

**MODEL:** CMP-5247TF-K | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE**FEATURES**

- noise cancelling
- 9.7 mm diameter
- solder pads

**SPECIFICATIONS**

| parameter                               | conditions/description              | min | typ | max    | units    |
|-----------------------------------------|-------------------------------------|-----|-----|--------|----------|
| directivity                             | noise cancelling                    |     |     |        |          |
| sensitivity [S]                         | f = 1 kHz, 1 Pa, 0 dB = 1 V/Pa      | -50 | -47 | -44    | dB       |
| standard operating voltage [Vs]         |                                     |     | 1.5 |        | Vdc      |
| max operating voltage                   |                                     |     |     | 10     | Vdc      |
| output impedance [Zout]                 | f = 1 kHz, 1 Pa                     |     | 680 |        | $\Omega$ |
| sensitivity reduction [ $\Delta S$ -Vs] | f = 1 kHz, 1 Pa, Vs = 1.5 ~ 1.0 Vdc |     | -3  |        | dB       |
| frequency [f]                           |                                     | 100 |     | 20,000 | Hz       |
| current consumption [I <sub>0SS</sub> ] | Vs = 1.5 Vdc, RL = 680 $\Omega$     |     |     | 0.5    | mA       |
| signal to noise ratio [S/N]             | f = 1 kHz, 1 Pa, A-weighted         |     | 58  |        | dBA      |
| dimensions                              | $\varnothing 9.7 \times 5.2$        |     |     |        | mm       |
| material                                | aluminum                            |     |     |        |          |
| terminal                                | solder pads                         |     |     |        |          |
| weight                                  |                                     |     |     | 0.75   | g        |
| operating temperature                   |                                     | -20 |     | 70     | °C       |
| storage temperature                     |                                     | -20 |     | 70     | °C       |
| RoHS                                    | yes                                 |     |     |        |          |

Notes:

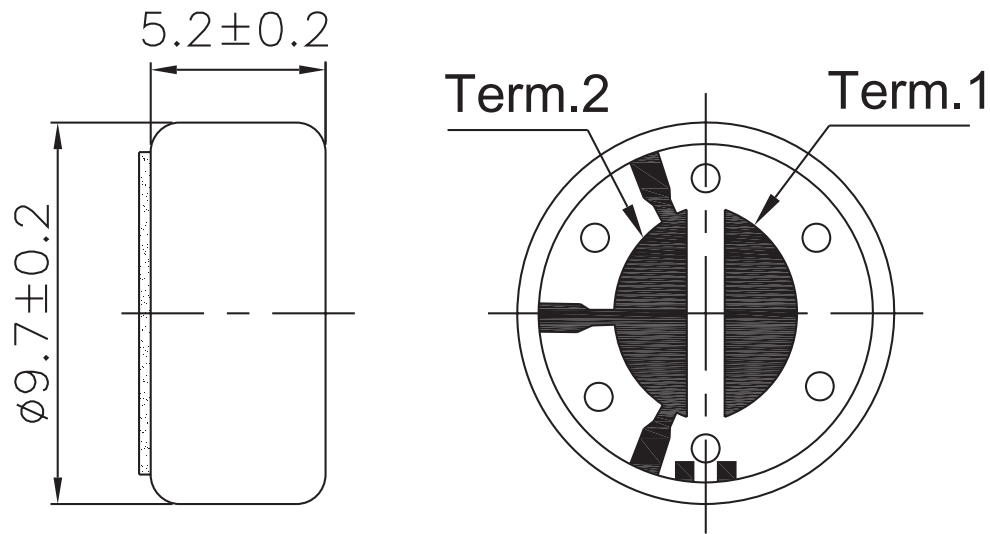
1. We use the "Pascal [Pa]" indication of sensitivity as per the recommendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20 dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1 V/Pa)
2. All specifications measured at 5-35°C,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

**SOLDERABILITY**

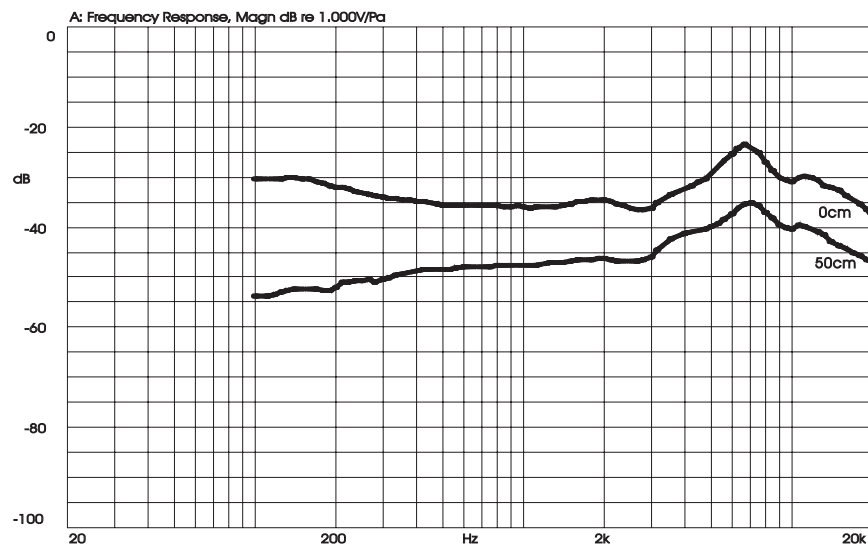
| parameter      | conditions/description  | min | typ | max | units |
|----------------|-------------------------|-----|-----|-----|-------|
| hand soldering | for $2 \pm 0.5$ seconds | 310 | 320 | 330 | °C    |

## MECHANICAL DRAWING

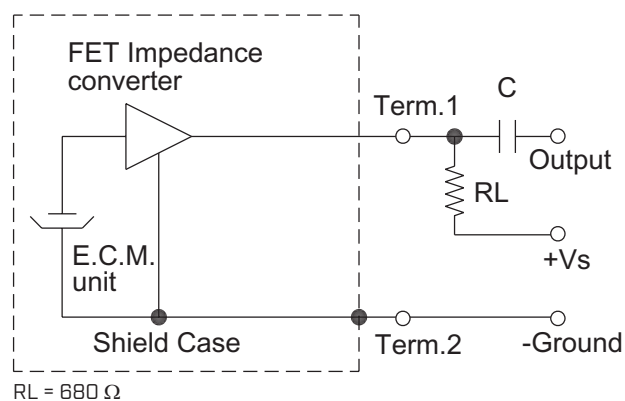
units: mm



## FREQUENCY RESPONSE CURVE



## APPLICATION CIRCUIT



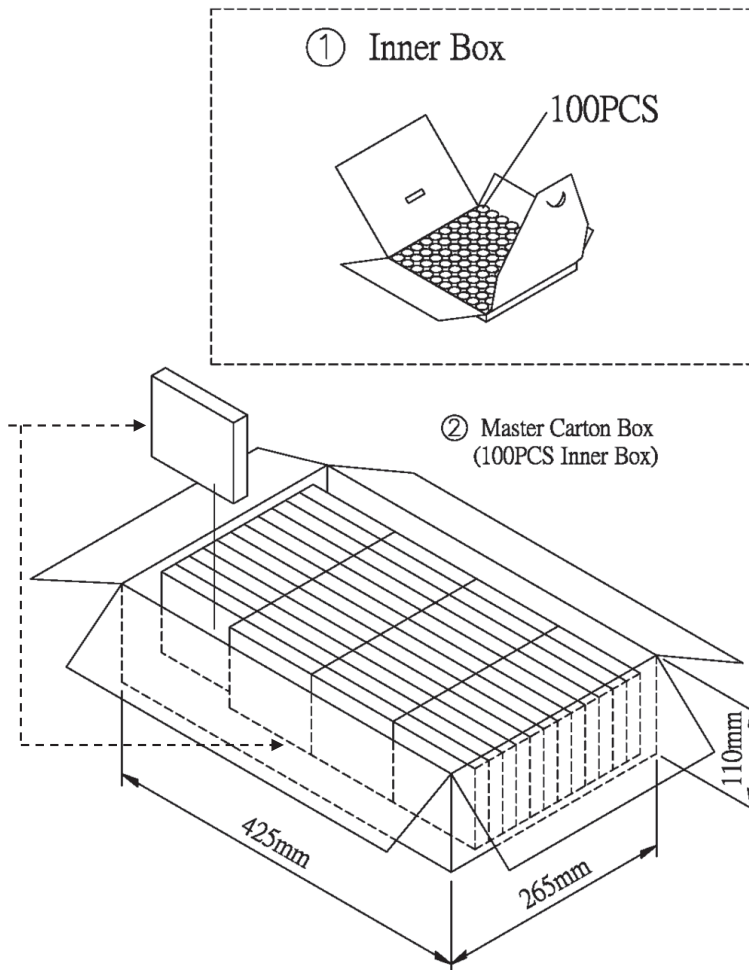
## PACKAGING

units: mm

Inner Box Size: 100 x 100 x 18 mm  
Outer Box Size: 425 x 265 x 110 mm  
Inner Box QTY: 100 pcs per box  
Outer Box QTY: 10,000 pcs per box

|           |               |
|-----------|---------------|
| Lot No.   | XXXXXXXXXX    |
| Model No. | XXXXXXXXXX    |
| Quantity. | XXXX Pcs      |
| Date:     | DD MM YY      |
|           | MADE IN CHINA |

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



## REVISION HISTORY

| rev. | description                  | date       |
|------|------------------------------|------------|
| 1.0  | initial release              | 06/01/2008 |
| 1.01 | brand update                 | 04/24/2020 |
| 1.02 | logo, datasheet style update | 08/05/2022 |

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



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

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