

## Excellent Integrated System Limited

Stocking Distributor

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[CUI Inc.](#)  
[CDS-18138A](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)



**date** 03/25/2015  
**page** 1 of 3

**MODEL:** CDS-18138A | **DESCRIPTION:** SPEAKER

**FEATURES**

- micro-speaker
- 8 ohm impedance
- spring leads



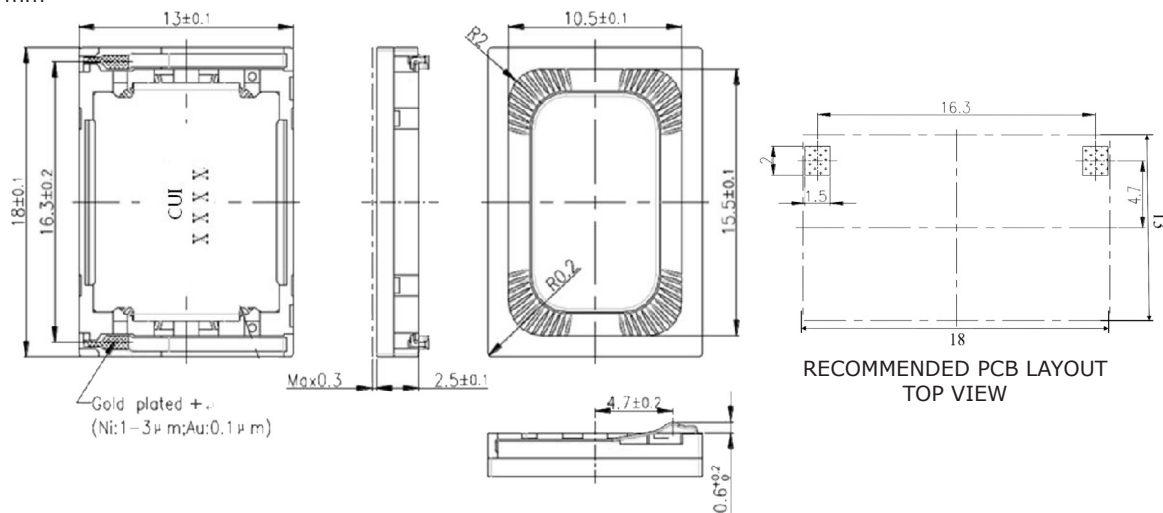
**SPECIFICATIONS**

| parameter               | conditions/description   | min | typ  | max    | units    |
|-------------------------|--|-----|------|--------|----------|
| input power             | maximum power: IEC-60268-5, filter 60s on/120s off, 10 cycles at room temp |     | 0.7  | 1.0    | W        |
| impedance               | at 1.5 kHz, 1.0 V  | 7.2 | 8    | 8.8    | $\Omega$ |
| resonant frequency (Fo) | in 1 cc closed box   | 300 | 375  | 450    | Hz       |
|                         |  | 702 | 780  | 858    | Hz       |
| frequency response      | average SPL -10 dB   | Fo  |      | 20,000 | Hz       |
| sound pressure level    | at 0.7 W, 0.1 m ave, at 2.0, 3.0, 4.0 kHz                                  | 86  | 89   | 92     | dB       |
| distortion              | at 1.0 kHz, 0.7 W, in 1 cc closed box                                      |     |      | 10     | %        |
| buzz, rattle, etc.      | must be normal at sine wave between 400 ~ 5 kHz, in 1 cc closed box        |     | 2.37 |        | V        |
| polarity                | cone will move forward with positive dc current to "+" terminal            |     |      |        |          |
| dimensions              | 18.0 x 13.0 x 2.5  |     |      |        | mm       |
| magnet                  | Nd-Fe-B  |     |      |        |          |
| material                | PPA  |     |      |        |          |
| cone material           | mylar  |     |      |        |          |
| terminal                | spring type  |     |      |        |          |
| weight                  |  |     | 1.6  |        | g        |
| operating temperature   |  | -20 |      | 70     | °C       |
| storage temperature     |  | -40 |      | 85     | °C       |
| RoHS                    | 2011/65/EU   |     |      |        |          |

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

## MECHANICAL DRAWING

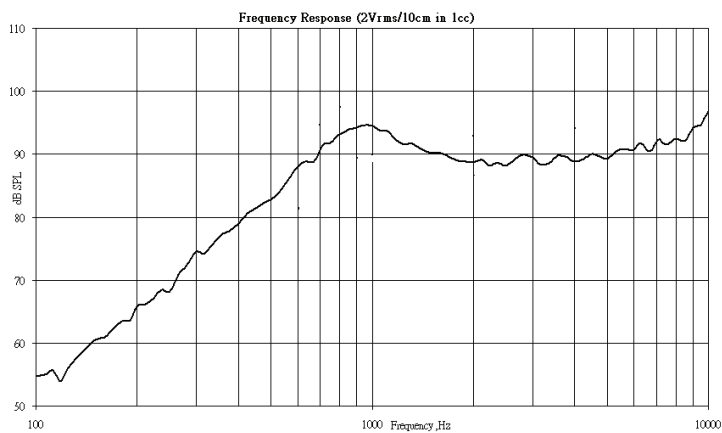
units: mm  
tolerance:  $\pm 0.2$  mm



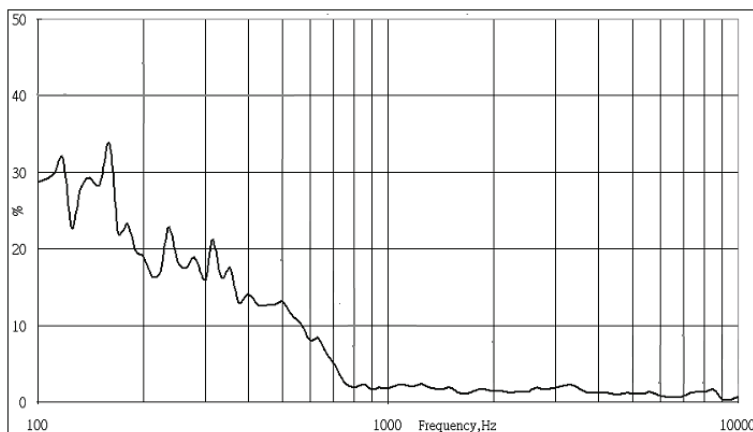
- Notes:
1. Working height of the spring contacts is  $< 0.4$  mm.
  2. The cone extends beyond the housing by a maximum of  $0.3$  mm during operation.

## RESPONSE CURVES

### Frequency Response Curve



### Total Harmonic Distortion Curve





## REVISION HISTORY

| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 03/25/2015 |

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



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

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