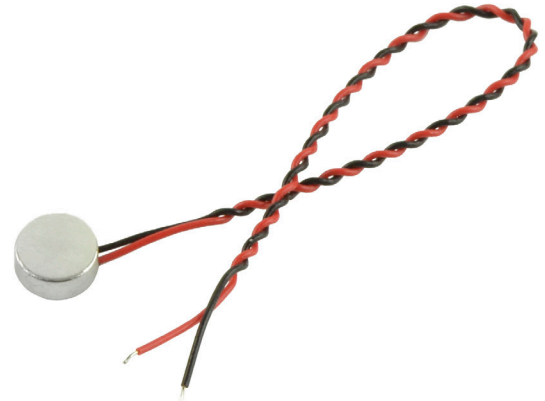


**MODEL:** CMC-6027-42L100 | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE**FEATURES**

- omnidirectional
- IP57
- 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            | -45 | -42 | -39    | 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>0SS</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               |     | 57  |        | dBA        |
| dimensions                              | $\varnothing$ 6.0 x 2.7                   |     |     |        | mm         |
| material                                | Al                                        |     |     |        |            |
| terminal                                | wire leads                                |     |     |        |            |
| weight                                  |                                           |     |     | 0.35   | g          |
| operating temperature                   |                                           | -30 |     | 70     | °C         |
| storage temperature                     |                                           | -30 |     | 70     | °C         |
| RoHS                                    | yes                                       |     |     |        |            |
| IP level                                | IP57 (IEC standard 529 edition 2.0 (1989) |     |     |        |            |

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.

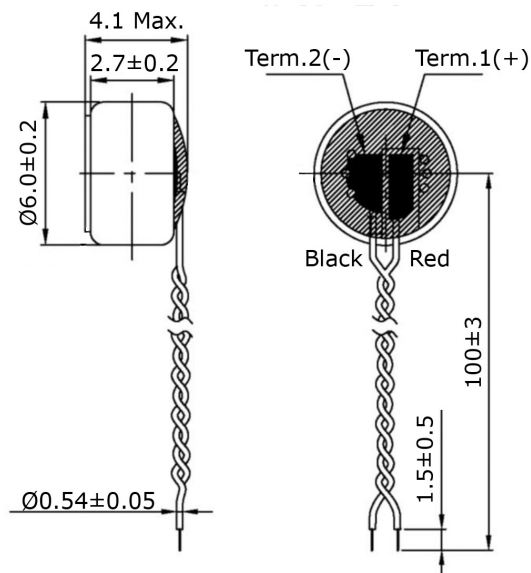
**SOLDERABILITY**

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

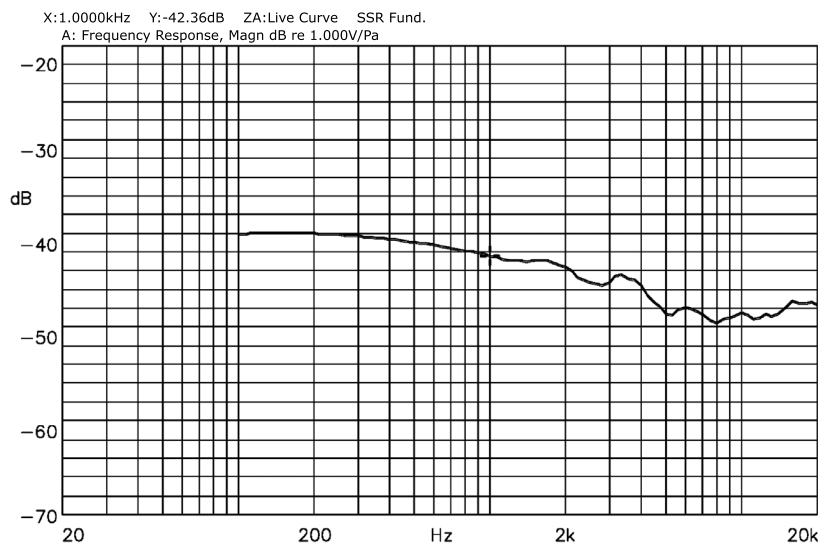
## MECHANICAL DRAWING

units: mm

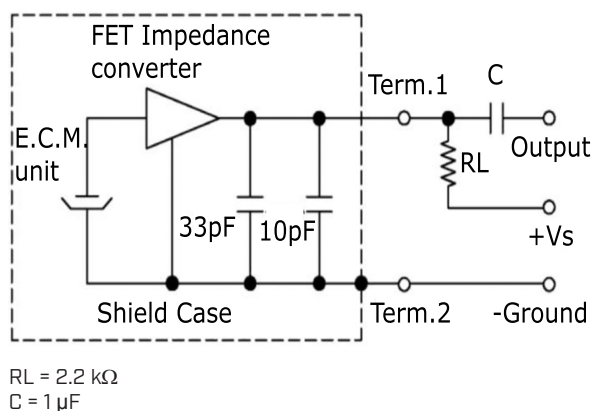
wire: UL1571 LF 32 AWG



## FREQUENCY RESPONSE CURVE



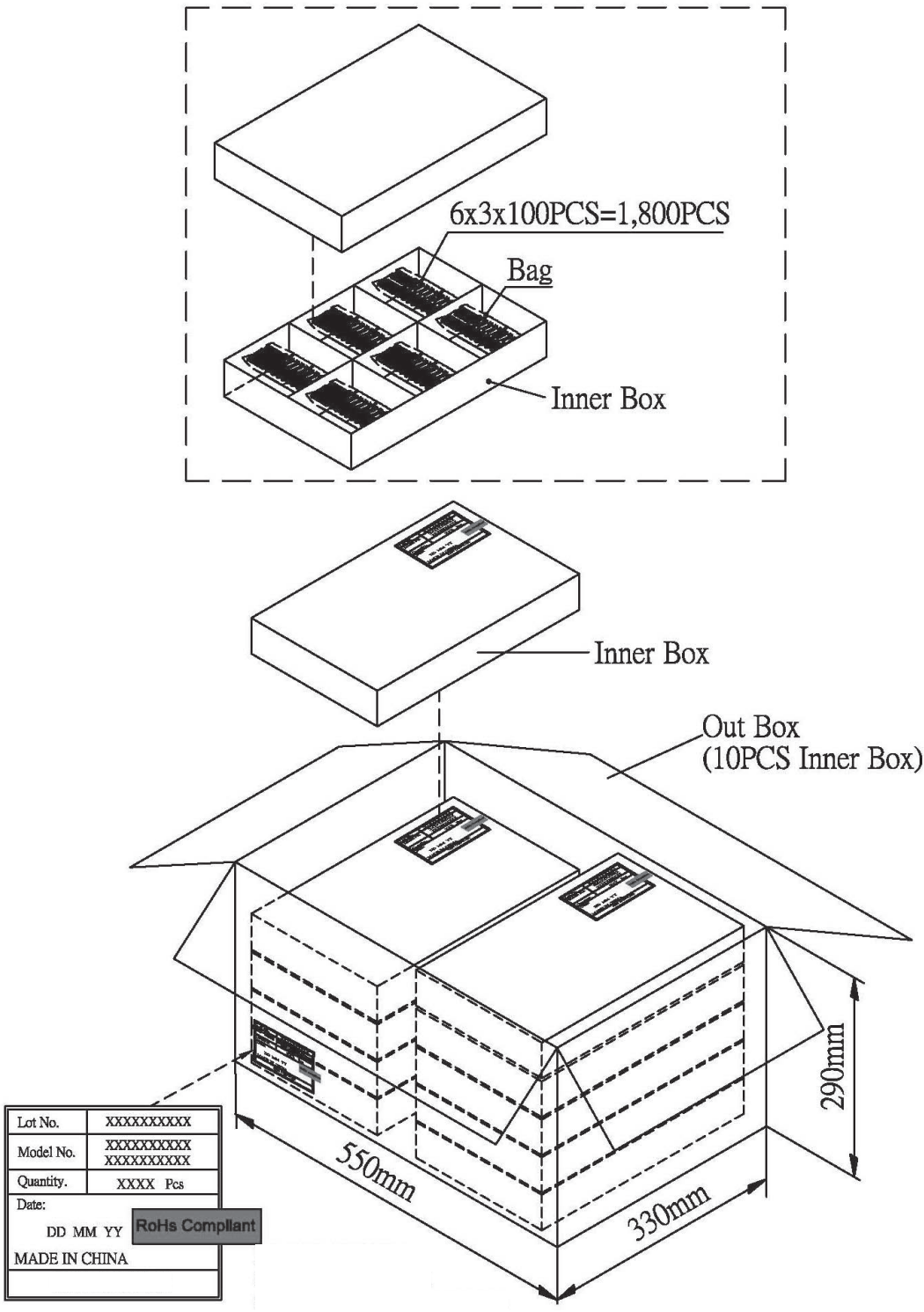
## MEASUREMENT CIRCUIT



PACKAGING

units: mm

Inner Box Size: 310 x 248 x 49 mm  
Outer Box Size: 550 x 330 x 290 mm  
Inner Box QTY: 1,800 pcs per box  
Outer Box QTY: 18,000 pcs per box



REVISION HISTORY

| rev. | description                                      | date       |
|------|--------------------------------------------------|------------|
| 1.0  | initial release                                  | 11/07/2016 |
| 1.01 | brand update                                     | 01/13/2020 |
| 1.02 | updated operating and storage temperature ranges | 04/15/2020 |
| 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.

Same Sky reserves the right to make changes to the product at any time without notice. Information provided by Same Sky is believed to be accurate and reliable. However, no responsibility is assumed by Same Sky for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

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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