CUDEVICES



# **MODEL:** CMI-5247TF-K | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE

### FEATURES

- unidirectional
- 9.7 mm diameter
- solder pads

RoHS

## SPECIFICATIONS

| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| directivity | unidirectional | | | | |
| 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 | | Ω |
| sensitivity reduction (ΔS-Vs) | f = 1 kHz, 1 Pa, Vs = 2.0 ~ 1.5 Vdc | | -3 | | dB |
| frequency (f) | | 70 | | 20,000 | Hz |
| current consumption ($I_{DSS}$) | Vs = 1.5 Vdc, RL = 680 Ω | | | 0.5 | mA |
| signal to noise ratio (S/N) | f = 1 kHz, 1 Pa, A-weighted | | 60 | | dBA |
| dimensions | Ø9.7 x 5.2 | | | | mm |
| material | AL | | | | |
| terminal | solder pads | | | | |
| weight | | | | 0.72 | g |
| operating temperature | | -20 | | 70 | °C |
| storage temperature | | -20 | | 70 | °C |
| RoHS | yes | | | | |

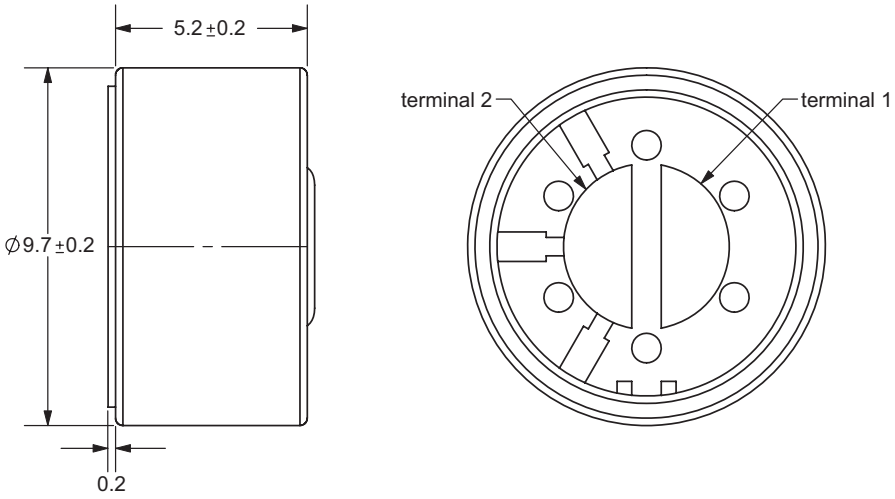
Notes: 1. We use the "Pascal (Pa)" indication of sensitivity as per the recomendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20 dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB ( 1V/Pa)
2. All specifications measured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

## SOLDERABILITY

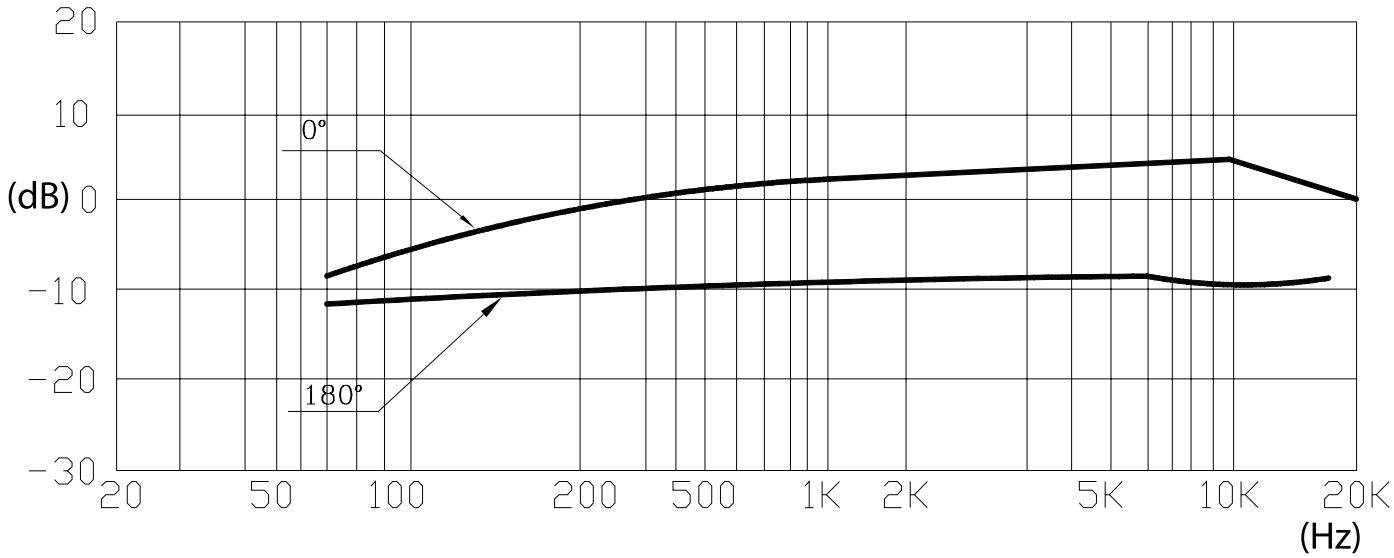
| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| hand soldering | for 2 ± 0.5 seconds | 310 | 320 | 330 | °C |

## MECHANICAL DRAWING

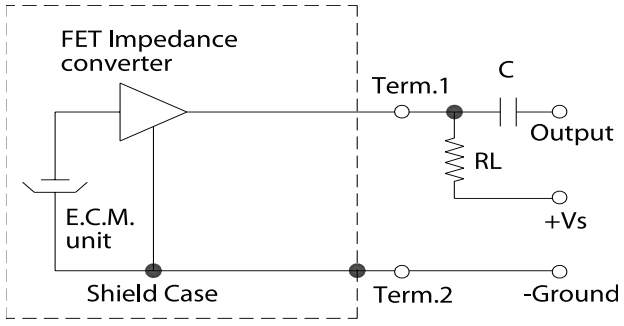
units: mm




## FREQUENCY RESPONSE CURVE




## APPLICATION CIRCUIT

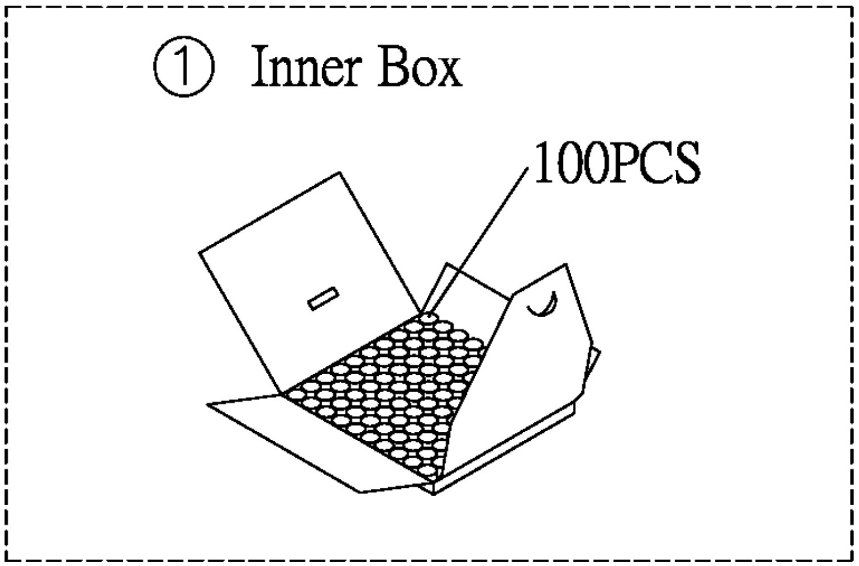


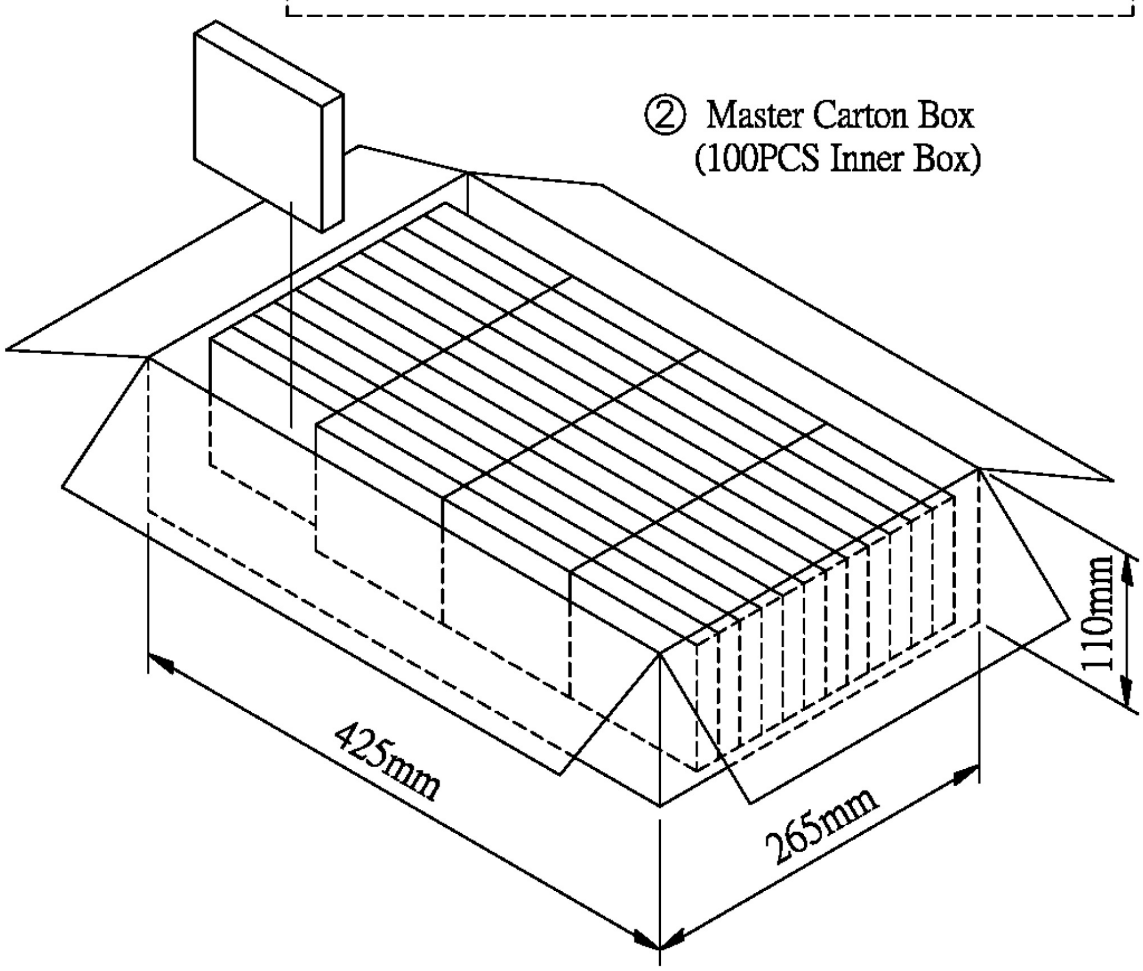

RL = 680 Ω
C = 1 µF

## 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



## 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.

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