

**MODEL:** CMC-6027-24L100 | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE

**FEATURES**

- omnidirectional
- high signal to noise ratio
- -24 dB sensitivity rating
- 100 mm lead wires


**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   |
| dimensions                      | ∅6.0 x 2.7                          |     |     |        | mm    |
| material                        | Al                                  |     |     |        |       |
| terminal                        | wire leads                          |     |     |        |       |
| weight                          |                                     |     |     | 0.4    | g     |
| operating temperature           |                                     | -20 |     | 70     | °C    |
| storage temperature             |                                     | -20 |     | 70     | °C    |
| RoHS                            | yes                                 |     |     |        |       |

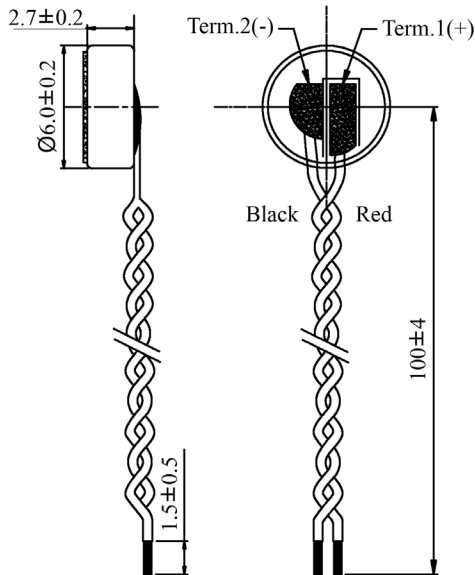
Notes: 1. We use the "Pascal [Pa]" indication of sensitivity as per the recommendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20 dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1 V/Pa)  
 2. All specifications measured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

**SOLDERABILITY**

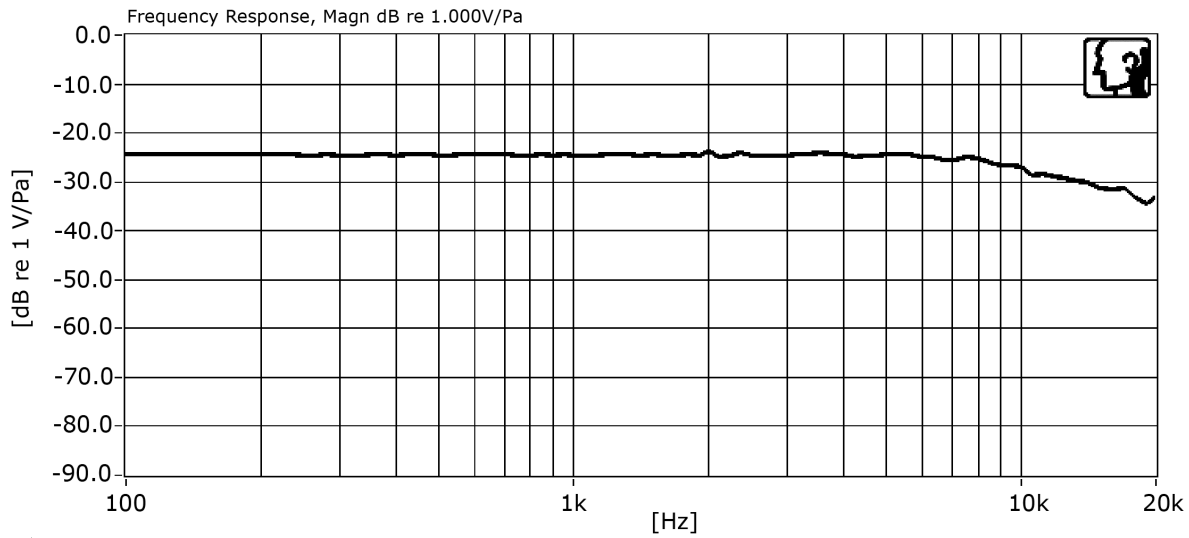
| parameter      | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for maximum 2 seconds  | 310 | 320 | 330 | °C    |

## MECHANICAL DRAWING

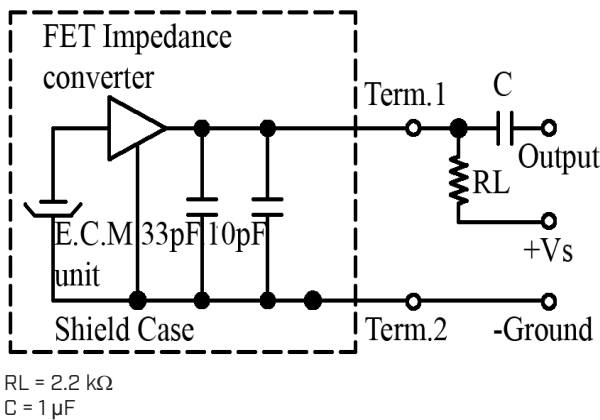
units: mm  
 tolerance:  $\pm 0.25$  mm  
 wire: UL1571 LF 30 AWG



## FREQUENCY RESPONSE CURVE



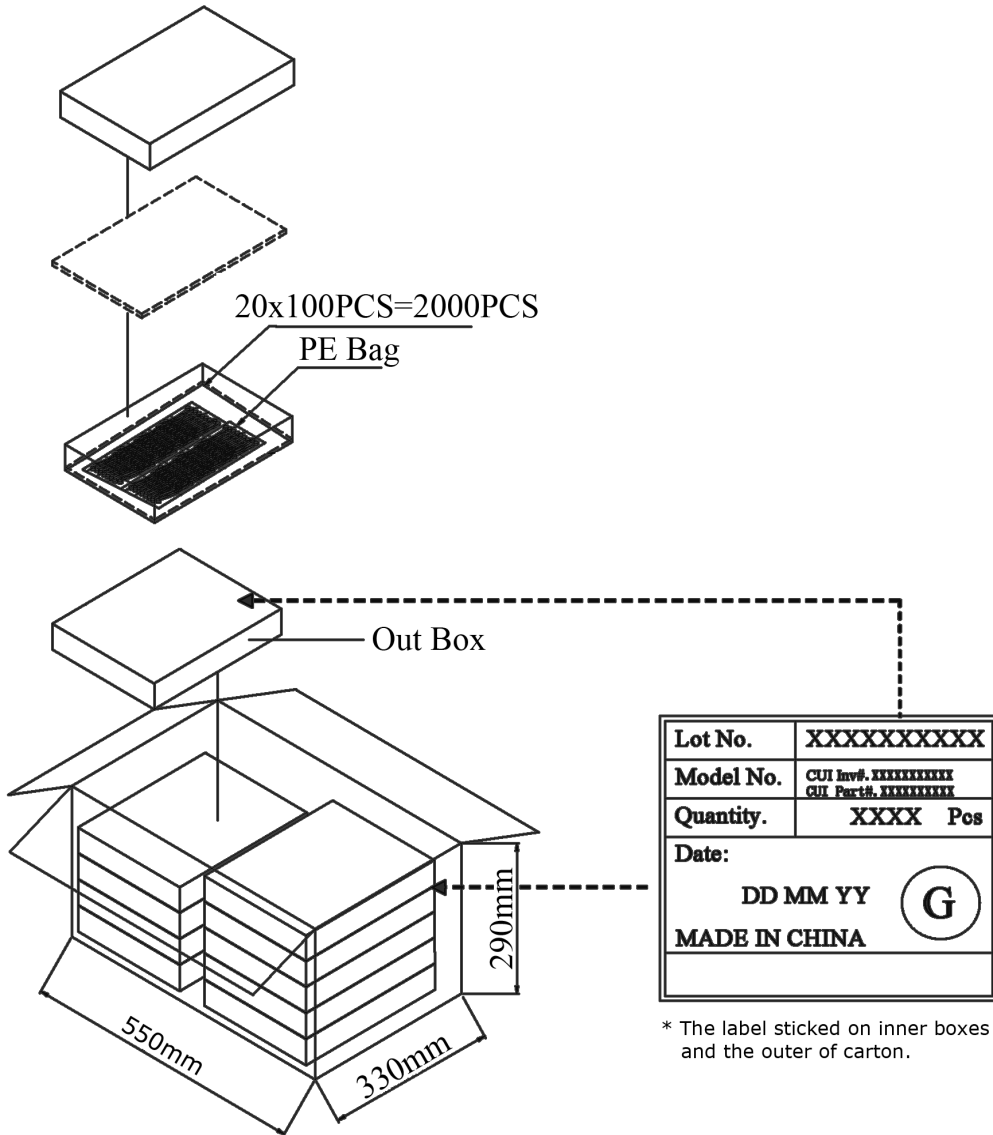
## MEASUREMENT CIRCUIT



## PACKAGING

units: mm

Out Box Size: 310 x 248 x 49 mm  
 Carton Box Size: 550 x 330 x 290 mm  
 Out Box QTY: 2,000 pcs per box  
 Carton Box QTY: 20,000 pcs per box



## REVISION HISTORY

| rev. | description                  | date       |
|------|------------------------------|------------|
| 1.0  | initial release              | 11/28/2016 |
| 1.01 | brand update                 | 01/13/2020 |
| 1.02 | logo, datasheet style update | 08/05/2022 |

The revision history provided is for informational purposes only and is believed to be accurate.



CUI Devices offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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