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# MODEL: CMC-5044TF-A | DESCRIPTION: ELECTRET CONDENSER MICROPHONE

## FEATURES

- omnidirectional
- analog
- solder pads

RoHS

## ELECTRICAL

| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| directivity | omnidirectional | | | | |
| sensitivity (S) | at 1 kHz (0 dB = 1 V/Pa) | -47 | -44 | -41 | dB |
| supply voltage ($V_{DD}$) | | | 2.0 | 10 | V |
| current consumption | $V_{DD}$ = 2.0 V, RL = 2.2 kΩ | | | 0.5 | mA |
| sensitivity reduction | $V_{DD}$ = 2.0 ~ 1.5 V | | | -3 | dB |
| frequency (f) | | 100 | | 20,000 | Hz |
| signal to noise ratio (S/N) | at 1 kHz, Pin = 1 Pa (A-weighted) | | 60 | | dBA |
| total harmonic distortion (THD) | at 115 dB SPL, 1 kHz | | | 10 | % |
| acoustic overload point (AOP) | at 1 kHz | | | 115 | dB SPL |
| output impedance (Zout) | at 1 kHz | | | 2.2 | kΩ |

Notes: 1. All specifications measured at 5~35°C, humidity at 45~85%, under 86~106 kPa pressure, unless otherwise noted.

## ENVIRONMENTAL

| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| operating temperature | | -20 | | 70 | °C |
| storage temperature | | -20 | | 70 | °C |
| hand soldering | for 2±0.5 seconds | 310 | 320 | 330 | °C |
| RoHS | yes | | | | |

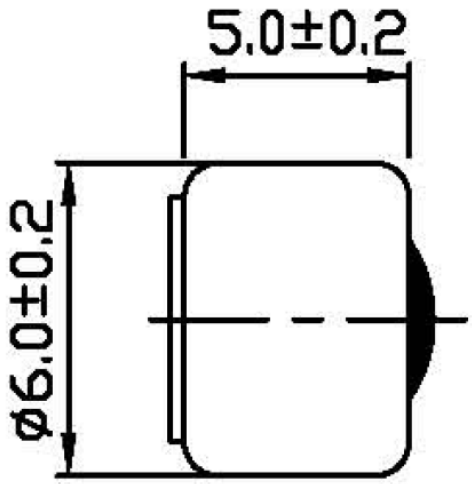
## MECHANICAL

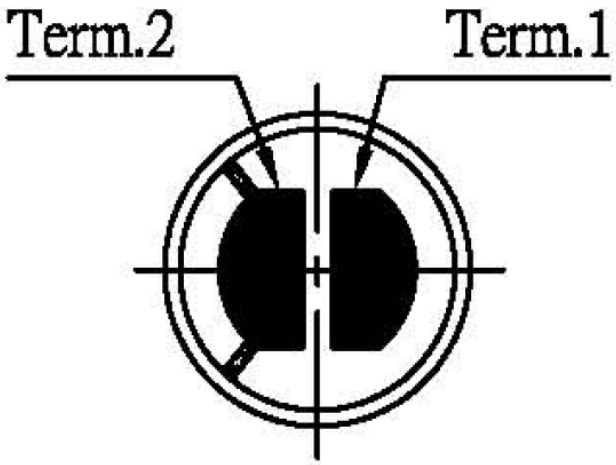
| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| dimensions | Ø6.0 x 5 | | | | mm |
| acoustic port | top | | | | |
| material | AL | | | | |
| terminals | solder pads | | | | |
| weight | | | 0.30 | | g |

## MECHANICAL DRAWING

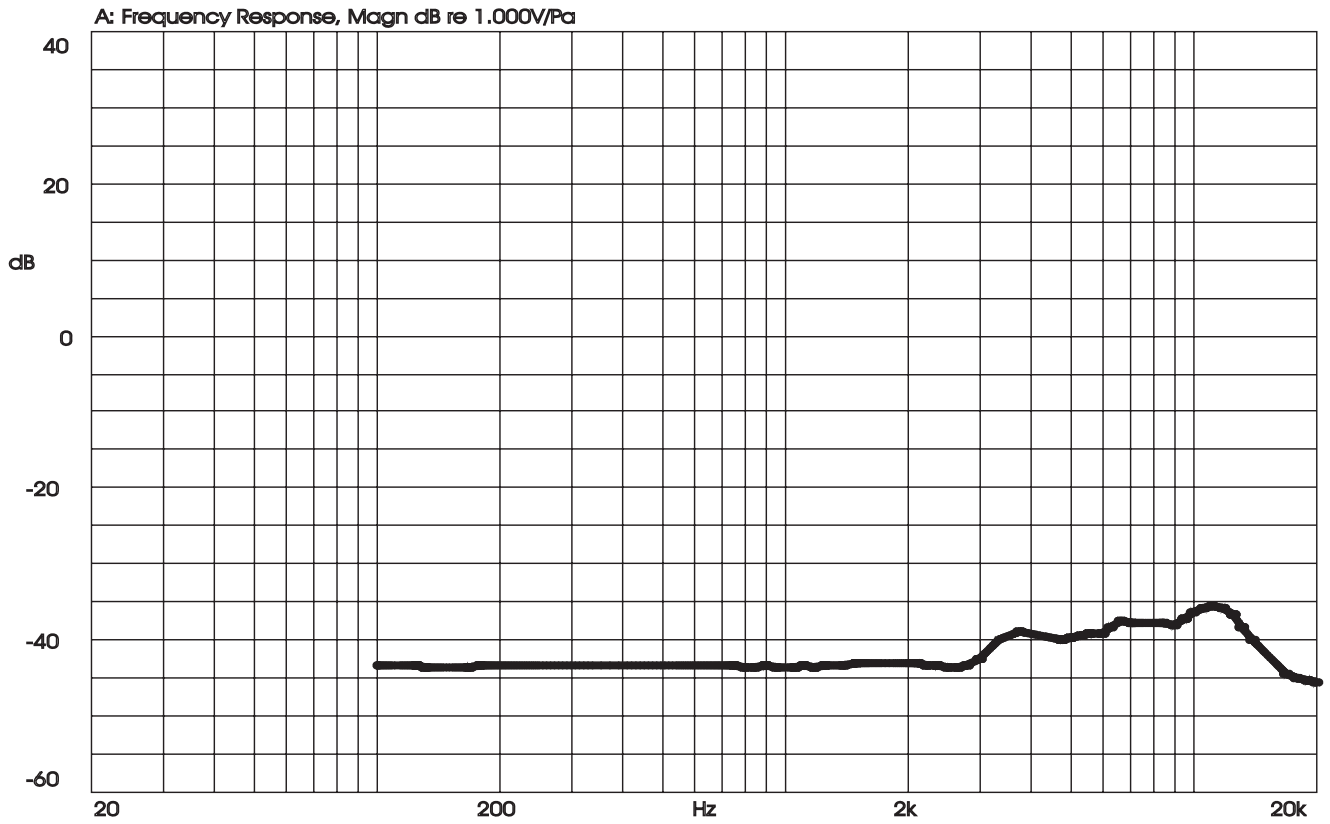
units: mm
tolerance: ±0.2 mm

| TERMINAL CONNECTIONS | |
|---|---|
| TERM. | FUNCTION |
| 1 | Output (+) |
| 2 | GND (-) |

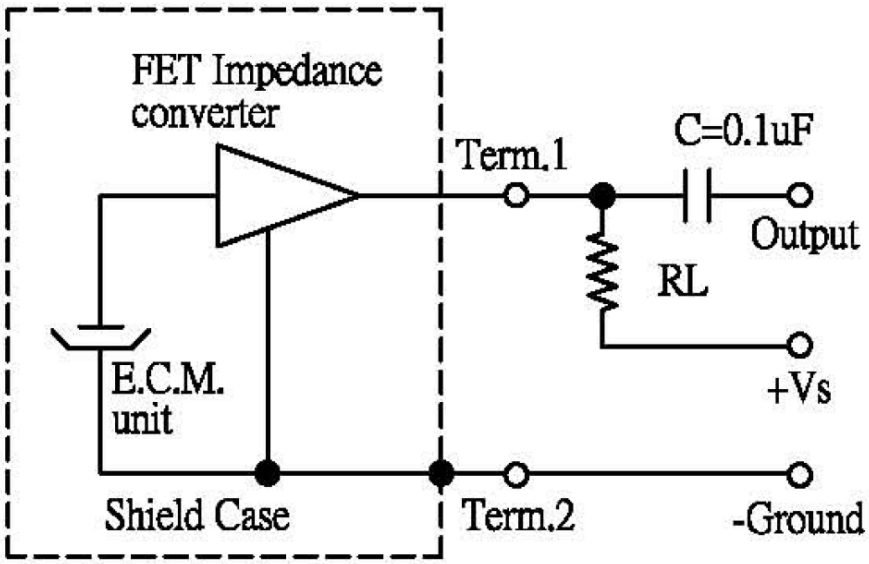


## FREQUENCY RESPONSE CURVE

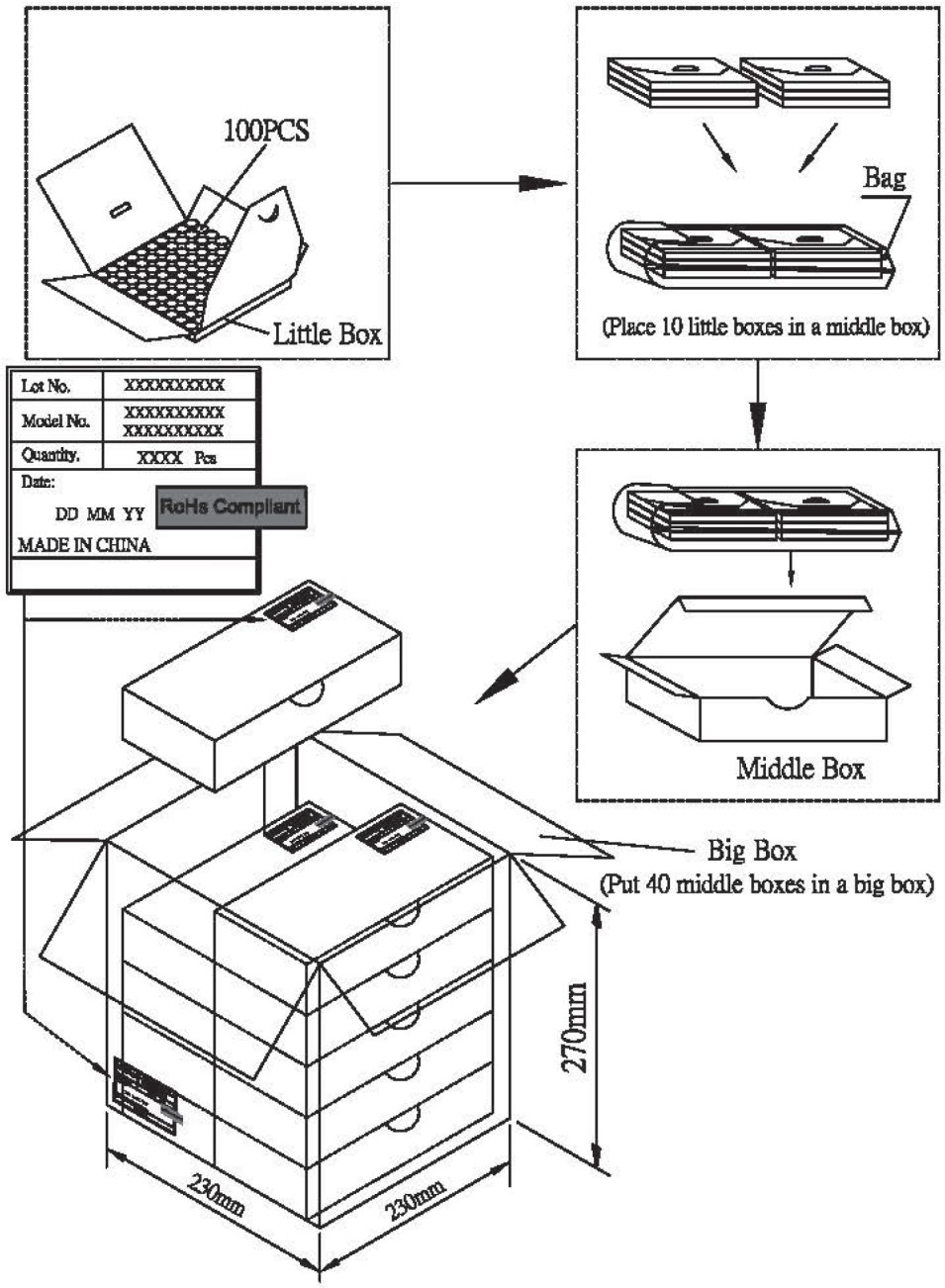



## APPLICATION CIRCUIT



## PACKAGING

Small Box Size: 63 x 63 x 8 mm
Medium Box Size: 125 x 65 x 45 mm
Carton Size: 230 x 230 x 270 mm
Small Box QTY: 100 pcs per box
Carton QTY: 40,000 pcs per carton



## REVISION HISTORY

| rev. | description | date |
|---|---|---|
| 1.0 | initial release | 07/21/2008 |
| 1.01 | changed color of mesh cloth | 06/24/2019 |
| 1.02 | brand update | 01/17/2020 |
| 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.

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