



MODEL: CMC-9745-L100 | DESCRIPTION: ELECTRET CONDENSER MICROPHONE

FEATURES

- unidirectional
- high signal to noise ratio
- 100 mm lead wires



SPECIFICATIONS

| parameter | conditions/description | min | typ | max | units |
|--|-------------------------------------|-----|-----|--------|--------------|
| directivity | unidirectional | | | | |
| sensitivity [S] | f = 1 kHz, 1 Pa, 0 dB = 1 V/Pa | -40 | -37 | -34 | dB |
| standard operating voltage [Vs] | | | 1.5 | | Vdc |
| max operating voltage | | | | 9 | Vdc |
| output impedance [Zout] | f = 1 kHz, 1 Pa | 1.4 | 2.0 | 2.6 | k Ω |
| sensitivity reduction [Δ S-Vs] | f = 1 kHz, 1 Pa, Vs = 1.5 ~ 1.0 Vdc | | -3 | | dB |
| frequency [f] | | 100 | | 12,000 | Hz |
| current consumption [IDSS] | Vs = 1.5 Vdc, RL = 2.0 k Ω | | | 0.4 | mA |
| signal to noise ratio [S/N] | f = 1 kHz, 1 Pa, A-weighted | | 69 | | dBa |
| dimensions | \varnothing 9.7 x 4.5 | | | | mm |
| material | Al | | | | |
| terminal | wire leads | | | | |
| weight | | | | 1 | g |
| operating temperature | | -20 | | 70 | $^{\circ}$ C |
| storage temperature | | -20 | | 70 | $^{\circ}$ 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 $^{\circ}$ C, humidity at 45-85%, under 86-106 kPa pressure, unless otherwise noted.

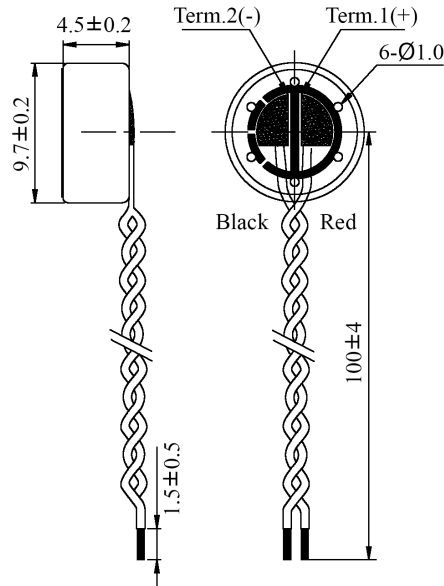
SOLDERABILITY

| parameter | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|--------------|
| hand soldering | for maximum 2 seconds | 310 | 320 | 330 | $^{\circ}$ C |

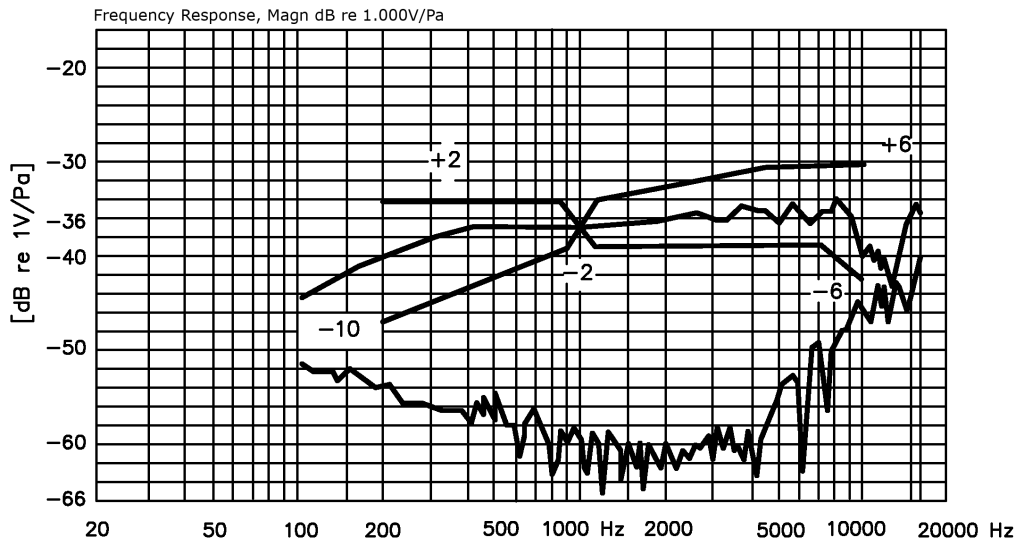
MECHANICAL DRAWING

units: mm
tolerance: ± 0.2 mm

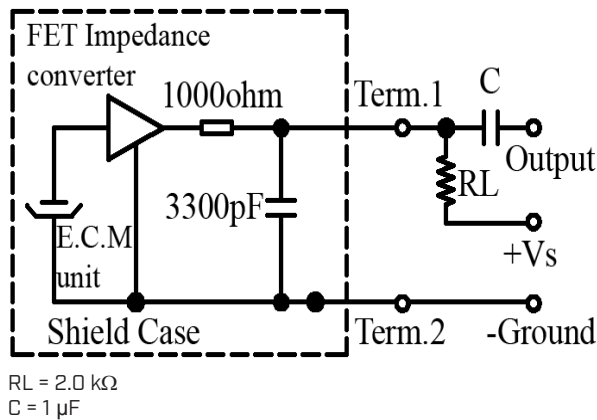
wire: UL1571 LF 30 AWG



FREQUENCY RESPONSE CURVE



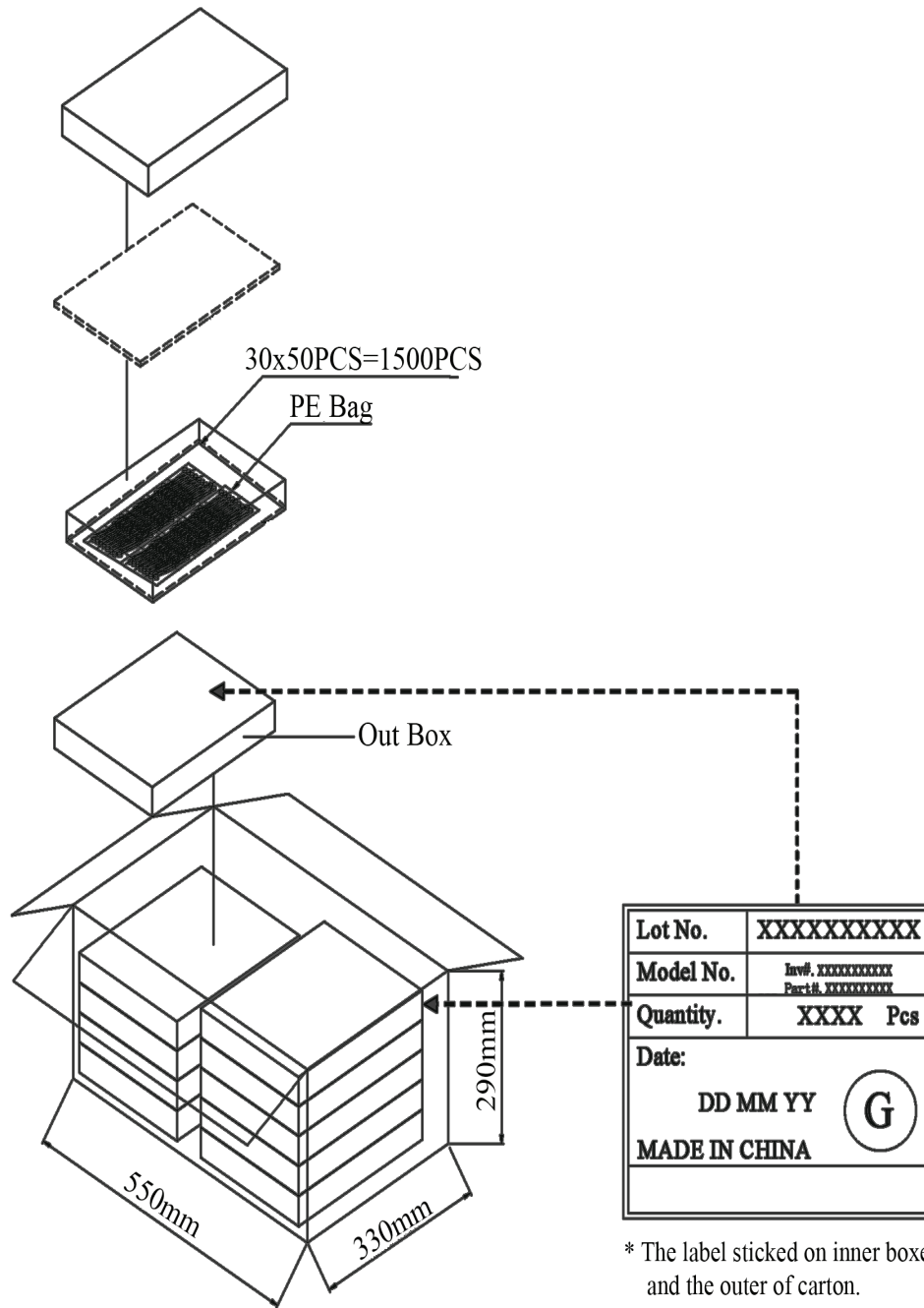
MEASUREMENT CIRCUIT



PACKAGING

units: mm

Outer Box Size: 310 x 248 x 49 mm
 Carton Box Size: 550 x 330 x 290 mm
 Outer Box QTY: 1,500 pcs per box
 Carton Box QTY: 15,000 pcs per box



REVISION HISTORY

| rev. | description | date |
|------|-----------------------------------|------------|
| 1.0 | initial release | 11/28/2016 |
| 1.01 | brand update | 01/17/2020 |
| 1.02 | logo, datasheet style update | 08/05/2022 |
| 1.03 | 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](https://www.sameskydevices.com)