

**MODEL:** CMC-9745-37T3 | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE

**FEATURES**

- unidirectional
- high signal to noise ratio
- terminal mount


**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    | k $\Omega$   |
| sensitivity reduction [ $\Delta$ S-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 k $\Omega$   |     |     | 0.4    | mA           |
| signal to noise ratio [S/N]            | f = 1 kHz, 1 Pa, A-weighted         |     | 72  |        | dBa          |
| dimensions                             | $\varnothing$ 9.7 x 4.5             |     |     |        | mm           |
| material                               | Al                                  |     |     |        |              |
| terminal                               | solder pads                         |     |     |        |              |
| weight                                 |                                     |     |     | 0.8    | g            |
| operating temperature                  |                                     | -20 |     | 70     | $^{\circ}$ C |
| storage temperature                    |                                     | -20 |     | 70     | $^{\circ}$ C |
| RoHS                                   | yes                                 |     |     |        |              |

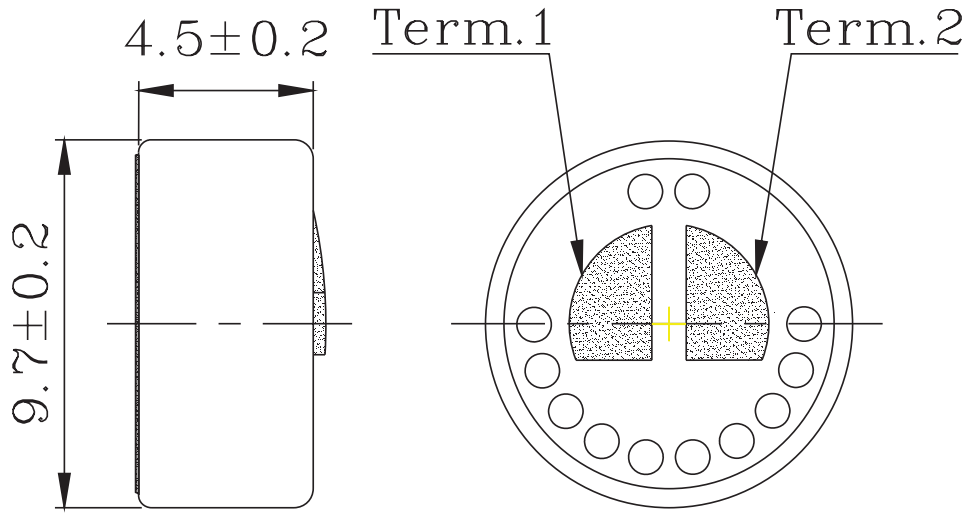
Notes: 1. We use the "Pascal [Pa]" indication of sensitivity as per the recommendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20 dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1 V/Pa)  
 2. All specifications measured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

**SOLDERABILITY**

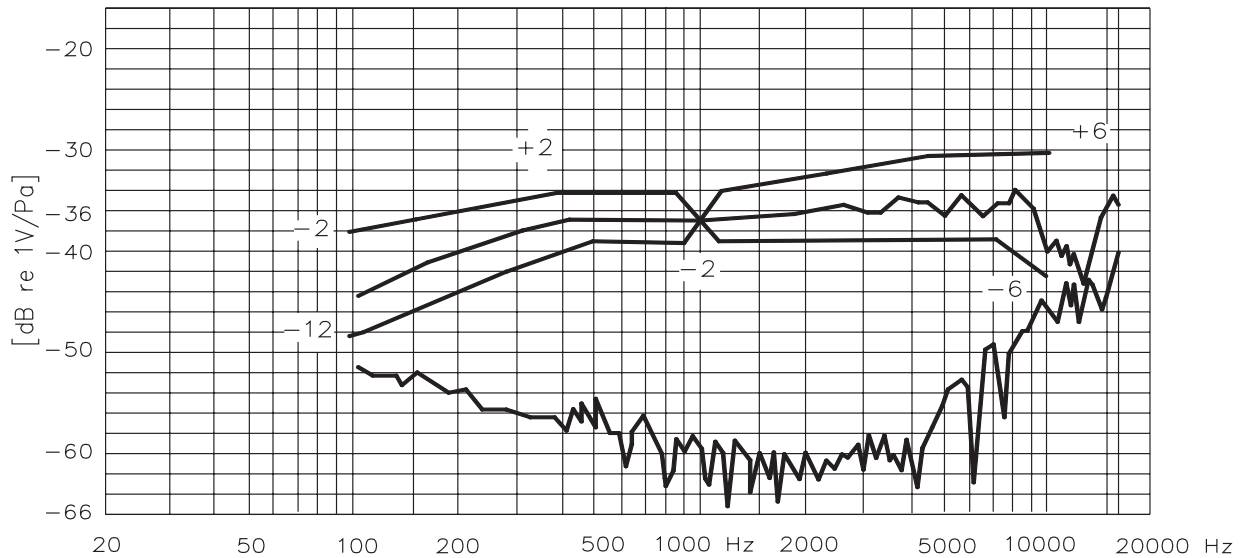
| parameter      | conditions/description | min | typ | max | units        |
|----------------|------------------------|-----|-----|-----|--------------|
| hand soldering | for maximum 2 seconds  | 310 | 320 | 330 | $^{\circ}$ C |

## MECHANICAL DRAWING

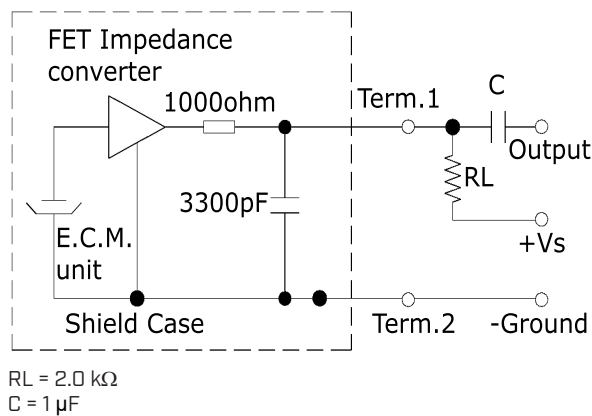
units: mm  
tolerance:  $\pm 0.2$  mm



## FREQUENCY RESPONSE CURVE



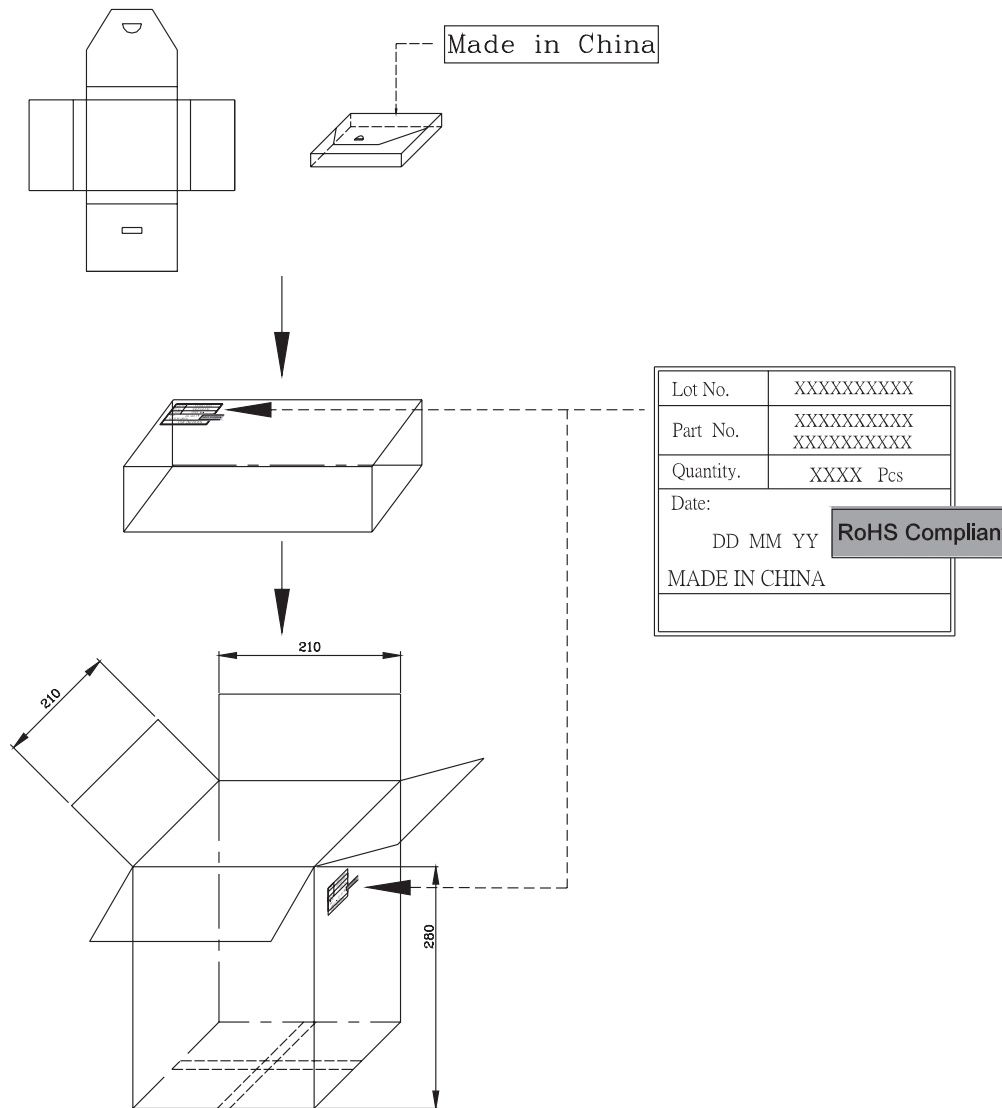
## MEASUREMENT CIRCUIT



## PACKAGING

units: mm

Inner Box Size: 100 x 100 x 7 mm  
 Middle Box Size: 205 x 105 x 50 mm  
 Outer Box Size: 210 x 210 x 280 mm  
 Inner Box QTY: 100 pcs per box  
 Middle Box QTY: 1,000 pcs per box  
 Outer Box QTY: 10,000 pcs per box



## REVISION HISTORY

| rev. | description                  | date       |
|------|------------------------------|------------|
| 1.0  | initial release              | 11/07/2016 |
| 1.01 | brand update                 | 01/17/2020 |
| 1.02 | updated drawing              | 12/07/2021 |
| 1.03 | 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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