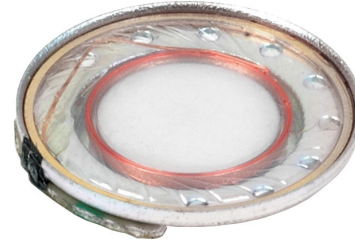


MODEL: CDMG13008L-02 | **DESCRIPTION:** SPEAKER**FEATURES**

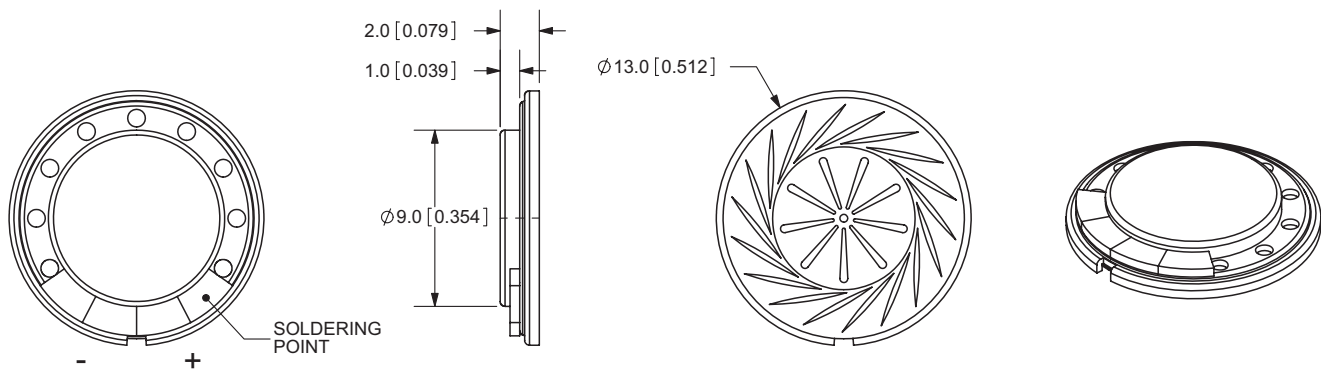
- metal frame
- PET cone

**SPECIFICATIONS**

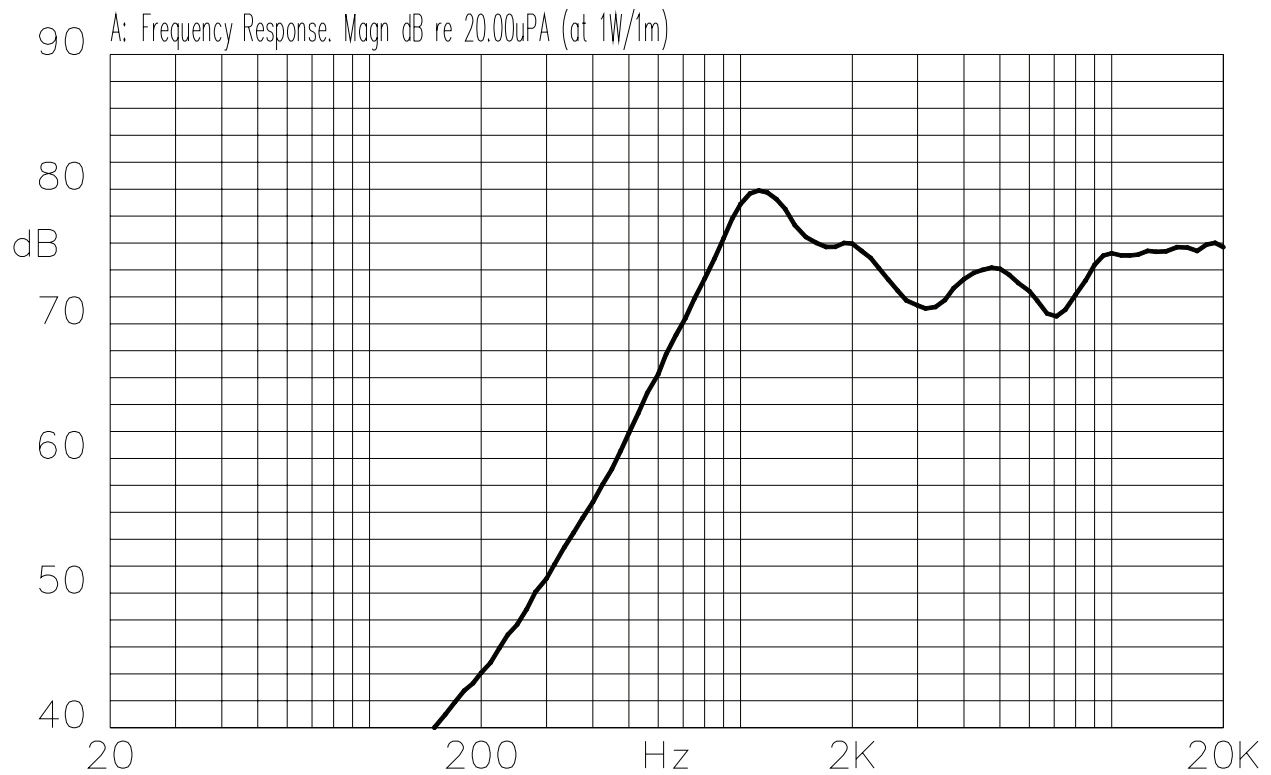
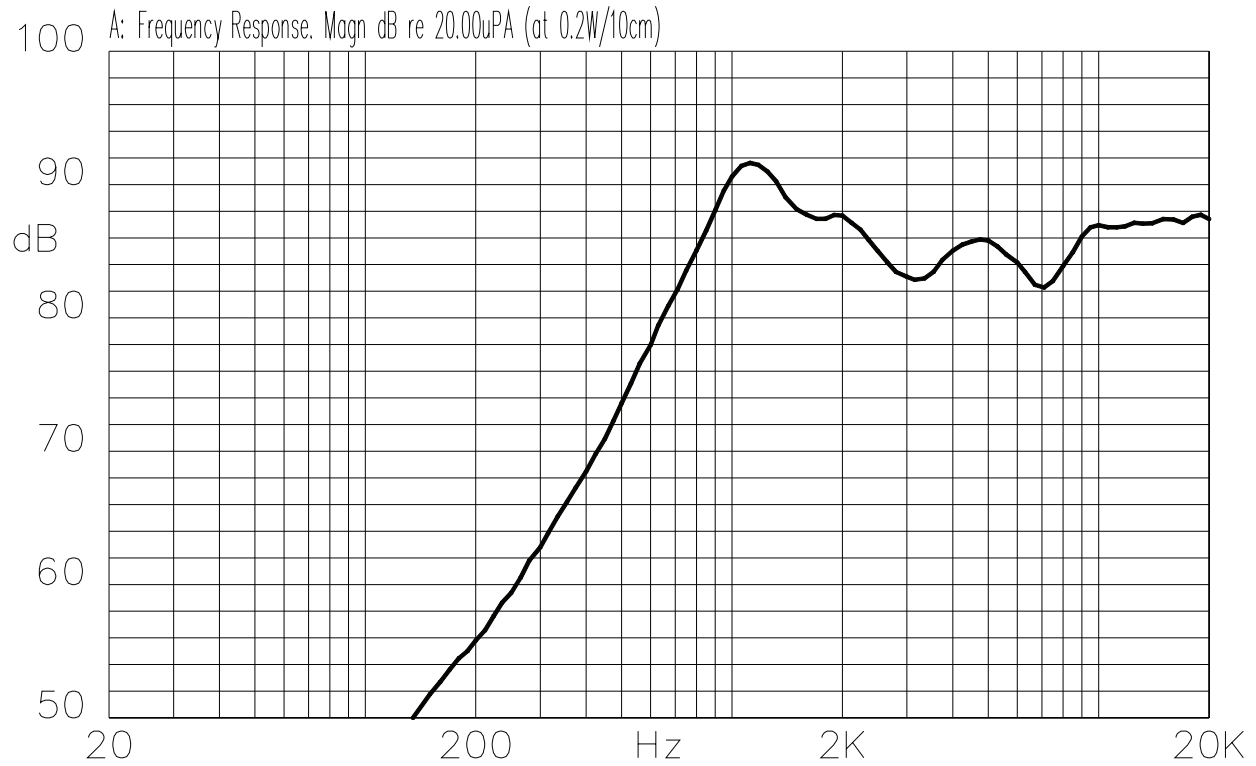
| parameter | conditions/description | min | typ | max | units |
|-----------------------|--|----------|----------|----------|--------------|
| dimension | ø13 x 2 mm | | | | |
| input power | max. power: IEC-60268-5, filter 60 s on / 120 s off, 10 cycles at room temp | | 0.2 | 0.4 | W |
| impedance | at 1.5 kHz, 1 V | 6.8 | 8 | 9.2 | Ω |
| resonant frequency | at 1 V | 840 | 1,050 | 1,260 | Hz |
| sound pressure level | 0.2 W, 10 cm ave. at 1.5, 2, 2.5, 3.0 kHz 1 W, 1 m ave. at 1.5, 2, 2.5, 3.0 kHz | 83 72 | 86 75 | 89 78 | dB dB |
| response | | | | 20,000 | Hz |
| distortion | at 1.5 kHz, 0.2 W | | | 10 | % |
| buzz, rattle, etc. | must be normal at sine wave 1.26 V | | | | |
| magnet size | ø7 x 0.7 mm [Nd-Fe-B] | | | | |
| operating temperature | | -20 | | 55 | °C |
| weight | | | 0.7 | | g |
| material | metal | | | | |
| RoHS | yes | | | | |

MECHANICAL DRAWING

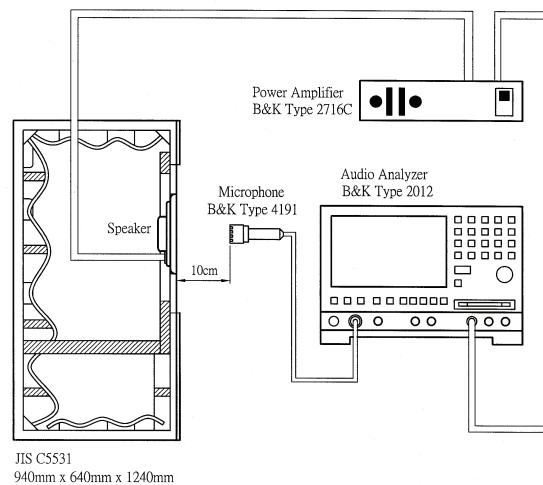
units: mm
tolerance: ± 0.3mm



FREQUENCY RESPONSE CURVE



MEASUREMENT METHOD



MECHANICAL CHARACTERISTICS

| item | test condition | evaluation standard |
|------------------------|---|---|
| PCB wire pull strength | The pull force will be applied to double lead wire: horizontal 3.0 N (0.306 kg) for 30 seconds | No damage or cutting off |
| vibration test | The speaker should be measured after a vibration amplitude of 1.5 mm with 10 ~ 55 Hz band of vibration frequency to each of the 3 perpendicular directions for 2 hours. | After the test, there will be no appearance or internal damage such as cracks, rust, or distortions that will affect normal speaker operation. There should be no audible sound distortion at 1.26 V sine wave between Fo ~ 20 KHz. |
| drop test | The speaker contained in normal box is subjected to 10 drops from the height of 75cm onto a 40mm thick wooden board. | |

ENVIRONMENT TEST

| item | test condition | evaluation standard |
|------------------------|---|--|
| high temperature test | After being placed in a chamber at +55°C for 96 hours. | <p>The buzzer will be measured after being placed at +25°C for 6 hours. After the test, there will be no appearance or internal damage such as cracks, rust, or distortions that will affect normal speaker operation. There should be no audible sound distortion at 1.26 V sine wave between Fo ~ 20 KHz. The Fo should meet initial measurements. SPL should be within ±3dB compared to the initial measurements.</p> |
| low temperature test | After being placed in a chamber at -20°C for 96 hours. | |
| humidity test | After being placed in a chamber at +40°C and 90 ±5% RH for 96 hours. | |
| temperature cycle test | <p>The part will be subjected to 5 cycles. One cycle will consist of:</p> | |

RECOMMENDED TEMPERATURE PROFILE FOR HAND SOLDERING

| item | conditions/description |
|----------------|----------------------------|
| hand soldering | 370 ±10°C for 3 ±1 seconds |

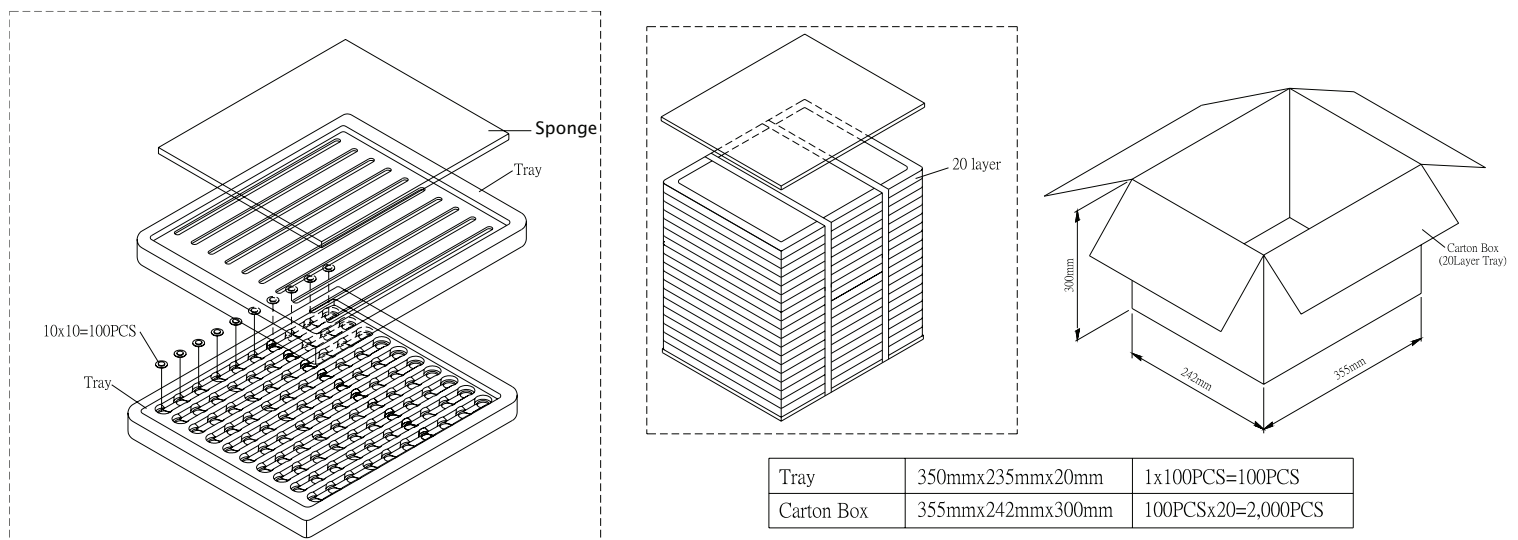
RELIABILITY TEST

| item | test condition | evaluation standard |
|-----------------------|---|---|
| operating (life test) | 1. Load test: The part will be subjected to 96 hours of continuous white noise at 0.2 W at room temperature. | The buzzer will be measured after being placed at +25°C for 1 hours. After the test, there will be no appearance or internal damage such as cracks, rust, or distortions that will affect normal speaker operation. There should be no audible sound distortion at 1.26 V sine wave between Fo ~ 20 KHz. The Fo should meet initial measurements. SPL should be within ±3dB compared to the initial measurements. |

TEST CONDITIONS

| | | | |
|---------------------------|----------------------------|-----------------------|------------------------------|
| standard test conditions | a) Temperature: +5 ~ +35°C | b) Humidity: 45 ~ 85% | c) Pressure: 860 ~ 1060 mbar |
| judgement test conditions | a) Temperature: +25 ±2°C | b) Humidity: 60 ~ 70% | c) Pressure: 860 ~ 1060 mbar |

PACKAGING



REVISION HISTORY

| rev. | description | date |
|------|------------------------------|------------|
| 1.0 | initial release | 10/18/2006 |
| 1.01 | new spec template applied | 10/26/2011 |
| 1.02 | brand update | 01/20/2020 |
| 1.03 | 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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