



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-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    | kΩ    |
| sensitivity reduction (ΔS-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 kΩ           |     |     | 0.4    | mA    |
| signal to noise ratio (S/N)     | f = 1 kHz, 1 Pa, A-weighted         |     | 69  |        | dBA   |
| dimensions                      | Ø9.7 x 4.5                          |     |     |        | mm    |
| material                        | Al                                  |     |     |        |       |
| terminal                        | wire leads                          |     |     |        |       |
| weight                          |                                     |     |     | 1      | 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.

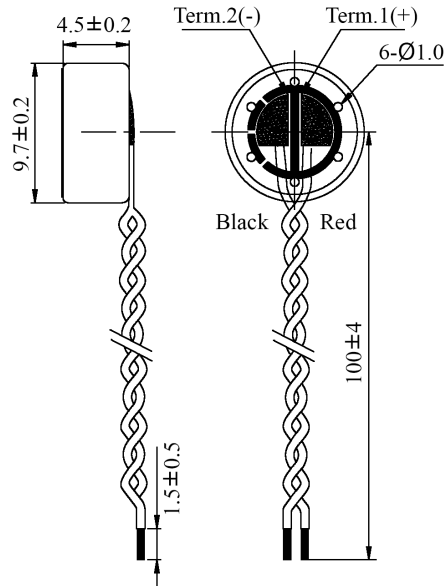
**SOLDERABILITY**

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

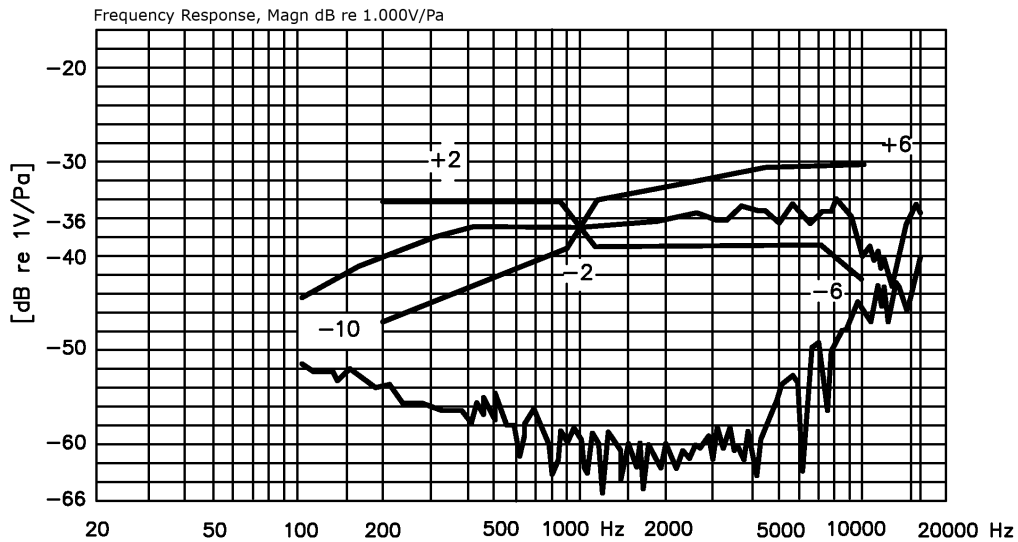
## MECHANICAL DRAWING

units: mm  
tolerance:  $\pm 0.2$  mm

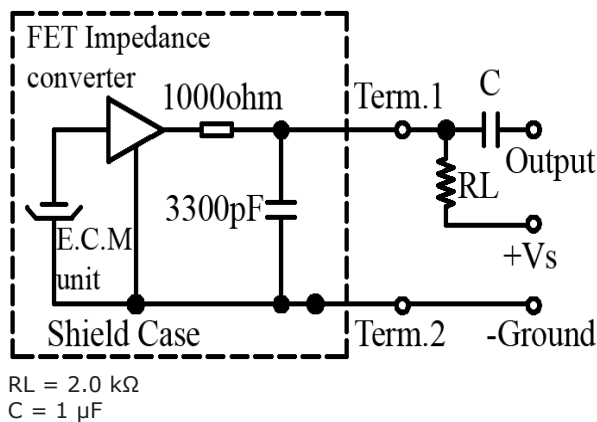
wire: UL1571 LF 30 AWG



## FREQUENCY RESPONSE CURVE



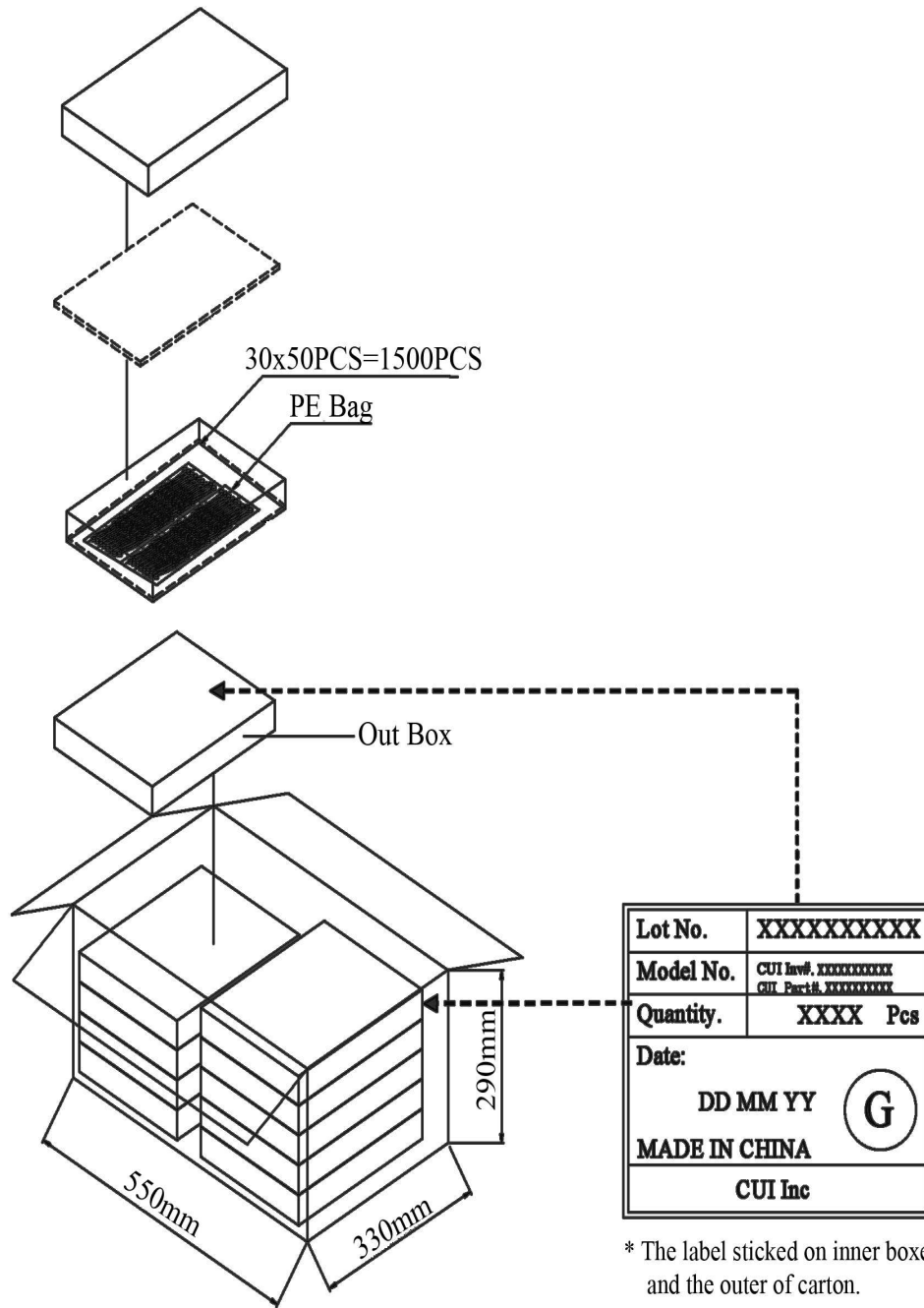
## MEASUREMENT CIRCUIT



## 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



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

## REVISION HISTORY

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| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 11/28/2016 |

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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