CUI Devices is now Same Sky! Learn More

SERIES: CDS-20144-L100 | DESCRIPTION: SPEAKER

FEATURES

- micro-speaker
- high SPL
- wide operating temp range
- 4 ohm impedance
- wire leads



RoHS

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		1.0	1.2	W
impedance	at 2.0 kHz, 1.0 V	3.4	4	4.6	Ω
resonant frequency (Fo)	at 1.0 V	480	600	720	Hz
frequency response	output SPL -10 dB	Fo		20,000	Hz
sound pressure level	at 1.0 W, 0.1 m ave, at 0.8, 1.0, 1.2, 1.5 kHz	89	92	95	dB
distortion	at 1.0 kHz, 2 V			10	%
buzz, rattle, etc.	must be normal at sine wave between Fo ~ 20 kHz		2.0		V
polarity	cone will move forward with positive dc current to "+" terminal				
dimensions	20 x 14 x 3.2				mm
magnet	Nd-Fe-B				
material	PBT				
cone material	PEN				
terminal	wire leads				
weight			1.6		g
operating temperature		-30		70	°C
storage temperature		-40		85	°C
RoHS	yes				

Notes: 1. All specifications measured at 5~35°C, humidity at 45~85%, under 86~106kPa pressure, unless otherwise noted.

PART NUMBER KEY

CDS-20144-L100 **X**

Base Number

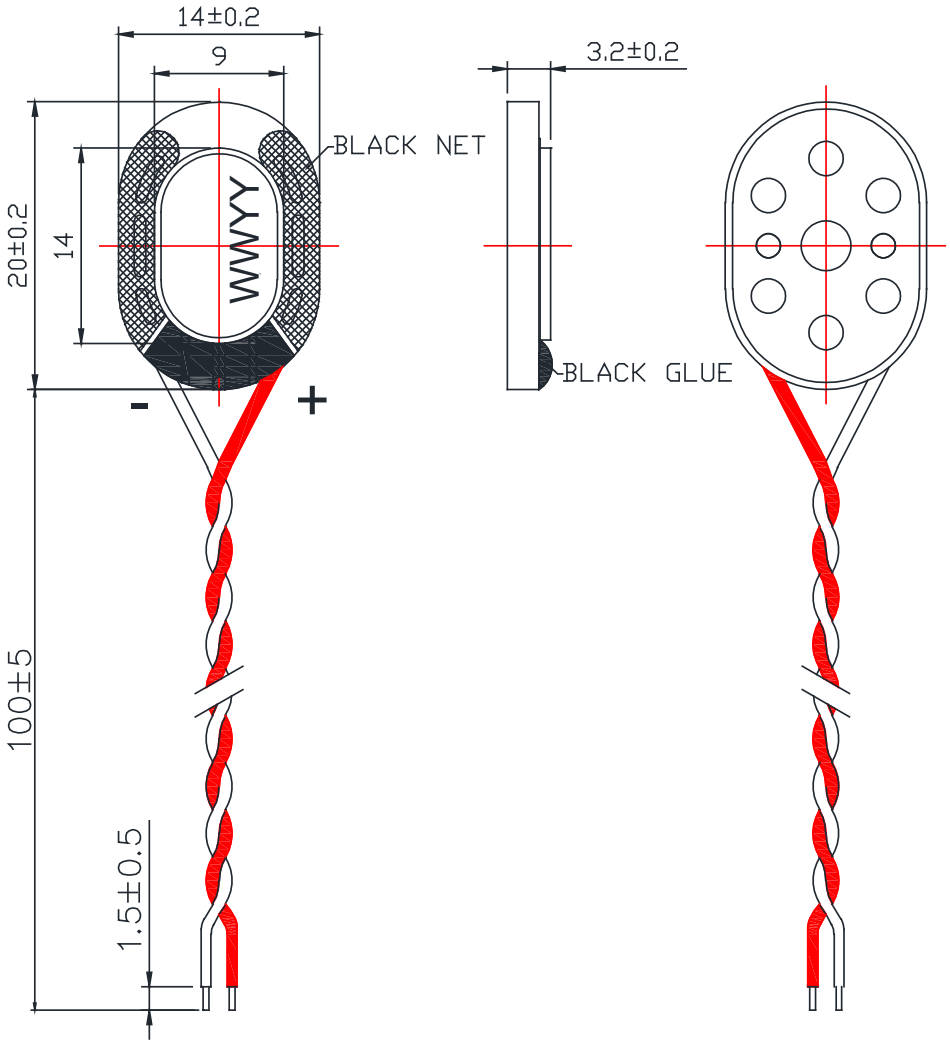
Termination Style:
"blank" = wire leads, no connector
1 = JST housing SHR-2V-S-B
2 = JST housing ZHR-2
3 = JST housing PHR-2
4 = JST housing HER-2
5* = JST housing PHR-4
6 = Molex housing 51021-0200

Notes: *Discontinued JST housing PHR-4 option.

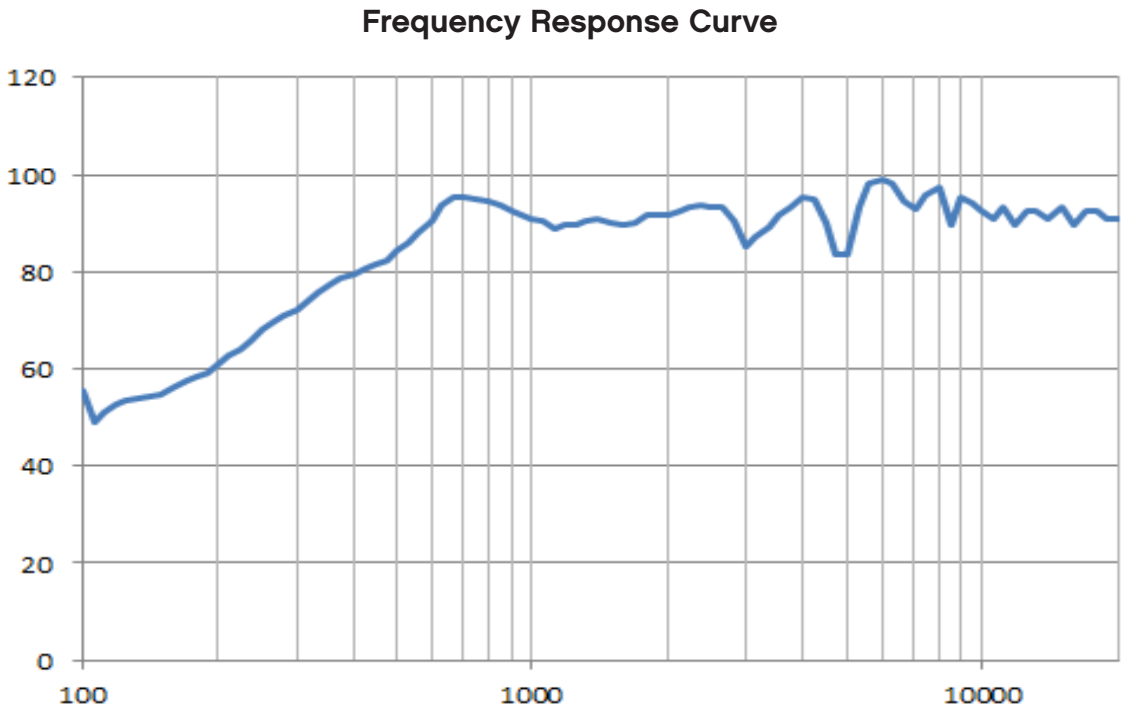
MECHANICAL DRAWING

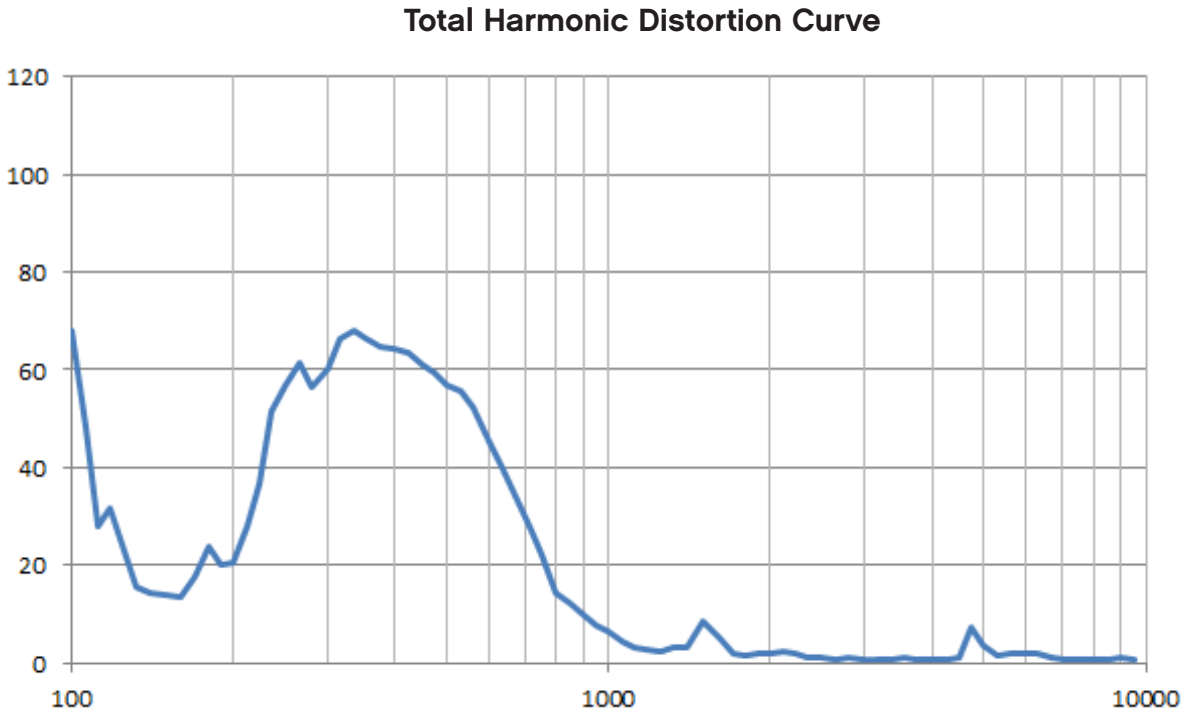
units: mm
tolerance: ±0.5 mm

wire: UL1571 30 AWG



RESPONSE CURVES





THIELE-SMALL PARAMETERS

parameter	conditions/description	typ
Mechanical Q Factor	Qms	2.713
Electrical Q Factor	Qes	9.354
Total Q Factor	Qts	2.103
Compliance Equivalent Volume	Vas	0.0028

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

REVISION HISTORY

rev.	description	date
1.0	initial release	03/25/2015
1.01	added connector options	07/15/2016
1.02	discontinued JST housing PHR-4 option	07/01/2019
1.03	brand update	01/22/2020
1.04	logo, datasheet style update	08/05/2022
1.05	modified design	01/29/2024
1.06	CUI Devices rebranded to Same Sky	09/11/2024
1.07	added Thiele-Small Parameters	02/07/2025

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

same sky

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

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