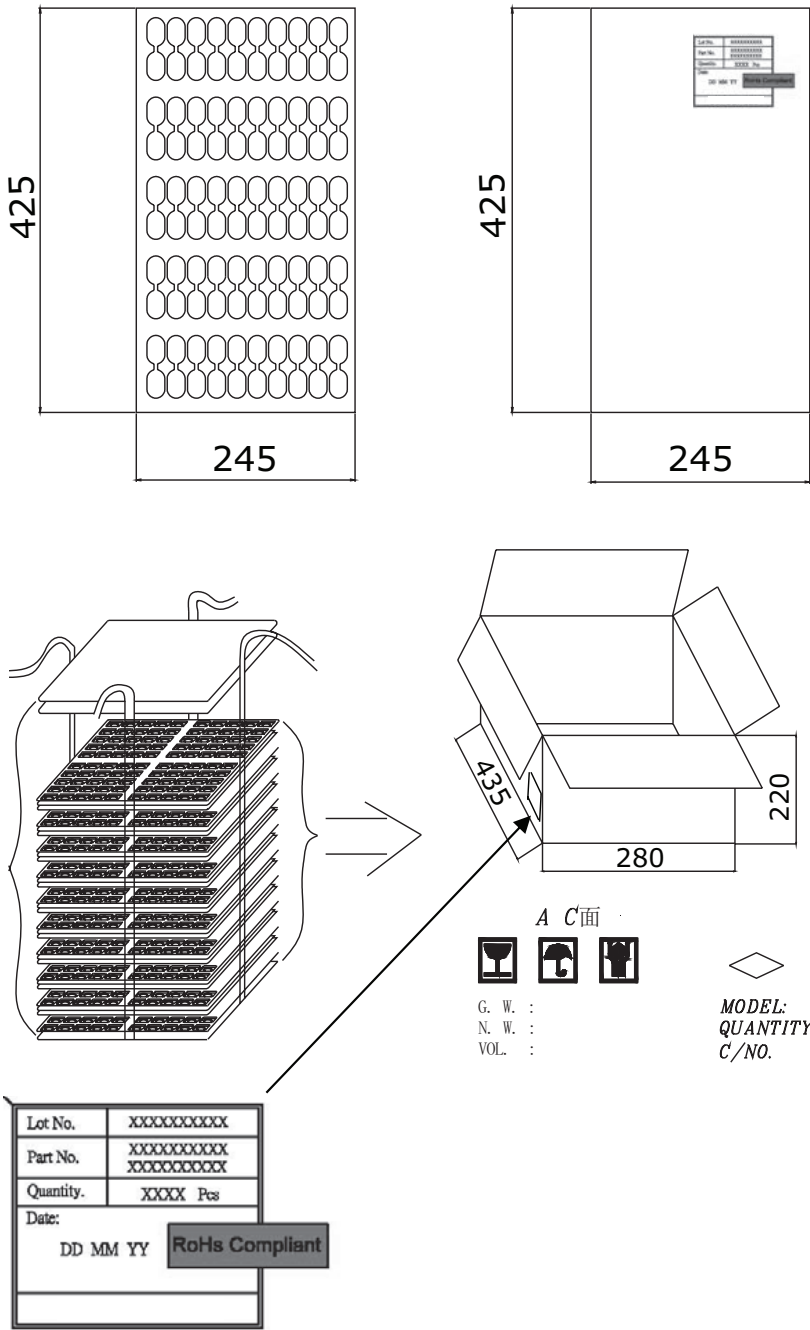
parameter	conditions/description	typ
Mechanical Q Factor	Qms	1.743
Electrical Q Factor	Qes	10.252
Total Q Factor	Qts	1.49
Compliance Equivalent Volume	Vas	0.003

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

PACKAGING

units: mm

Tray Size: 425 x 245 x 11 mm
Carton Size: 435 x 280 x 220 mm
Tray QTY: 100 pcs per tray
Carton QTY: 2,000 pcs per carton



REVISION HISTORY

rev.	description	date
1.0	initial release	04/28/2015
1.01	updated datasheet	07/23/2015
1.02	brand update	01/22/2020
1.03	modified solder pads	12/16/2020
1.04	logo, datasheet style update	08/05/2022
1.05	CUI Devices rebranded to Same Sky	09/11/2024
1.06	added Thiele-Small Parameters	02/26/2025

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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