CUDEVICES



# **MODEL:** CMEJ-0706-42-P | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE

### FEATURES

- omnidirectional
- 7 mm diameter
- through hole



RoHS

## ELECTRICAL

| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| directivity | omnidirectional | | | | |
| sensitivity (S) | at 1 kHz (0 dB = 1 V/Pa) | -45 | -42 | -39 | dB |
| supply voltage ($V_{DD}$) | | 1.0 | 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 | | 10,000 | Hz |
| signal to noise ratio (S/N) | at 1 kHz, Pin = 1 Pa (A-weighted) | | 60 | | dBA |
| total harmonic distortion (THD) | at 94 dB SPL, 1 kHz<br>at 115 dB SPL, 1 kHz | | | 1<br>3 | %<br>% |
| 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 20±2°C, humidity at 60~70%, unless otherwise noted.

## ENVIRONMENTAL

| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| operating temperature | | -40 | | 70 | °C |
| storage temperature | | -40 | | 85 | °C |
| operating humidity | non-condensing | 30 | | 85 | % |
| storage humidity | non-condensing | 30 | | 75 | % |
| hand soldering | for 1~3 seconds | 340 | 350 | 360 | °C |
| RoHS | yes | | | | |

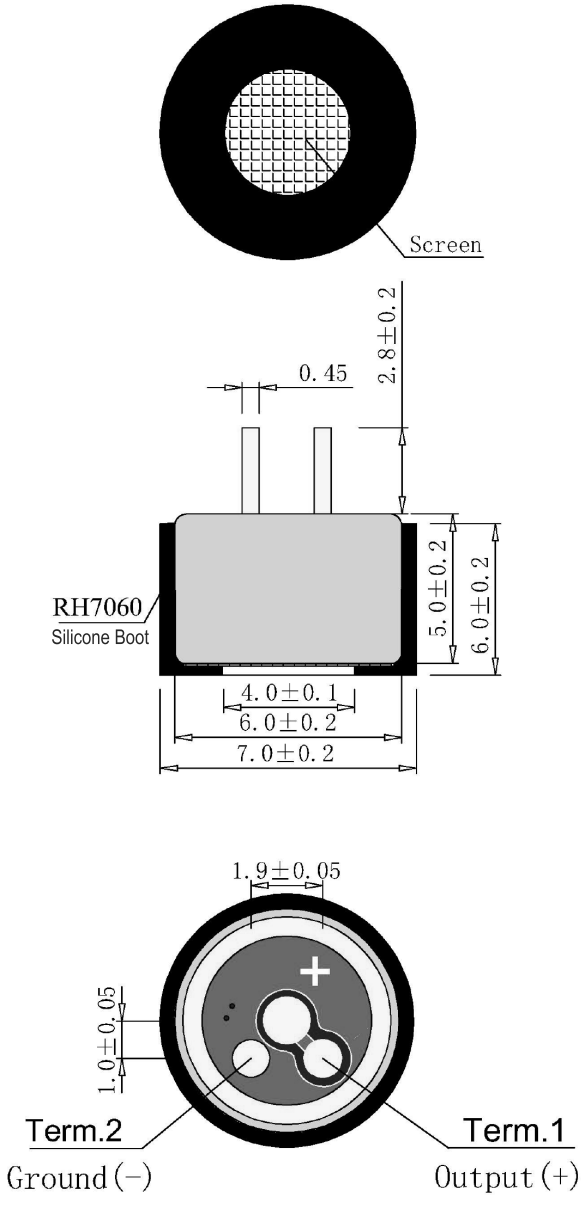
## MECHANICAL

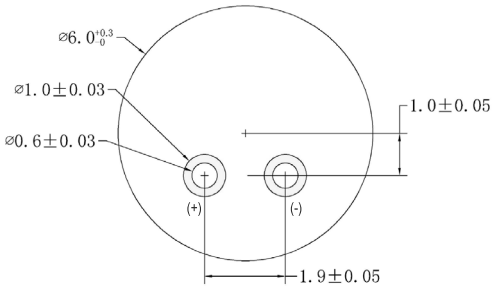
| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| dimensions | Ø7.0 x 6.0 | | | | mm |
| acoustic port | top | | | | |
| terminals | pins | | | | |
| weight | | | 0.29 | | g |

## MECHANICAL DRAWING

units: mm
tolerance: ±0.2 mm

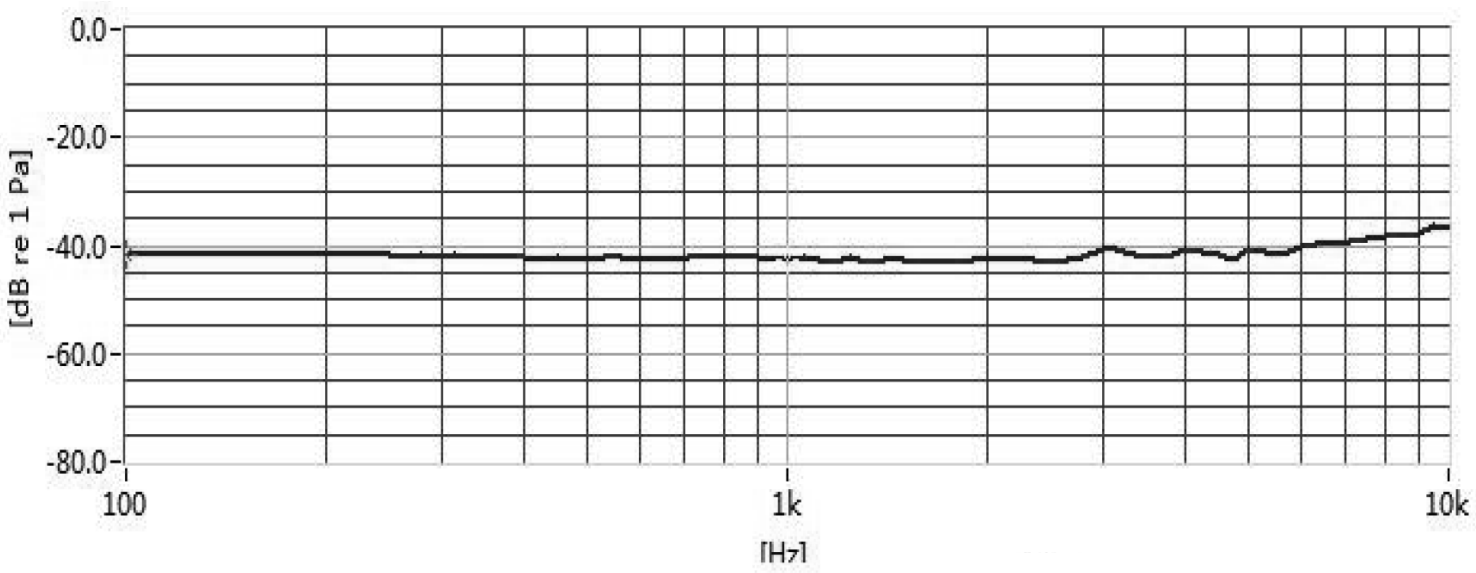
| TERMINAL CONNECTIONS | |
|---|---|
| TERM. | FUNCTION |
| 1 | Output (+) |
| 2 | GND (-) |



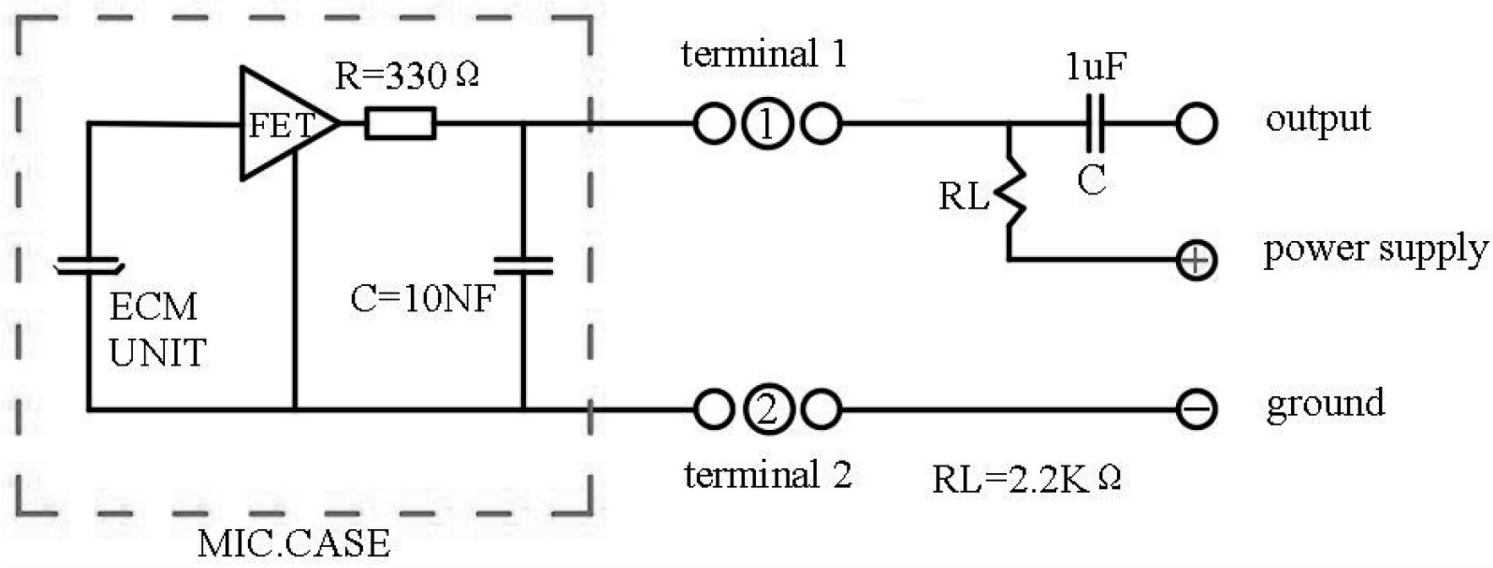




Recommended PCB Layout
Top View

## FREQUENCY RESPONSE CURVE

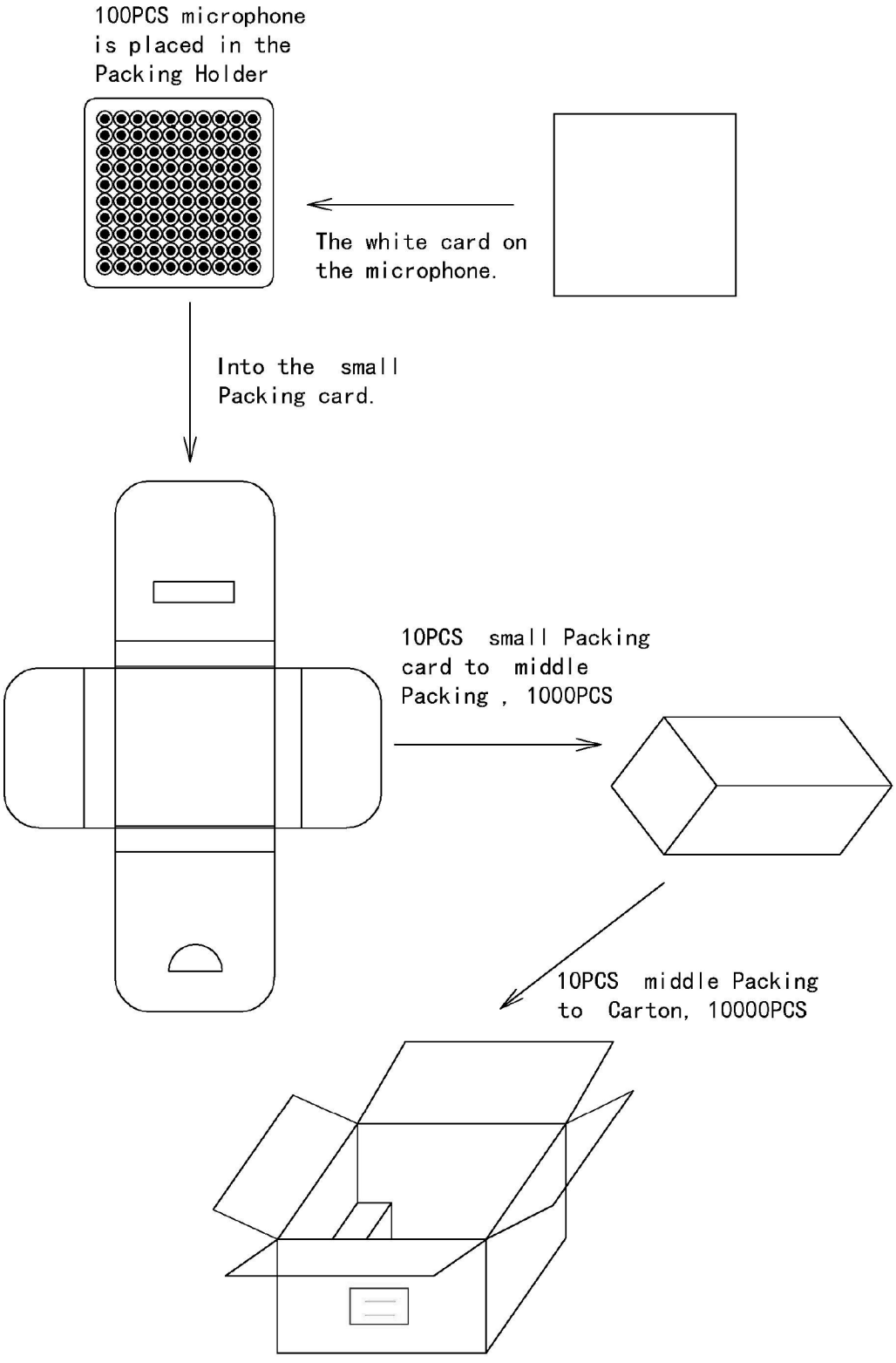



## APPLICATION CIRCUIT



## PACKAGING

Carton QTY: 10,000 pcs



## REVISION HISTORY

| rev. | description | date |
|---|---|---|
| 1.0 | initial release | 06/05/2019 |
| 1.01 | brand update | 01/16/2020 |
| 1.02 | logo, datasheet style update | 08/05/2022 |

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

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