

date 11/03/2016

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# MODEL: CMC-6022-42P | DESCRIPTION: ELECTRET CONDENSER MICROPHONE

#### **FEATURES**

- omnidirectional
- 6 mm diameter
- pin mount





### **SPECIFICATIONS**

| SPECII ICATIONS                |                                     |     |     |        |       |
|--------------------------------|-------------------------------------|-----|-----|--------|-------|
| parameter                      | conditions/description              | min | typ | max    | units |
| directivity                    | omnidirectional                     |     |     |        |       |
| sensitivity (S)                | f = 1  kHz, 1  Pa, 0  dB = 1  V/Pa  | -45 | -42 | -39    | dB    |
| standard operating voltage (Vs | 5)                                  |     | 2   |        | 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 = 2.0 ~ 1.5 Vdc |     | -3  |        | dB    |
| frequency (f)                  |                                     | 20  |     | 20,000 | Hz    |
| current consumption (IDSS)     | $Vs = 2.0 Vdc$ , $RL = 2.2 k\Omega$ |     |     | 0.5    | mA    |
| signal to noise ratio (S/N)    | f = 1 kHz, 1 Pa, A-weighted         |     | 58  |        | dBA   |
| dimensions                     | Ø6.0 x 2.2                          |     |     |        | mm    |
| material                       | Al                                  |     |     |        |       |
| terminal                       | pin type                            |     |     |        |       |
| weight                         |                                     |     |     | 0.2    | g     |
| operating temperature          |                                     | -20 |     | 70     | °C    |
| storage temperature            |                                     | -20 |     | 70     | °C    |
| RoHS                           | 2011/65/EU                          |     |     |        |       |

Notes:

## **SOLDERABILITY**

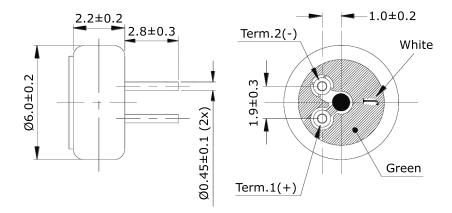
| parameter      | conditions/description  | min | typ | max | units |
|----------------|-------------------------|-----|-----|-----|-------|
| hand soldering | for $2 \pm 0.5$ seconds | 270 | 280 | 290 | °C    |

<sup>1.</sup> 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

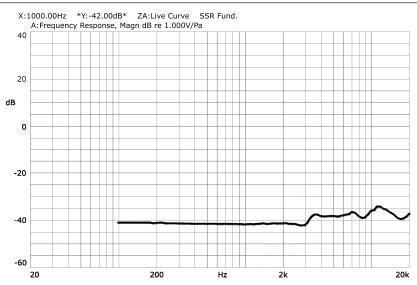
<sup>20</sup> dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1  $V_0$ ) 40 dB (1  $V_0$ ) 2. All specifications measured at 5~35°C, humidity at 45~85%, under 86~106 kPa pressure, unless otherwise noted.

# **MECHANICAL DRAWING**

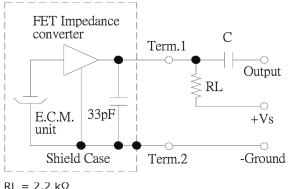
units: mm



# **FREQUENCY RESPONSE CURVE**



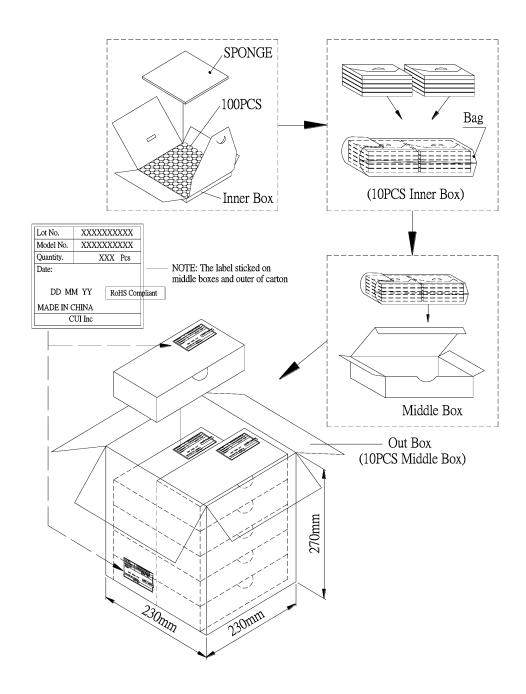
## **MEASUREMENT CIRCUIT**



#### **PACKAGING**

units: mm

Inner Box Size: 100 x 100 x 8 mm Middle Box Size: 205 x 106 x 52 mm Outer Box Size: 230 x 230 x 270 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 | 11/03/2016 |

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



**Headquarters** 20050 SW 112th Ave. Tualatin, OR 97062 **800.275.4899** 

Fax 503.612.2383 cui.com techsupport@cui.com

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