

**MODEL:** CMC-6027-24T | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE**FEATURES**

- omnidirectional
- high signal to noise ratio
- -24 dB sensitivity rating

**SPECIFICATIONS**

| parameter                               | conditions/description              | min | typ | max    | units      |
|-----------------------------------------|-------------------------------------|-----|-----|--------|------------|
| directivity                             | omnidirectional                     |     |     |        |            |
| sensitivity [S]                         | f = 1 kHz, 1 Pa, 0 dB = 1 V/Pa      | -27 | -24 | -21    | dB         |
| standard operating voltage [Vs]         |                                     |     | 2   |        | Vdc        |
| max operating voltage                   |                                     |     |     | 10     | Vdc        |
| output impedance [Zout]                 | f = 1 kHz, 1 Pa                     |     | 2.2 |        | k $\Omega$ |
| sensitivity reduction [ $\Delta$ S-Vs]  | f = 1 kHz, 1 Pa, Vs = 2.0 ~ 1.5 Vdc |     | -3  |        | dB         |
| frequency [f]                           |                                     | 100 |     | 20,000 | Hz         |
| current consumption [I <sub>oSS</sub> ] | Vs = 2.0 Vdc, RL = 2.2 k $\Omega$   |     |     | 0.5    | mA         |
| signal to noise ratio [S/N]             | f = 1 kHz, 1 Pa, A-weighted         |     | 70  |        | dBA        |
| total harmonic distortion [THD]         | at 94 dB SPL                        |     |     | 1      | %          |
| acoustic overload point [AOP]           |                                     |     |     | 115    | dB SPL     |
| dimensions                              | Ø6.0 x 2.7                          |     |     |        | mm         |
| material                                | Al                                  |     |     |        |            |
| terminal                                | solder pads                         |     |     |        |            |
| weight                                  |                                     |     |     | 0.2    | g          |
| operating temperature                   |                                     | -20 |     | 70     | °C         |
| storage temperature                     |                                     | -20 |     | 70     | °C         |
| RoHS                                    | yes                                 |     |     |        |            |

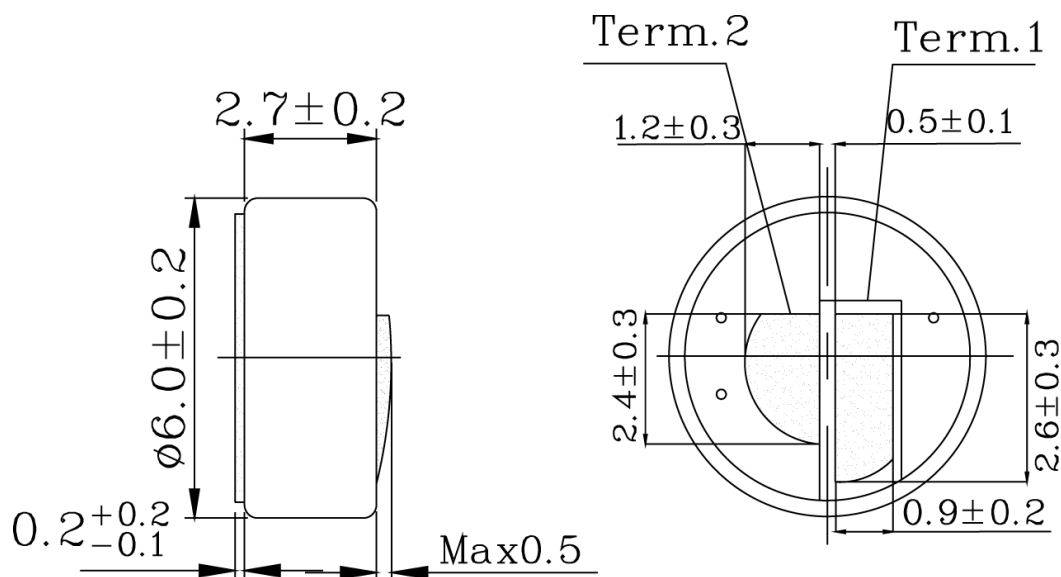
Notes: 1. We use the "Pascal [Pa]" indication of sensitivity as per the recommendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20 dB compared to the "ubar" indication. Example: -60 dB [0 dB = 1 V/ubar] = -40 dB [1 V/Pa]  
2. All specifications measured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

**SOLDERABILITY**

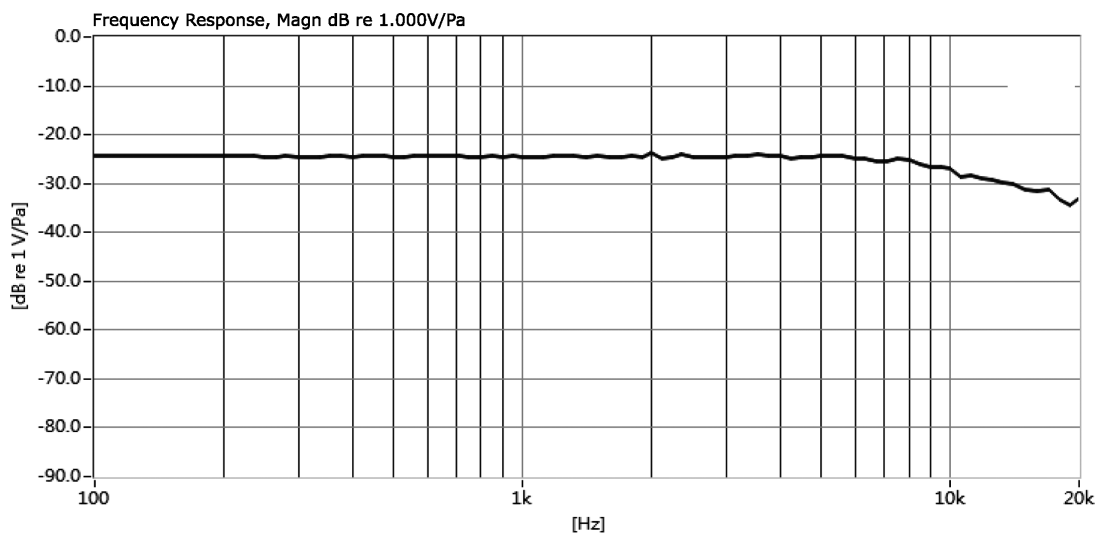
| parameter      | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for maximum 2 seconds  | 310 | 320 | 330 | °C    |

## MECHANICAL DRAWING

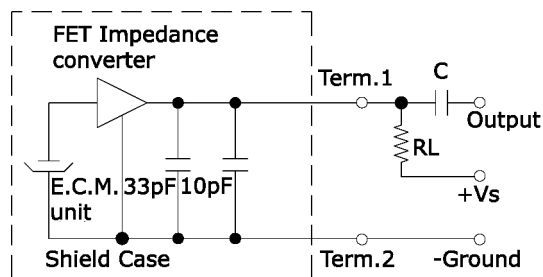
units: mm



## FREQUENCY RESPONSE CURVE



## MEASUREMENT CIRCUIT

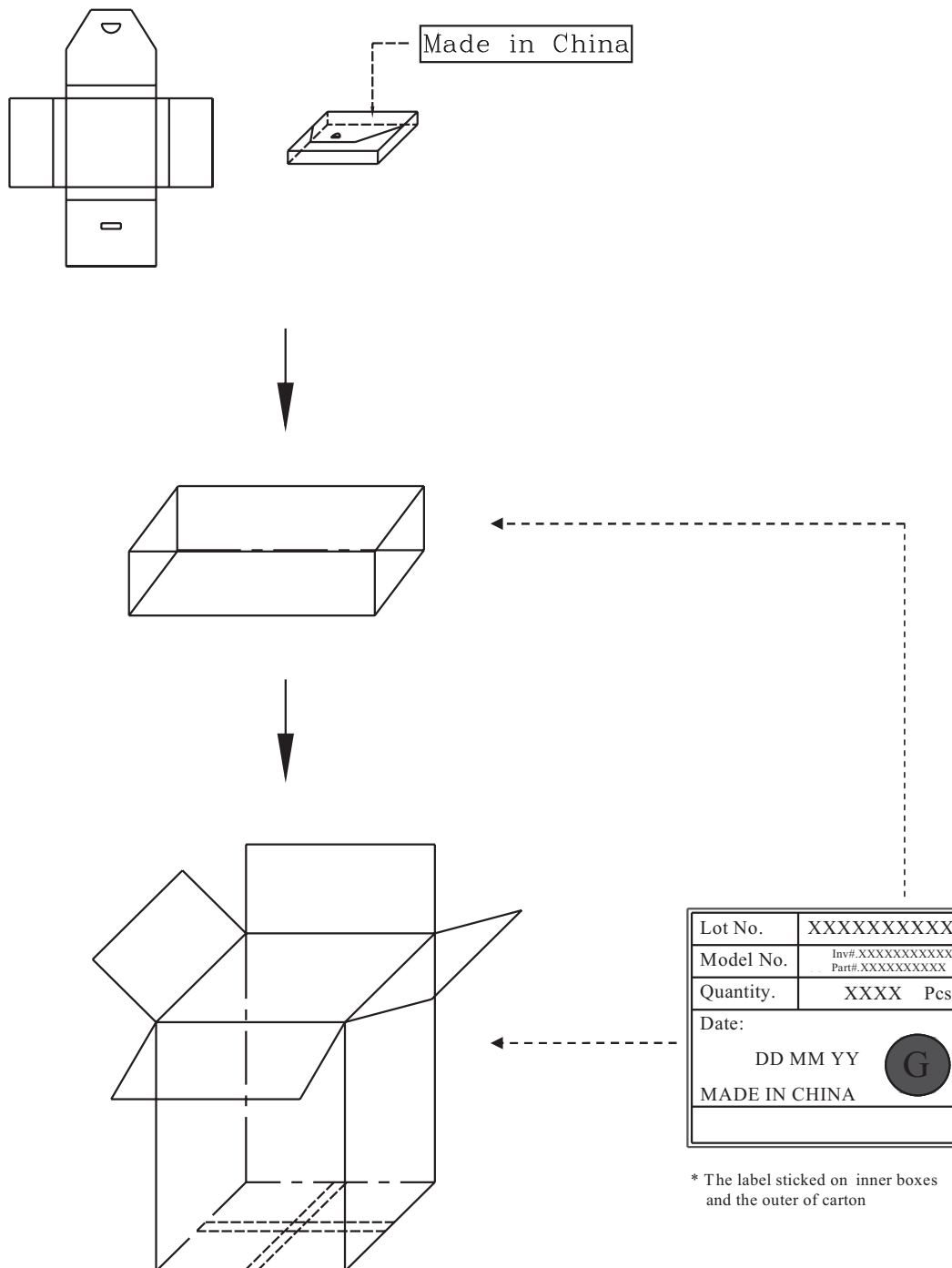


$R_L = 2.2 \text{ k}\Omega$   
 $C = 1 \text{ }\mu\text{F}$

## PACKAGING

units: mm

Inner Box Size: 62 x 62 x 3 mm  
Middle Box Size: 125 x 65 x 28 mm  
Outer Box Size: 210 x 210 x 280 mm  
Inner Box QTY: 100 pcs per box  
Middle Box QTY: 1,000 pcs per box  
Outer Box QTY: 24,000 pcs per box



REVISION HISTORY

| rev. | description                            | date       |
|------|----------------------------------------|------------|
| 1.0  | initial release                        | 11/07/2016 |
| 1.01 | updated packaging                      | 06/19/2017 |
| 1.02 | added dimensions to mechanical drawing | 12/11/2018 |
| 1.03 | brand update                           | 01/09/2020 |
| 1.04 | logo, datasheet style update           | 08/05/2022 |
| 1.05 | 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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