



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 | | kΩ |
| sensitivity reduction [ΔS-Vs] | f = 1 kHz, 1 Pa, Vs = 2.0 ~ 1.5 Vdc | | -3 | | dB |
| frequency [f] | | 100 | | 20,000 | Hz |
| current consumption [IDSS] | Vs = 2.0 Vdc, RL = 2.2 kΩ | | | 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)

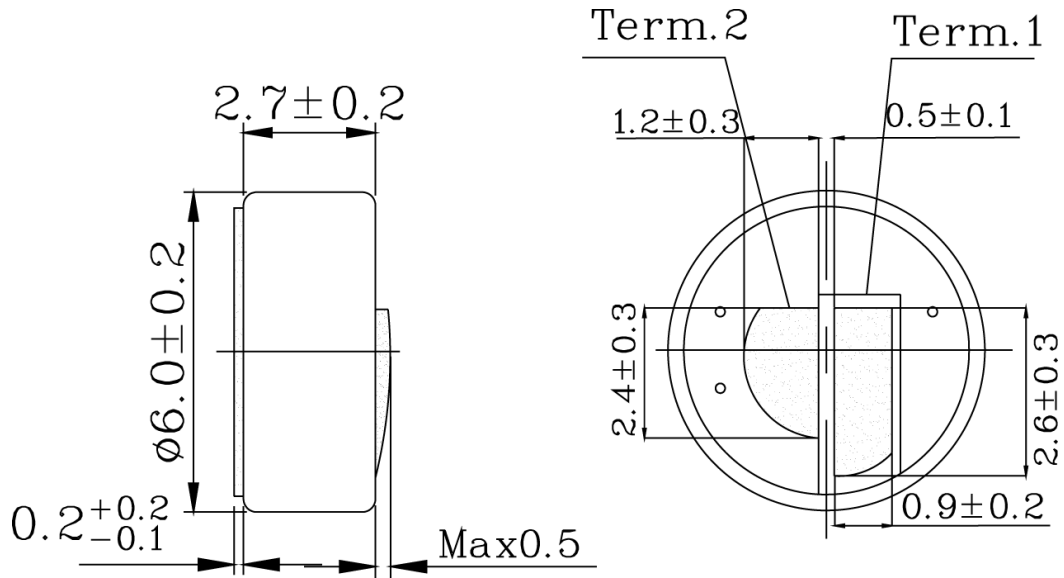
2. All specifications measured at 5-35°C, humidity at 45-85%, under 86-106 kPa pressure, unless otherwise noted.

SOLDERABILITY

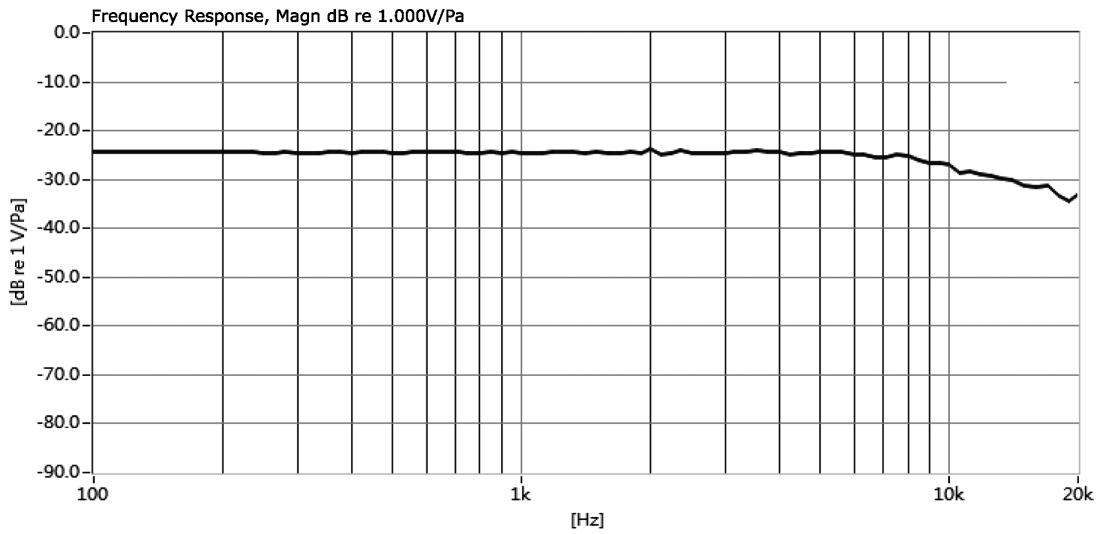
| parameter | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for maximum 2 seconds | 310 | 320 | 330 | °C |

MECHANICAL DRAWING

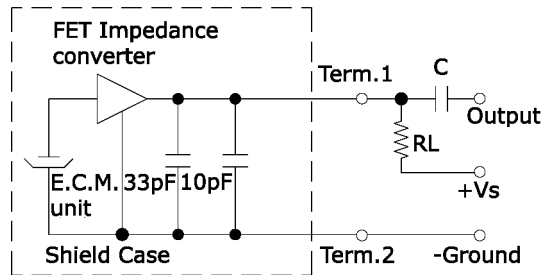
units: mm



FREQUENCY RESPONSE CURVE



MEASUREMENT CIRCUIT

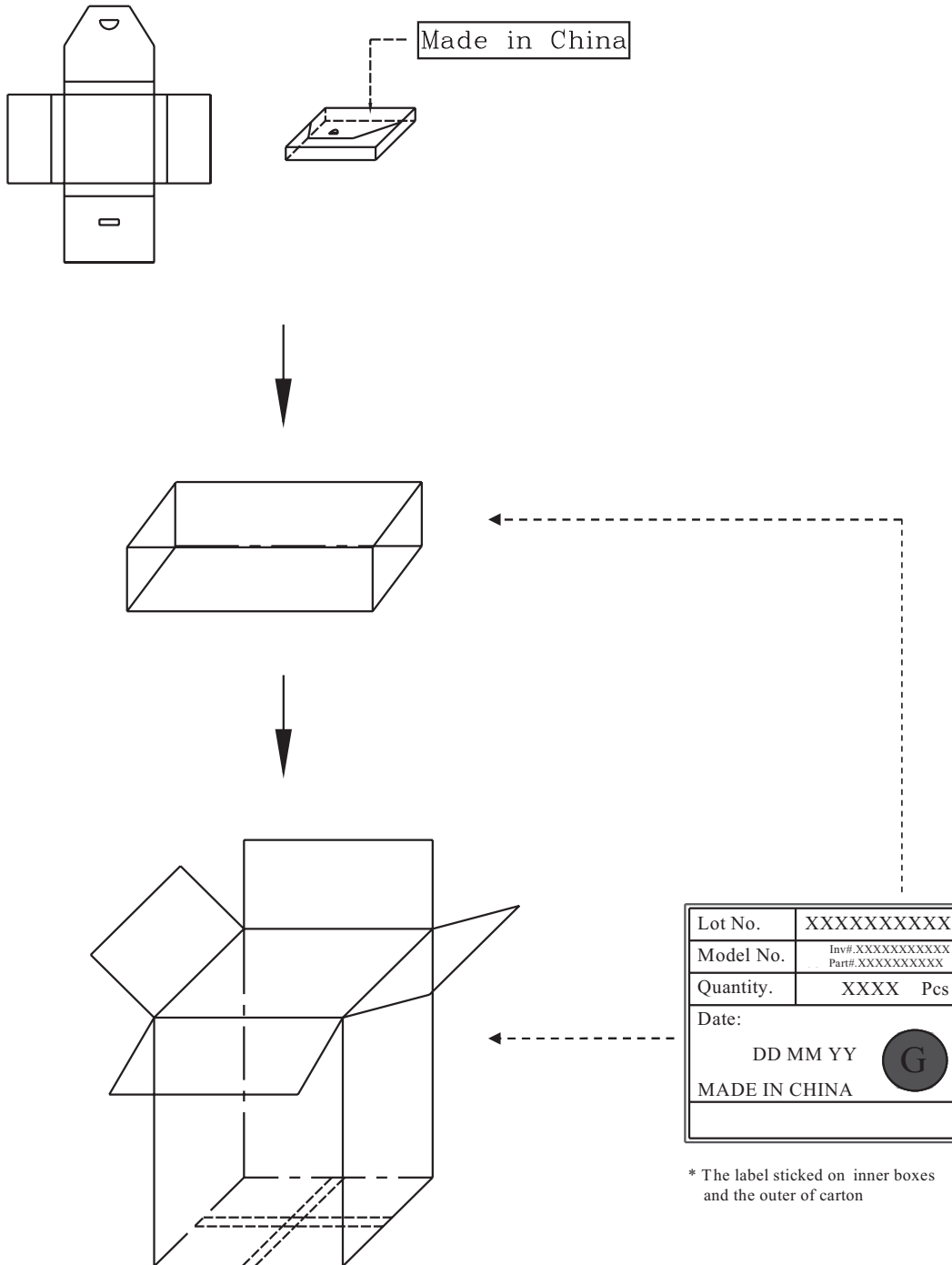


$RL = 2.2 \text{ k}\Omega$
 $C = 1 \text{ }\mu\text{F}$

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



* The label stucked on inner boxes and the outer of carton

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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