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# SERIES: CMS-28588N-L152 | DESCRIPTION: SPEAKER

## FEATURES

- miniature speaker
- 550 Hz resonant frequency
- wire leads with connector options



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 | | 2.0 | 2.5 | W |
| impedance | at 2.0 kHz, 1.0 V | 6.8 | 8 | 9.2 | Ω |
| resonant frequency (Fo) | at 1.0 V | 440 | 550 | 660 | 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<br>at 2.0 W, 0.5 m ave, at 0.8, 1.0, 1.2, 1.5 kHz | 96<br>85 | 99<br>88 | 102<br>91 | dB<br>dB |
| distortion | at 1.0 kHz, 1.0 W | | | 10 | % |
| buzz, rattle, etc. | must be normal at sine wave between Fo ~ 20,000 Hz | | 4.0 | | V |
| dimensions | Ø28 x 5.5 | | | | mm |
| magnet | Nd-Fe-B | | | | |
| material | SPCC | | | | |
| cone material | PET | | | | |
| terminal | wire leads | | | | |
| weight | | | 7.6 | | g |
| operating temperature | | -20 | | 55 | °C |
| storage temperature | | -30 | | 70 | °C |
| hand soldering | for maximum 3 seconds | 370 | 380 | 390 | °C |
| RoHS | yes | | | | |

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

## PART NUMBER KEY

CMS-28588N-L152 **X**

Base Number

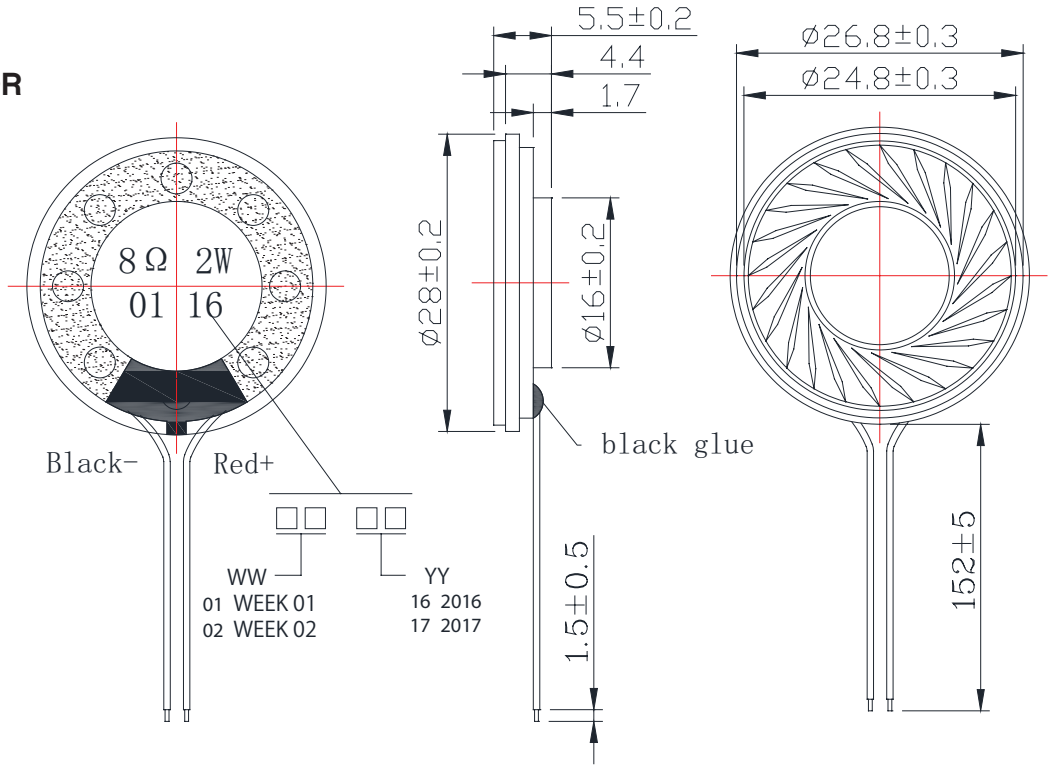
Termination Options:
"blank" = wire leads, no connector
A = wire leads with Molex housing 51021-0200
B = wire leads with JST housing SHR-02V-S-B

## MECHANICAL DRAWINGS

units: mm
tolerance: ±0.2 mm

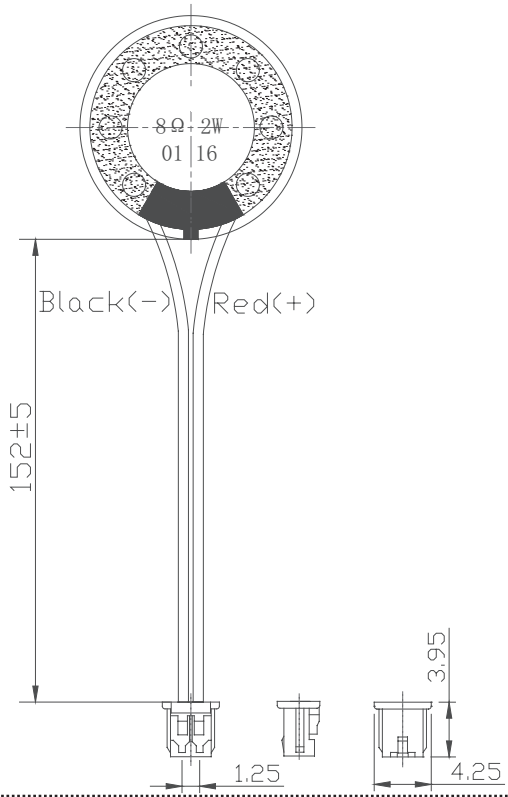
### WIRE LEADS, NO CONNECTOR

wire: UL 1007 28 AWG



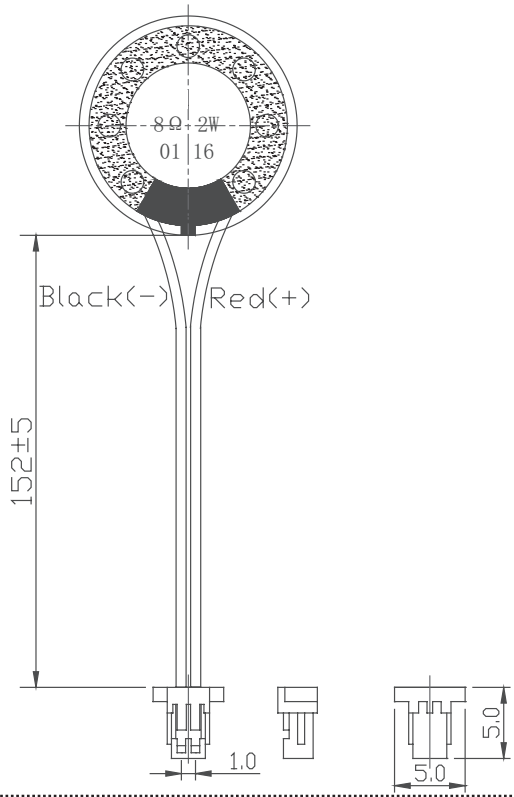

### WIRE LEADS WITH MOLEX CONNECTOR

wire: UL 1571 28 AWG
connector: Molex 51021-0200
mating connector: Molex 53261-0271

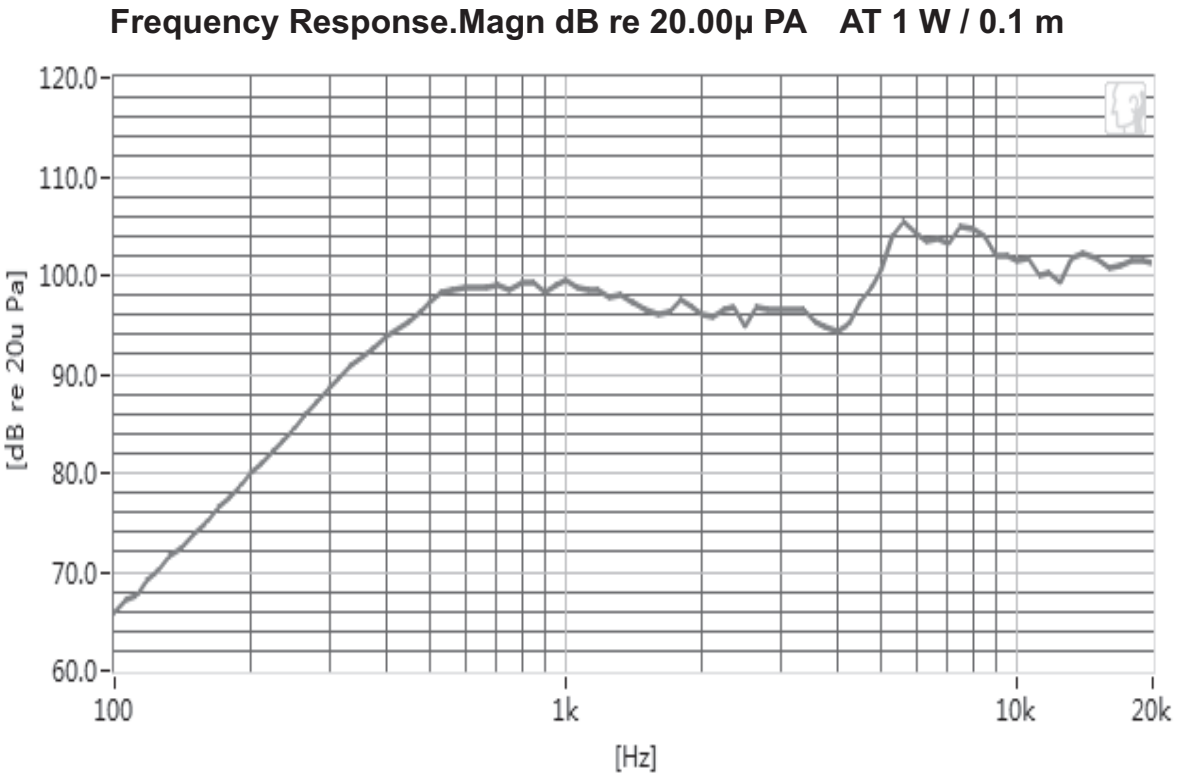



### WIRE LEADS WITH JST CONNECTOR

wire: UL 1571 28 AWG
connector: JST SHR-02V-S-B
mating connector: JST BM02B-SRSS-TB



## FREQUENCY RESPONSE CURVE




## THIELE-SMALL PARAMETERS

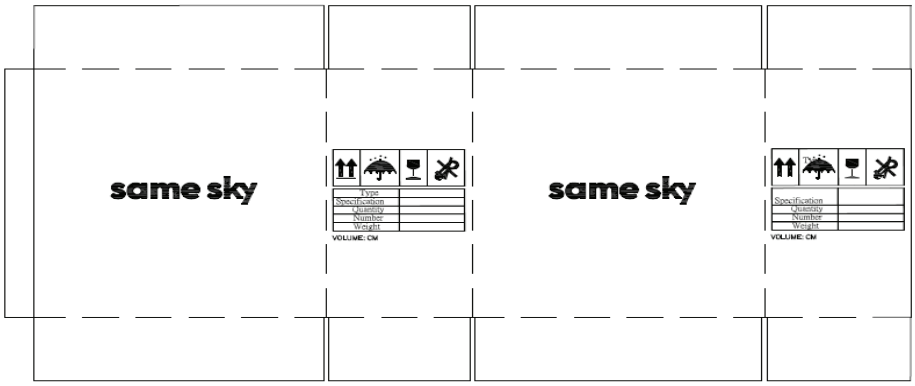
| parameter | conditions/description | typ |
|---|---|---|
| Mechanical Q Factor | Qms | 2.138 |
| Electrical Q Factor | Qes | 4.876 |
| Total Q Factor | Qts | 1.486 |
| Compliance Equivalent Volume | Vas | 0.0159 |

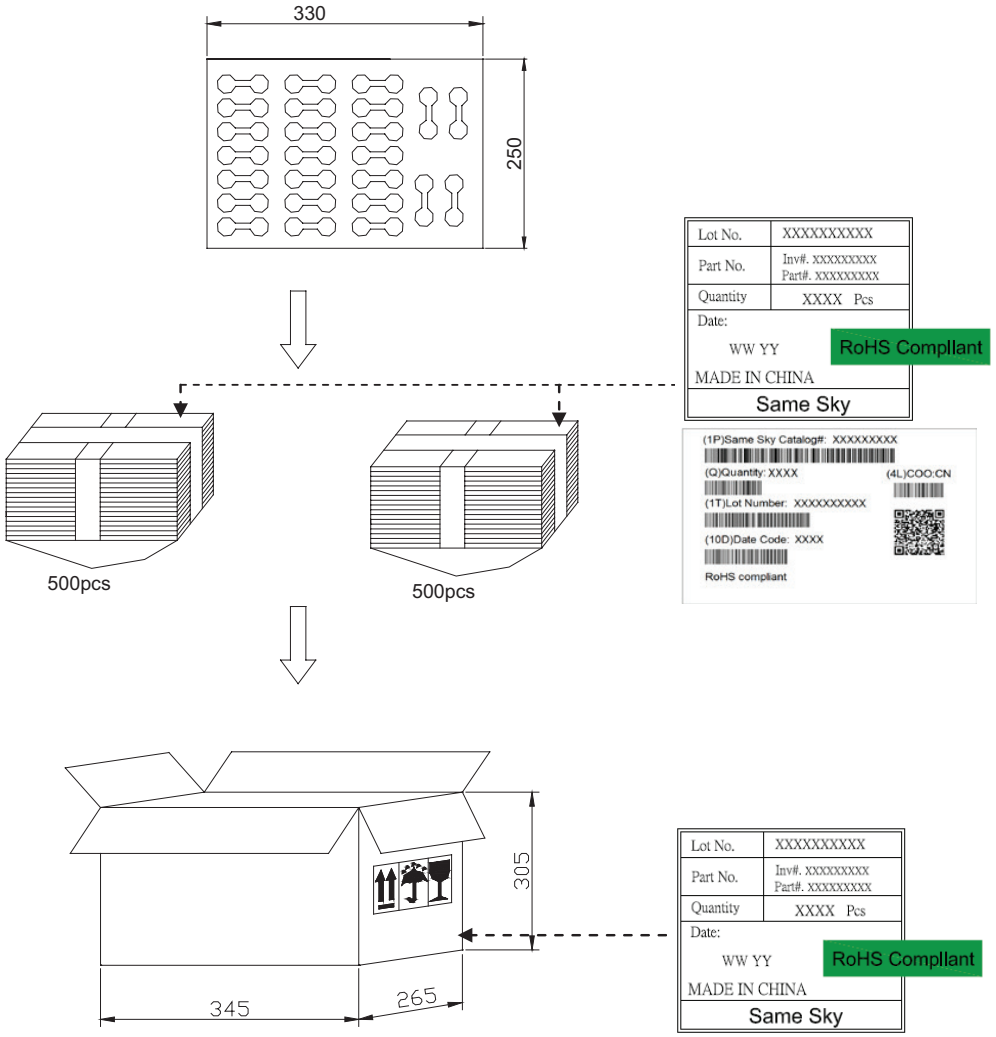
Notes: 2. Results represent typical performance in Free Air conditions.

## PACKAGING

units: mm

Tray Size: 330 x 250 x 13 mm
Carton Size: 345 x 265 x 305 mm
Tray QTY: 50 pcs per tray
Carton QTY: 1,000 pcs per carton



## REVISION HISTORY

| rev. | description | date |
|---|---|---|
| 1.0 | initial release | 06/28/2016 |
| 1.01 | brand update | 01/22/2020 |
| 1.02 | added Molex and JST connector options | 10/23/2020 |
| 1.03 | logo, datasheet style update | 08/05/2022 |
| 1.04 | CUI Devices rebranded to Same Sky | 09/11/2024 |
| 1.05 | added Thiele-Small Parameters | 02/26/2025 |

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.

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