



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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**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 |        | kΩ    |
| sensitivity reduction (ΔS-Vs)   | f = 1 kHz, 1 Pa, Vs = 3.0 ~ 2.0 Vdc |     | -3  |        | dB    |
| frequency (f)                   |                                     | 20  |     | 20,000 | Hz    |
| current consumption (IDSS)      | Vs = 3.0 Vdc, RL = 2.2 kΩ           |     |     | 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                            | 2011/65/EU                          |     |     |        |       |

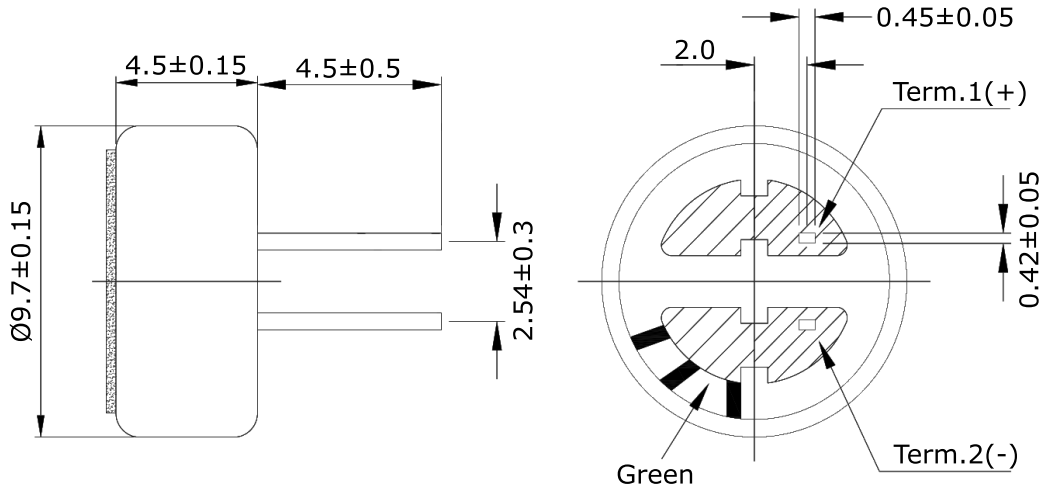
Notes: 1. We use the "Pascal (Pa)" indication of sensitivity as per the recommendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20 dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1V/Pa)  
 2. All specifications measured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

**SOLDERABILITY**

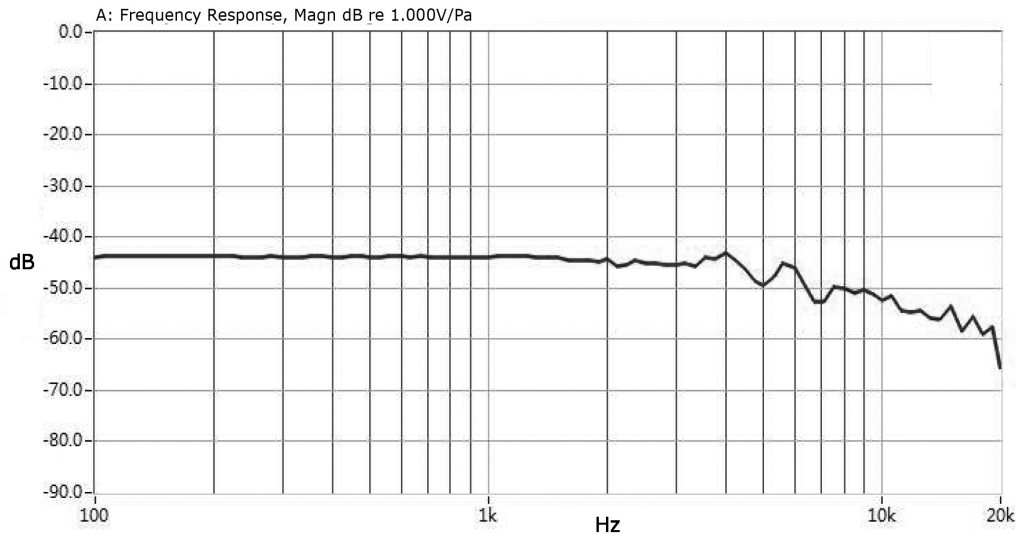
| parameter      | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for maximum 2 seconds  | 310 | 320 | 330 | °C    |

## MECHANICAL DRAWING

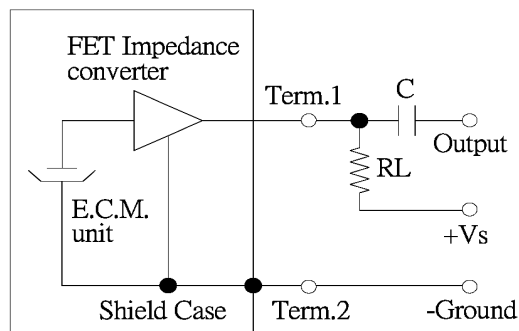
units: mm



## FREQUENCY RESPONSE CURVE



## MEASUREMENT CIRCUIT



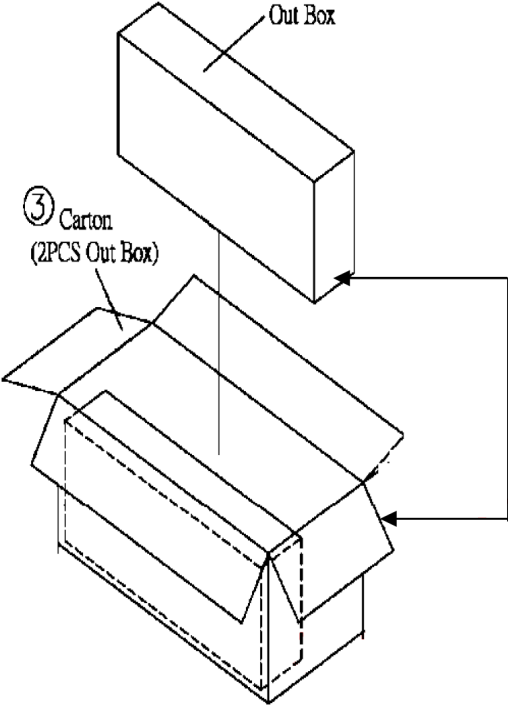
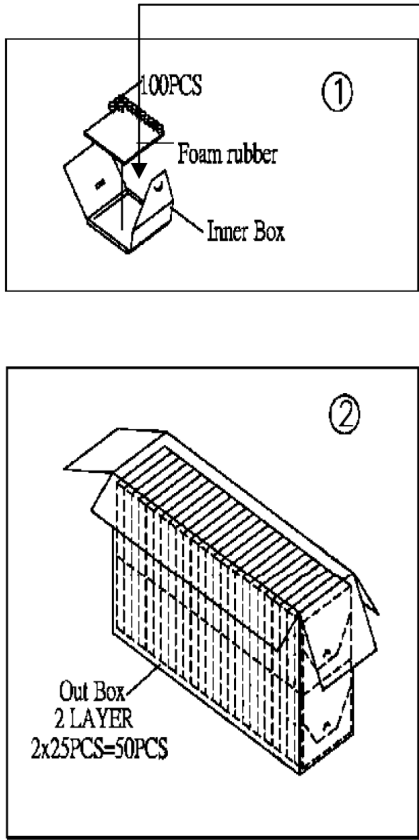
RL = 2.2 kΩ  
C = 1 μF

## 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 |                                                 |
| CUI Inc       |                                                 |



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

## REVISION HISTORY

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| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 11/03/2016 |

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



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

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CUI 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.