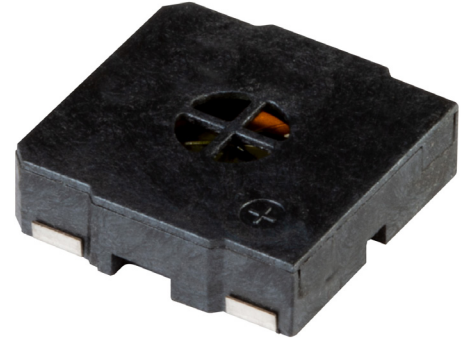



**MODEL:** CMS-151504-SMT-TR | **DESCRIPTION:** SPEAKER

**FEATURES**

- surface mount speaker
- reflow solder capable
- low profile

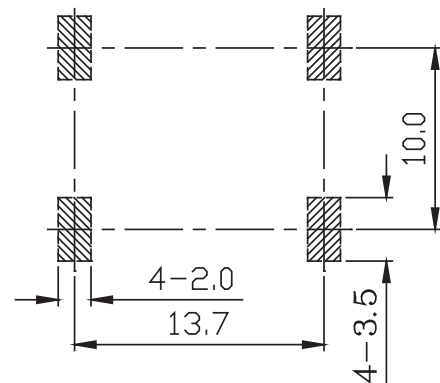
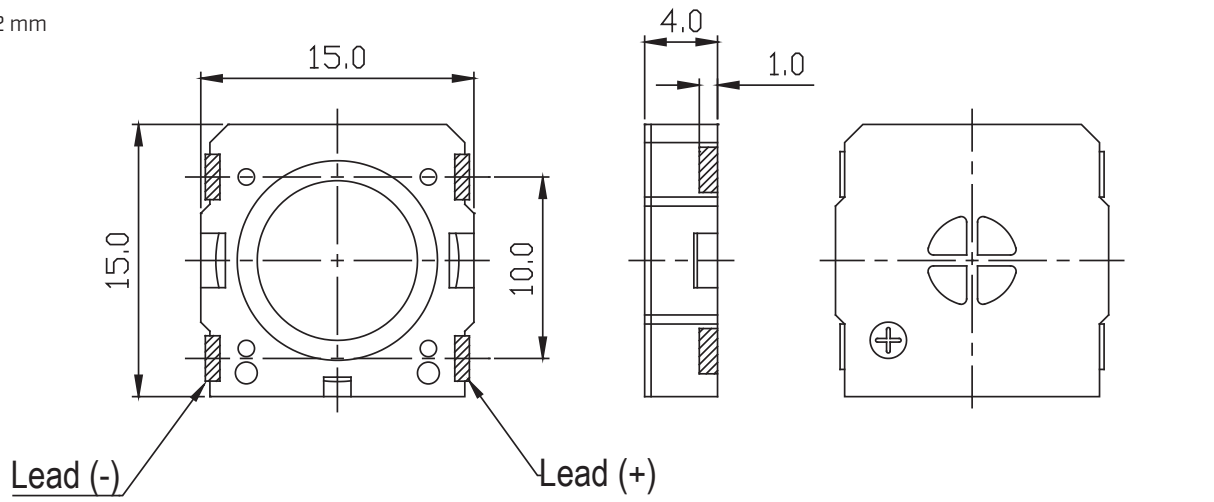

**SPECIFICATIONS**

| parameter               | conditions/description                                    | min   | typ | max    | units              |
|-------------------------|---|-------|-----|--------|--------------------|
| input power             | max power: 1 minute on, 2 minutes off, 10 cycles          |       | 0.5 | 0.8    | W                  |
| impedance               | at 1.0 kHz, 1.0 V   | 6.8   | 8   | 9.2    | $\Omega$           |
| resonant frequency (Fo) | at 1.0 V  | 722.5 | 850 | 977.5  | Hz                 |
| frequency response      |   | Fo    |     | 20,000 | Hz                 |
| sound pressure level    | at 0.5 W, 0.1 m, avg at 1.0, 1.2, 1.5, 2.0 kHz            | 85    | 88  | 91     | dB                 |
| distortion              | at 2.0 kHz, 0.5 W   |       |     | 10     | %                  |
| buzz, rattle, etc.      | must be normal at sine wave, Fo Hz~5 kHz                  |       |     | 2.0    | V                  |
| polarity                | cone moves forward w/ positive dc current to "+" terminal |       |     |        |                    |
| dimensions              | 15 x 15 x 4   |       |     |        | mm                 |
| magnet                  | SmCo  |       |     |        |                    |
| frame material          | LCP   |       |     |        |                    |
| cone material           | PI  |       |     |        |                    |
| terminal                | surface mount   |       |     |        |                    |
| weight                  |   |       | 1.5 |        | g                  |
| operating temperature   |   | -20   |     | 70     | $^{\circ}\text{C}$ |
| storage temperature     |   | -20   |     | 70     | $^{\circ}\text{C}$ |
| RoHS                    | yes   |       |     |        |                    |

Notes: 1. All specifications measured at 15-35 $^{\circ}\text{C}$ , humidity at 45-85%, under 86-106 kPa pressure, unless otherwise noted.

## MECHANICAL DRAWING

units: mm  
tolerance:  $\pm 0.2$  mm

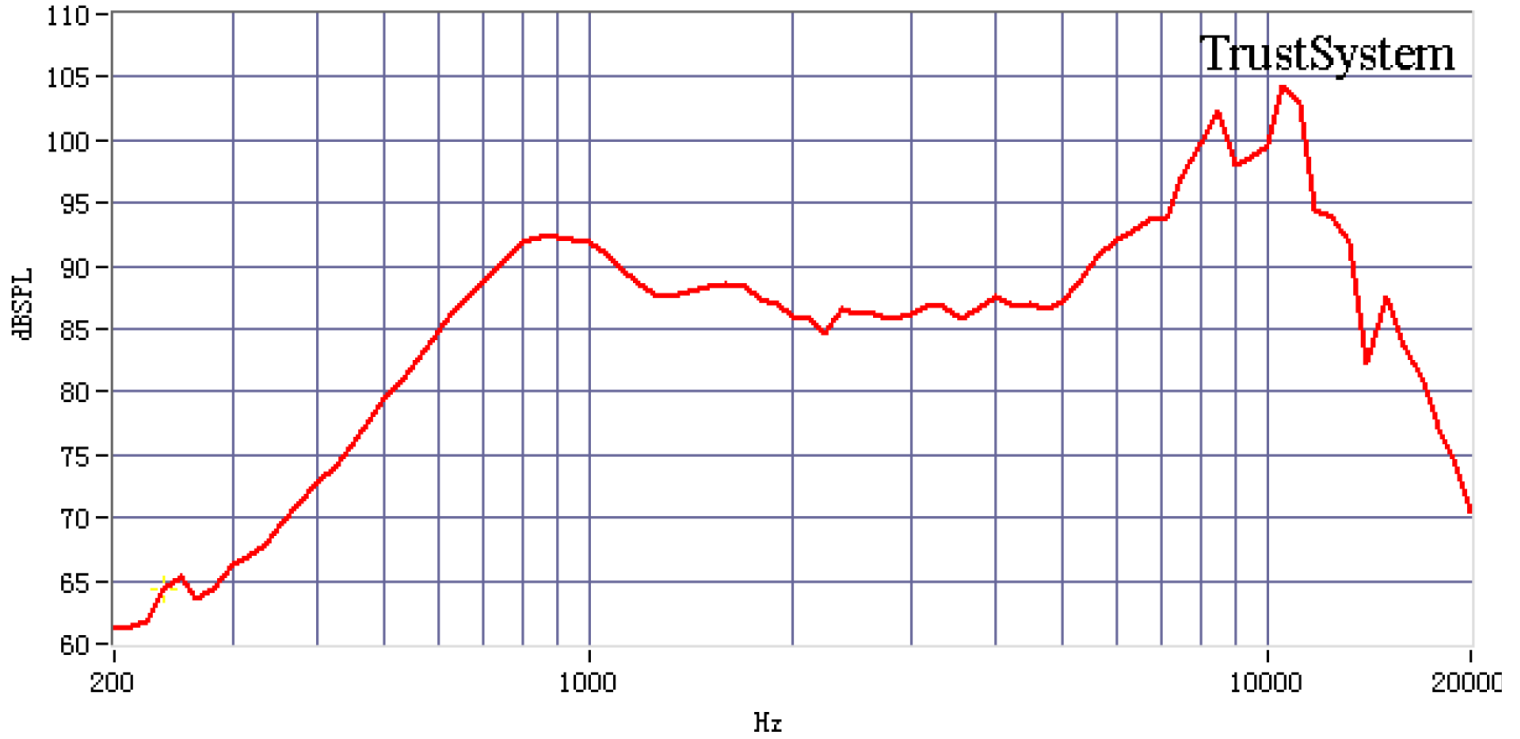


Recommended PCB Layout  
Top View

## RESPONSE CURVES

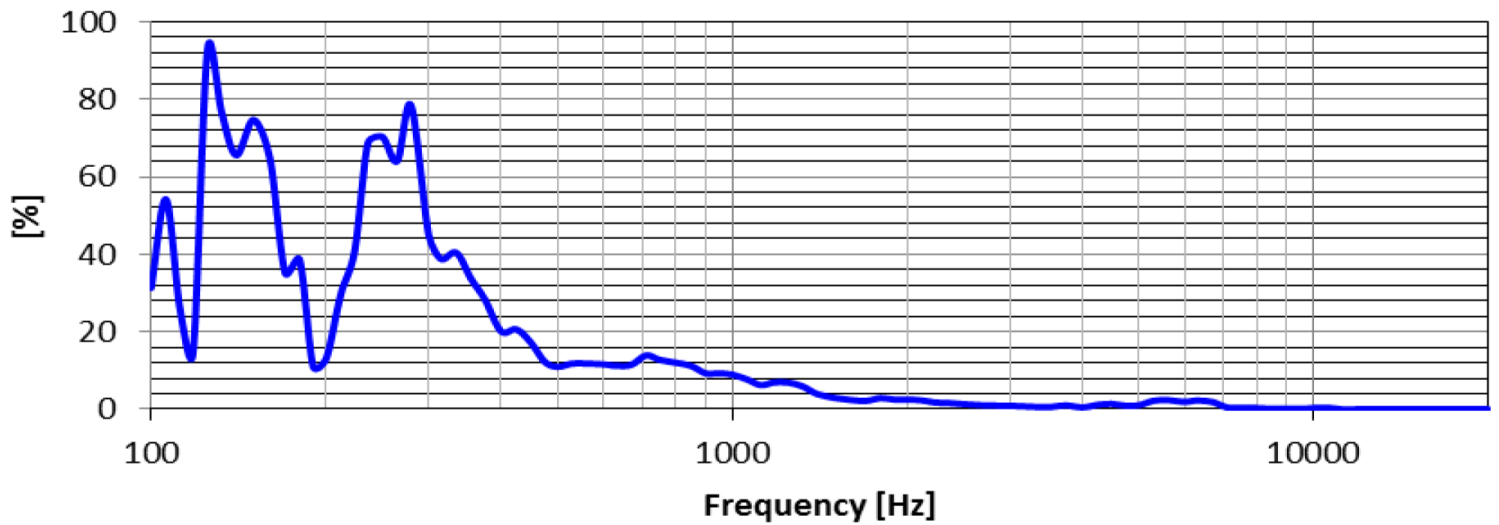
### Frequency Response Curve

Test Conditions: 0.5 W / 0.1 m



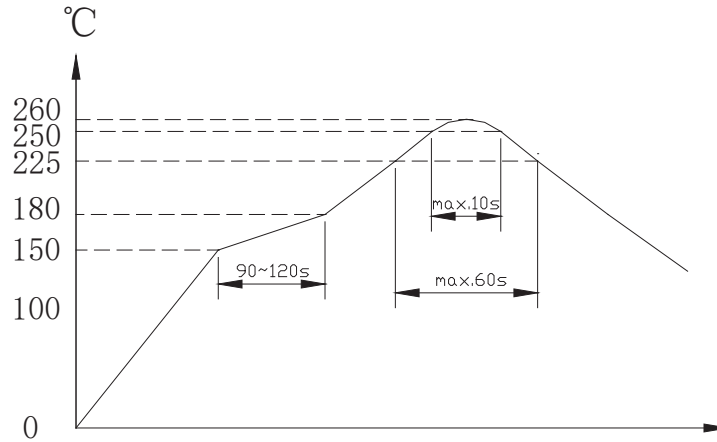
### Total Harmonic Distortion Curve

Test Conditions: 0.5 W / 0.1 m



## SOLDERABILITY

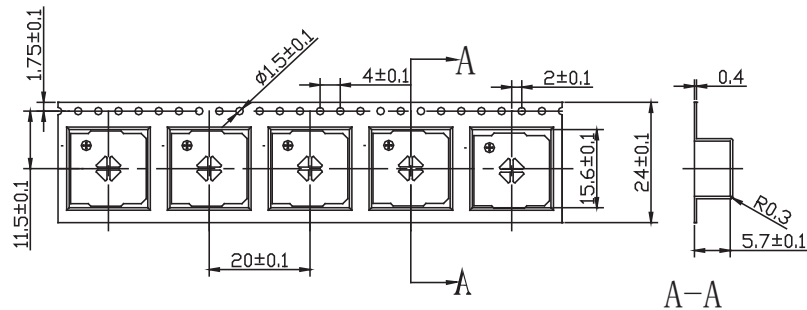
| parameter        | conditions/description | min | typ | max | units |
|------------------|------------------------|-----|-----|-----|-------|
| hand soldering   | for 3~5 seconds        | 370 | 380 | 390 | °C    |
| reflow soldering | see reflow profile     | 255 | 260 | 265 | °C    |



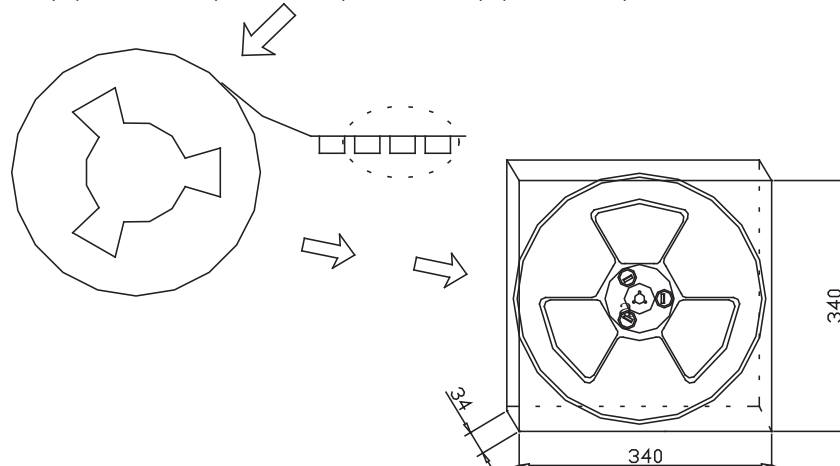
## PACKAGING

| parameter         | conditions/description            | min | typ | max | units |
|-------------------|-----------------------------------|-----|-----|-----|-------|
| reel storage      | ≤30°C, ≤60% humidity              |     |     |     |       |
| drying conditions | bake at 60°C, ≤5% RH for 48 hours |     |     |     |       |
| reel size         | Ø330 mm max                       |     |     |     |       |
| reel QTY          | 600 pcs per reel                  |     |     |     |       |

Note: 2. Same Sky recommends to mount within 4 weeks of opening bag at ≤30°C, ≤60% humidity.



8 positions empty before components, 12 positions empty after components



## REVISION HISTORY

| rev. | description                       | date       |
|------|-----------------------------------|------------|
| 1.0  | initial release                   | 12/12/2023 |
| 1.01 | CUI Devices rebranded to Same Sky | 09/11/2024 |
| 1.02 | updated datasheet                 | 01/21/2025 |

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.

Same Sky reserves the right to make changes to the product at any time without notice. Information provided by Same Sky is believed to be accurate and reliable. However, no responsibility is assumed by Same Sky for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

Same Sky products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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