

**MODEL:** CMC-9745-44P | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE**FEATURES**

- omnidirectional
- pin mount
- 3 Vdc operating voltage

**SPECIFICATIONS**

| parameter                               | conditions/description              | min | typ | max    | units      |
|-----------------------------------------|-------------------------------------|-----|-----|--------|------------|
| directivity                             | omnidirectional                     |     |     |        |            |
| sensitivity [S]                         | f = 1 kHz, 1 Pa, 0 dB = 1 V/Pa      | -47 | -44 | -41    | dB         |
| standard operating voltage [Vs]         |                                     |     | 3   |        | 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 = 3.0 ~ 2.0 Vdc |     | -3  |        | dB         |
| frequency [f]                           |                                     | 20  |     | 20,000 | Hz         |
| current consumption [I <sub>0SS</sub> ] | Vs = 3.0 Vdc, RL = 2.2 k $\Omega$   |     |     | 0.5    | mA         |
| signal to noise ratio [S/N]             | f = 1 kHz, 1 Pa, A-weighted         |     | 60  |        | dBA        |
| dimensions                              | Ø9.7 x 4.5                          |     |     |        | mm         |
| material                                | Al                                  |     |     |        |            |
| terminal                                | pin type                            |     |     |        |            |
| weight                                  |                                     |     |     | 0.8    | g          |
| operating temperature                   |                                     | -20 |     | 70     | °C         |
| storage temperature                     |                                     | -20 |     | 70     | °C         |
| RoHS                                    | yes                                 |     |     |        |            |

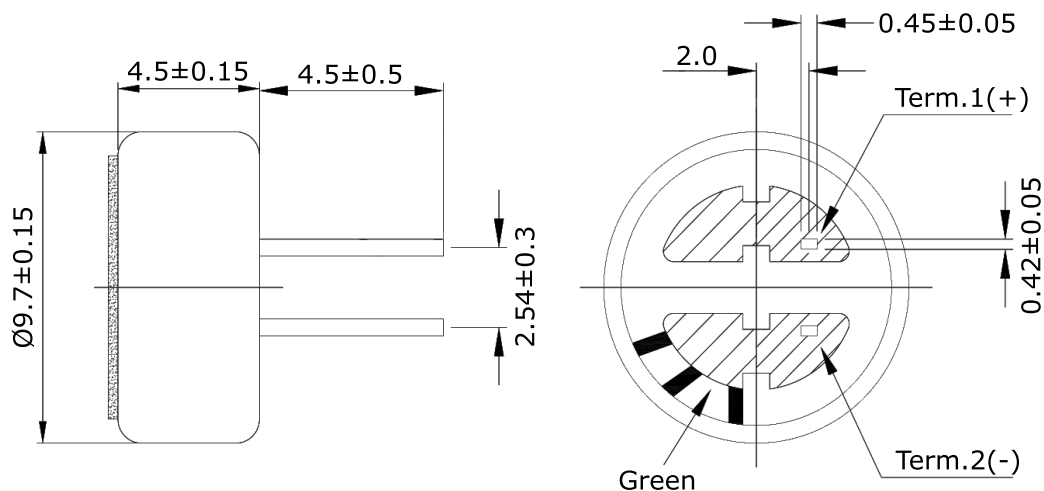
Notes: 1. We use the "Pascal [Pa]" indication of sensitivity as per the recommendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20 dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1 V/Pa)  
2. All specifications measured at 5-35°C, humidity at 45-85%, under 86-106 kPa pressure, unless otherwise noted.

**SOLDERABILITY**

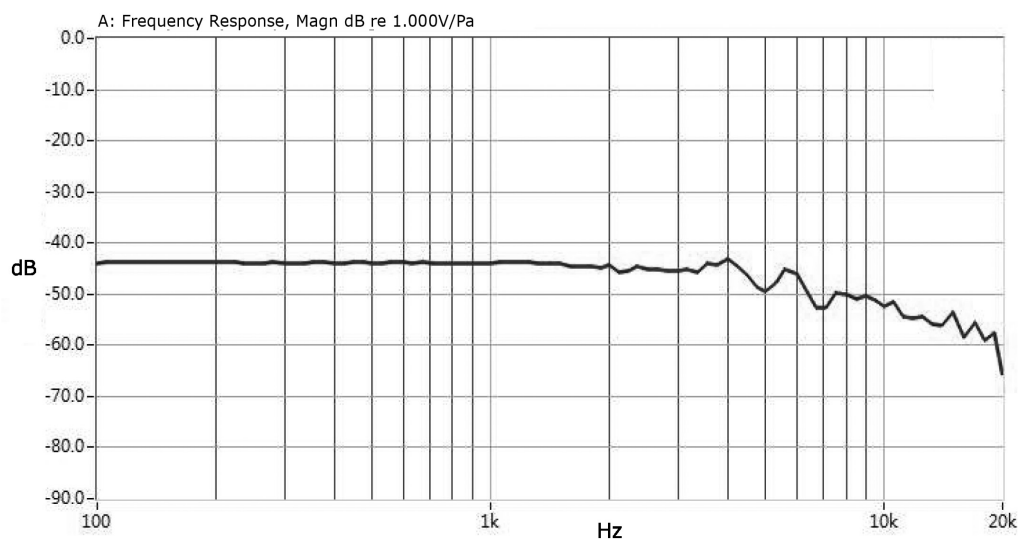
| parameter      | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for maximum 2 seconds  | 310 | 320 | 330 | °C    |

## MECHANICAL DRAWING

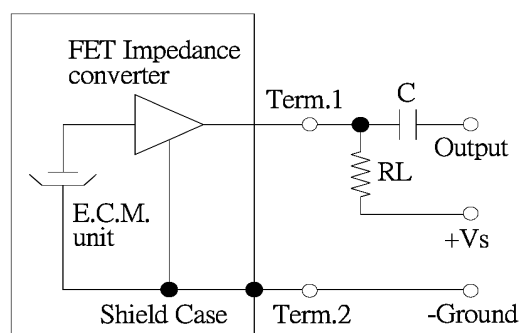
units: mm



## FREQUENCY RESPONSE CURVE



## MEASUREMENT CIRCUIT



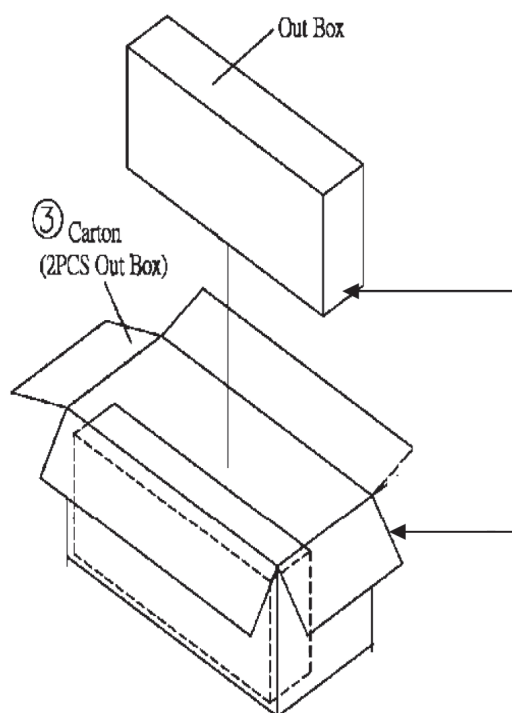
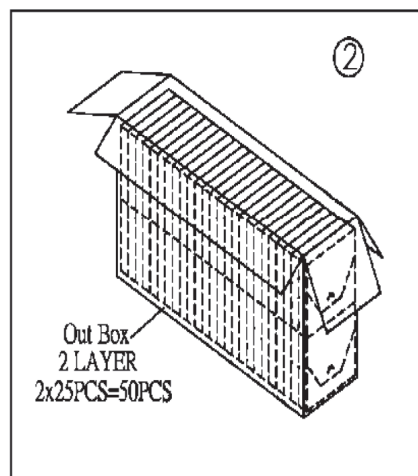
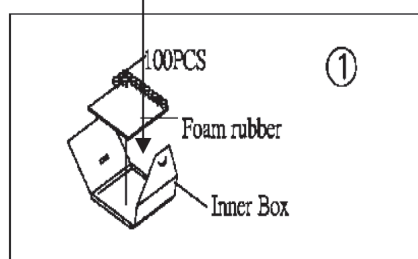
RL = 2.2 kΩ  
C = 1 μF

## PACKAGING

units: mm

Inner Box Size: 100 x 100 x 15 mm  
Outer Box Size: 385 x 110 x 215 mm  
Carton Box Size: 400 x 240 x 230 mm  
Inner Box QTY: 100 pcs per box  
Outer Box QTY: 5,000 pcs per box  
Carton Box QTY: 10,000 pcs per box

Made in China



|           |                                                   |
|-----------|---------------------------------------------------|
| Lot No.   | XXXXXXXXXX                                        |
| Model No. | CUI Inv#. XXXXXXXXXXXX<br>CUI Part#. XXXXXXXXXXXX |
| Quantity. | XXXX Pcs                                          |
| Date:     | DD MM YY                                          |
|           | MADE IN CHINA                                     |

\* The label sticked on inner boxes and the outer of carton.

## REVISION HISTORY

| rev. | description                  | date       |
|------|------------------------------|------------|
| 1.0  | initial release              | 11/03/2016 |
| 1.01 | brand update                 | 01/08/2020 |
| 1.02 | logo, datasheet style update | 08/05/2022 |

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



CUI Devices offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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