

**MODEL:** CMC-2742PBJ-A | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE**FEATURES**

- omnidirectional
- 6.0 mm diameter
- solder pins

**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 $\Omega$   |     |     | 0.4    | mA         |
| signal to noise ratio [S/N]             | f = 1 kHz, 1 Pa, A-weighted         |     | 58  |        | dBA        |
| dimensions                              | Ø6.0 x 2.7                          |     |     |        | mm         |
| material                                | AL                                  |     |     |        |            |
| terminal                                | solder pins [gold plating]          |     |     |        |            |
| weight                                  |                                     |     |     | 0.17   | g          |
| operating temperature                   |                                     | -20 |     | 70     | °C         |
| storage temperature                     |                                     | -20 |     | 70     | °C         |
| RoHS                                    | yes                                 |     |     |        |            |

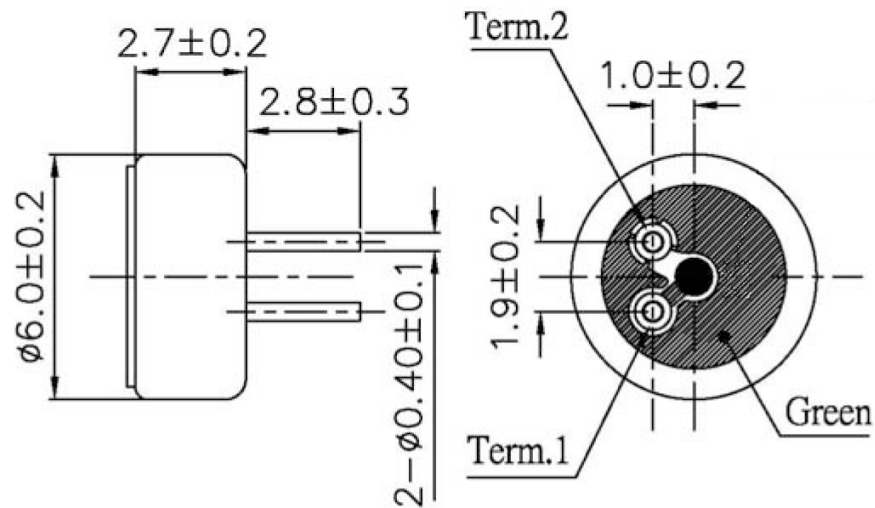
Notes: 1. We use the "Pascal [Pa]" indication of sensitivity as per the recommendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20 dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1 V/Pa)  
2. All specifications measured 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    | 270 | 280 | 290 | °C    |

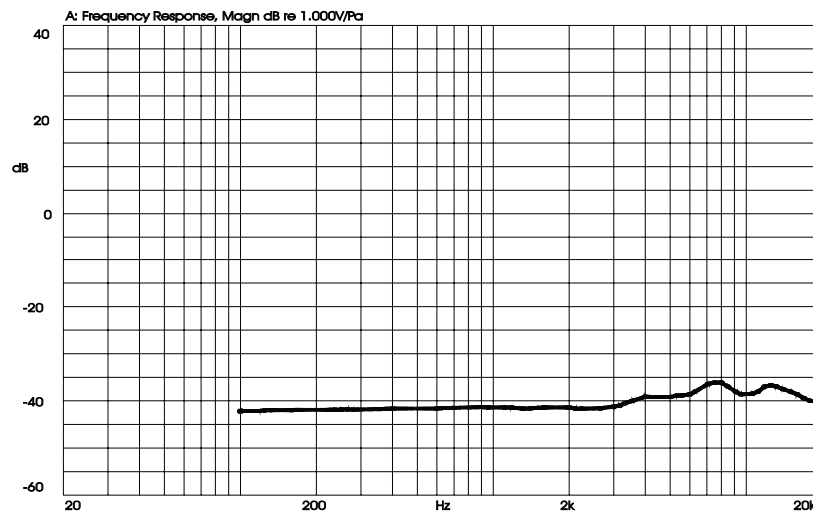
## MECHANICAL DRAWING

units: mm

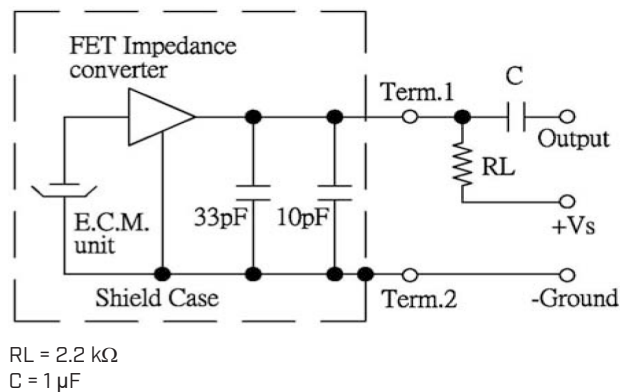


## FREQUENCY RESPONSE CURVE

X:1.0000kHz \*Y:-42.00dB ZA:Live Curve SSR Fund.



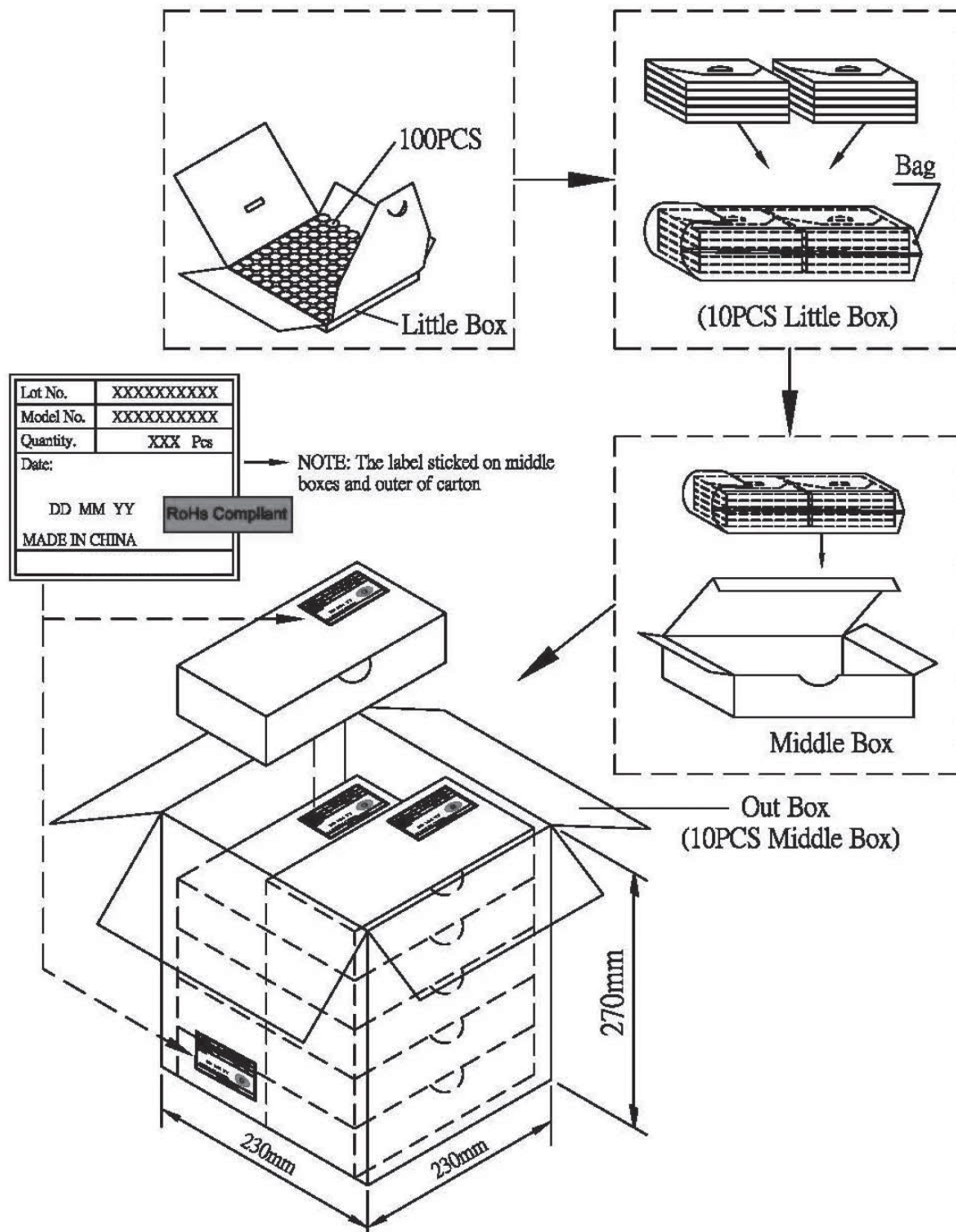
## APPLICATION CIRCUIT



## PACKAGING

units: mm

Inner Box Size: 100 x 100 x 8 mm  
Outer Box Size: 230 x 230 x 270 mm  
Inner Box QTY: 100 pcs per box  
Outer Box QTY: 10,000 pcs per box



REVISION HISTORY

| rev. | description                            | date       |
|------|----------------------------------------|------------|
| 1.0  | initial release                        | 06/01/2008 |
| 1.01 | brand update                           | 04/27/2020 |
| 1.02 | shortened pin length, added capacitors | 10/15/2021 |
| 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.

**sameskydevices.com**