

**MODEL:** CMI-4537-SN69 | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE**FEATURES**

- unidirectional
- 9.7 mm diameter
- solder pads

**SPECIFICATIONS**

| parameter                               | conditions/description              | min  | typ | max    | units      |
|-----------------------------------------|-------------------------------------|------|-----|--------|------------|
| directivity                             | unidirectional                      |      |     |        |            |
| sensitivity [S]                         | f = 1 kHz, 1 Pa, 0 dB = 1 V/Pa      | -40  | -37 | -34    | dB         |
| standard operating voltage [Vs]         |                                     |      | 1.5 |        | Vdc        |
| max operating voltage                   |                                     |      |     | 9      | Vdc        |
| output impedance [Zout]                 | f = 1 kHz, 1 Pa                     | 1.26 | 1.8 | 2.34   | k $\Omega$ |
| sensitivity reduction [ $\Delta$ S-Vs]  | f = 1 kHz, 1 Pa, Vs = 1.5 ~ 1.1 Vdc |      | -3  |        | dB         |
| frequency [f]                           |                                     | 100  |     | 12,000 | Hz         |
| current consumption [I <sub>0SS</sub> ] | Vs = 1.5 Vdc, RL = 2.0 k $\Omega$   |      |     | 0.4    | mA         |
| signal to noise ratio [S/N]             | f = 1 kHz, 1 Pa, A-weighted         |      | 69  |        | dBA        |
| dimensions                              | Ø9.7 x 4.5                          |      |     |        | mm         |
| material                                | AL                                  |      |     |        |            |
| terminal                                | solder pads                         |      |     |        |            |
| weight                                  |                                     |      |     | 0.8    | g          |
| operating temperature                   |                                     | -20  |     | 70     | °C         |
| storage temperature                     |                                     | -20  |     | 70     | °C         |
| RoHS                                    | yes                                 |      |     |        |            |

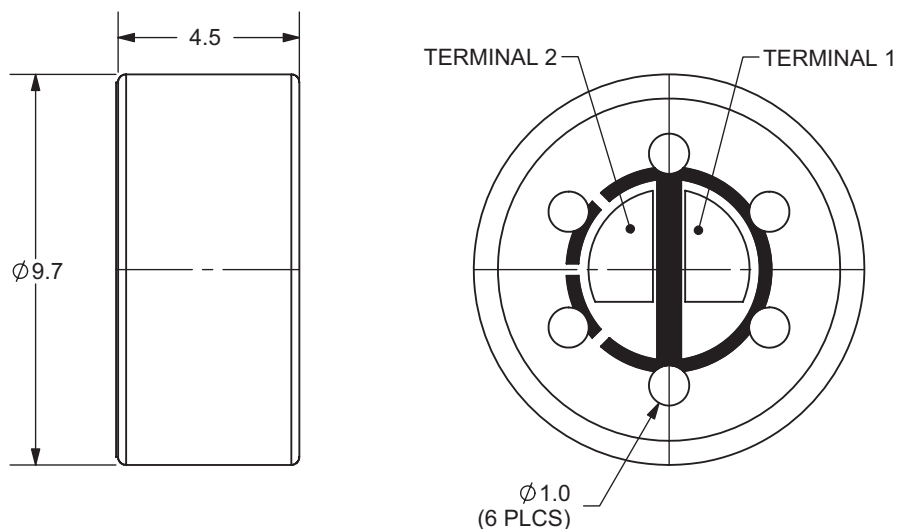
Notes: 1. We use the "Pascal [Pa]" indication of sensitivity as per the recommendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20 dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1 V/Pa)  
2. All specifications measured at 5-35°C, humidity at 45-85%, under 86-106 kPa pressure, unless otherwise noted.

**SOLDERABILITY**

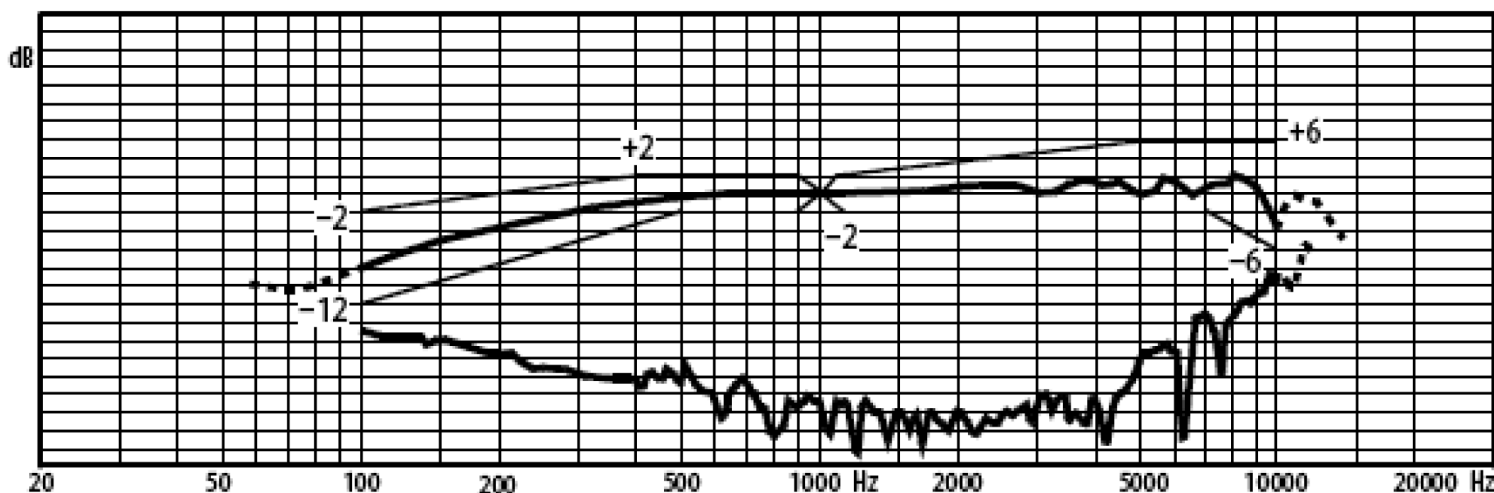
| parameter      | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for 2 ± 0.5 seconds    | 310 | 320 | 330 | °C    |

## MECHANICAL DRAWING

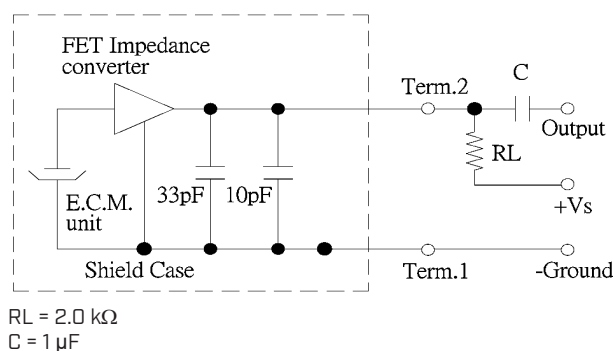
units: mm  
tolerance:  $\pm 0.2$  mm



## FREQUENCY RESPONSE CURVE



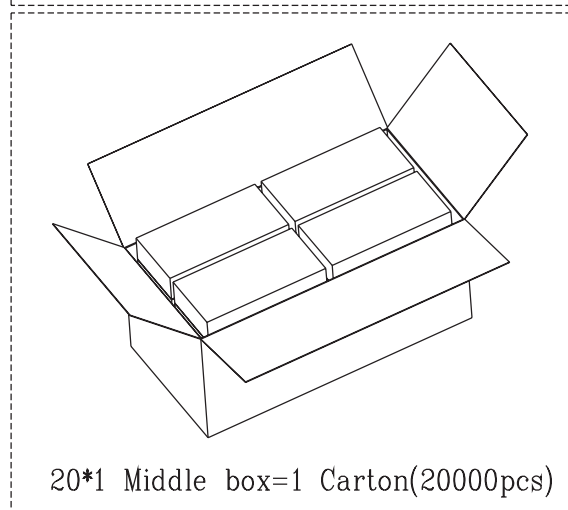
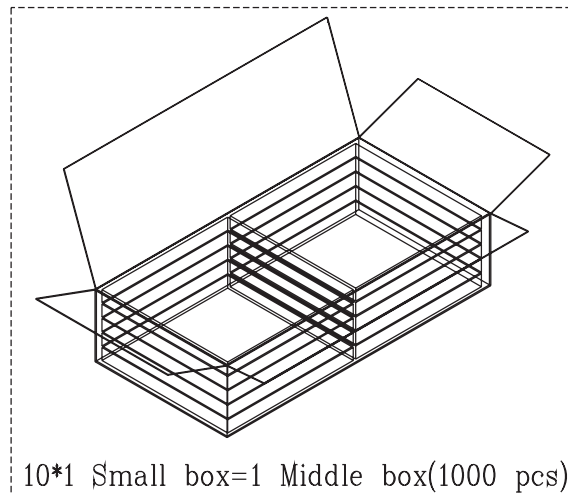
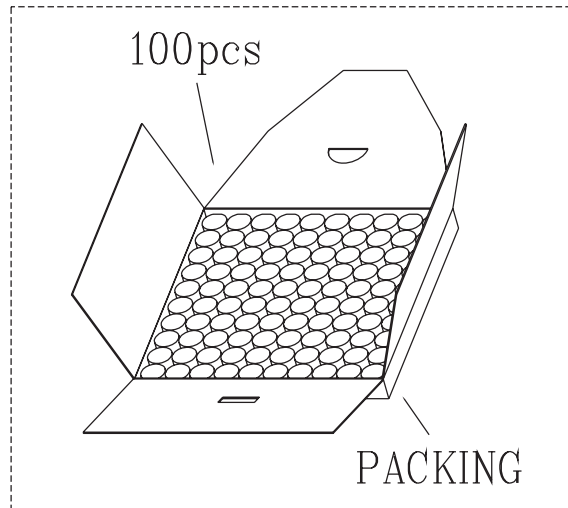
## APPLICATION CIRCUIT



## PACKAGING

units: mm

Inner Box Size: 100 x 100 x 10 mm  
Outer Box Size: 420 x 230 x 255 mm  
Inner Box QTY: 100 pcs per box  
Outer Box QTY: 20,000 pcs per box



REVISION HISTORY

| rev. | description                       | date       |
|------|-----------------------------------|------------|
| 1.0  | initial release                   | 06/01/2008 |
| 1.01 | specificaton update               | 06/25/2012 |
| 1.02 | brand update                      | 04/24/2020 |
| 1.03 | logo, datasheet style update      | 08/05/2022 |
| 1.04 | CUI Devices rebranded to Same Sky | 09/11/2024 |

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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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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