

# **MODEL:** CMC-9745-37T | **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         | 5)                                  |     | 1.5 |        | Vdc   |
| max operating voltage                  |                                     |     |     | 9      | Vdc   |
| output impedance (Zout)                | f = 1 kHz, 1 Pa                     |     | 2.2 |        | kΩ    |
| 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 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                               | AI                                  |     |     |        |       |
| terminal                               | solder pads                         |     |     |        |       |
| weight                                 |                                     |     |     | 0.8    | g     |
| operating temperature                  |                                     | -20 |     | 70     | °C    |
| storage temperature                    |                                     | -20 |     | 70     | °C    |
| RoHS                                   | 2011/65/EU                          |     |     |        |       |

1. We use the "Pascal (Pa)" indication of sensitivity as per the recomendation 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

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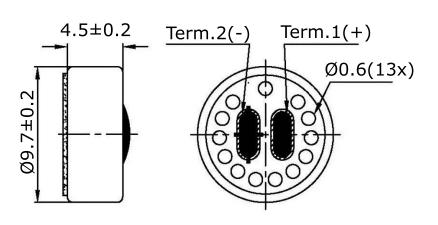
Notes:

| parameter      | conditions/description  | min | typ | max | units |
|----------------|-------------------------|-----|-----|-----|-------|
| hand soldering | for 2 $\pm$ 0.5 seconds | 270 | 280 | 290 | °C    |

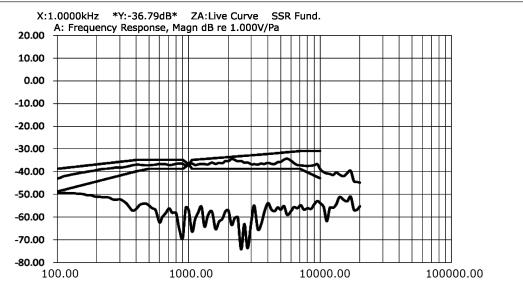
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#### **MECHANICAL DRAWING**

units: mm tolerance: ±0.2 mm

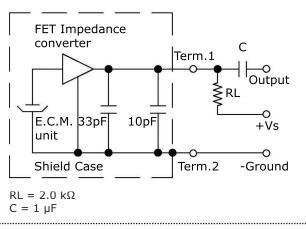


# **FREQUENCY RESPONSE CURVE**



#### **MEASUREMENT CIRCUIT**

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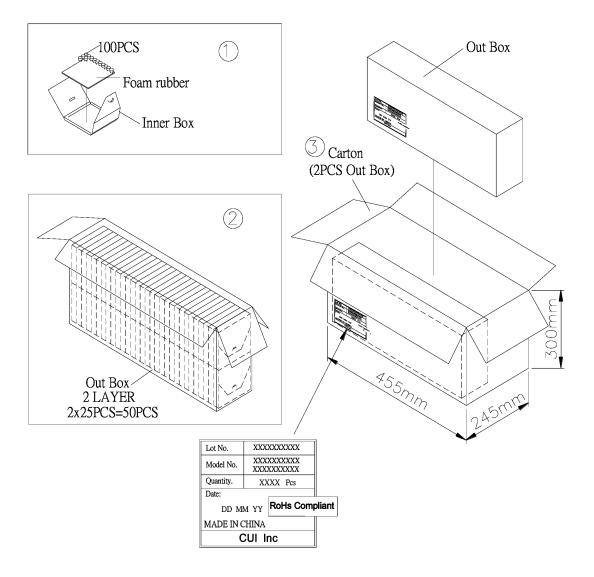


### PACKAGING

units: mm

Inner Box Size: 100 x 100 x 15 mm Outer Box Size: 435 x 120 x 280 mm Carton Box Size: 455 x 245 x 300 mm Inner Box QTY: 100 pcs per box Outer Box QTY: 5,000 pcs per box Carton Box QTY: 10,000 pcs per box

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# **REVISION HISTORY**

| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 11/07/2016 |

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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