

date 08/05/2022

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MODEL: CDS-20144 | DESCRIPTION: SPEAKER

FEATURES

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





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 3.5 | | | | mm |
| magnet | Nd-Fe-B | | | | |
| material | PBT | | | | |
| cone material | PEN | | | | |
| terminal | solder pads | | | | |
| weight | | | 1.6 | | g |
| operating temperature | | -30 | | 70 | °C |
| storage temperature | | -40 | | 85 | °C |
| RoHS | yes | | | | |

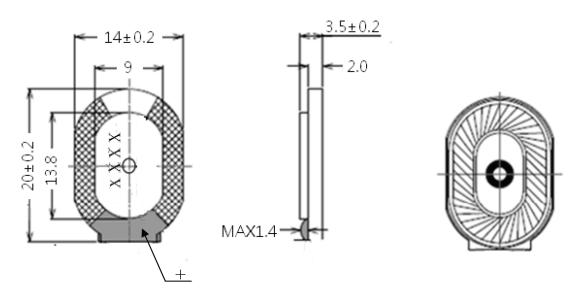
Notes: 1. All specifications measured at 5~35°C, humidity at 45~85%, under 86~106kPa pressure, unless otherwise noted.

SOLDERABILITY

| parameter | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for maximum 3 seconds | 370 | 380 | 390 | °C |

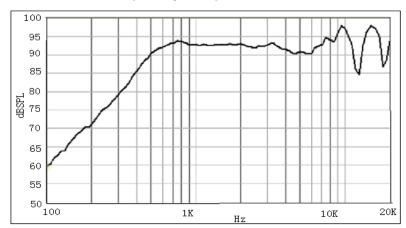
MECHANICAL DRAWING

units: mm tolerance: ±0.2 mm

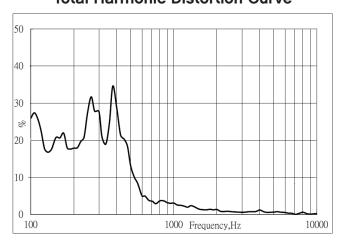


RESPONSE CURVES

Frequency Response Curve



Total Harmonic Distortion Curve



Additional Resources: Product Page | 3D Model

CUI DEVICES | MODEL: CDS-20144 | DESCRIPTION: SPEAKER

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REVISION HISTORY

| rev. | description | date |
|------|------------------------------|------------|
| 1.0 | initial release | 03/25/2015 |
| 1.01 | brand update | 01/21/2020 |
| 1.02 | logo, datasheet style update | 08/05/2022 |

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



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

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