

Additional Resources: Product Page | <u>3D Model</u>

date 09/11/2024 page 1 of 4

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

#### **FEATURES**

- unidirectional
- 9.7 mm diameter
- solder pads



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# 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 (IDSS)      | Vs = 1.5 Vdc, RL = 680 $\Omega$     |     |     | 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 (1 V/Pa)

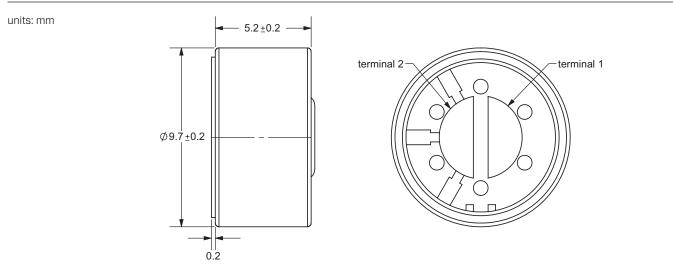
2. All specifications measured at 5~35°C, humidity at 45~85%, under 86~106 kPa pressure, unless otherwise noted.

#### SOLDERABILITY

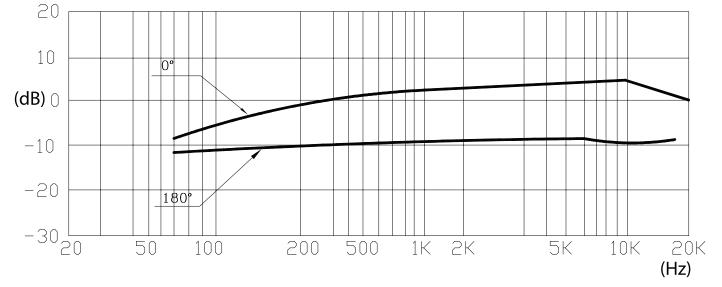
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| parameter      | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for 2 ± 0.5 seconds    | 310 | 320 | 330 | °C    |

## **MECHANICAL DRAWING**

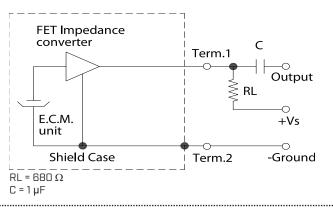


#### FREQUENCY RESPONSE CURVE



#### **APPLICATION CIRCUIT**

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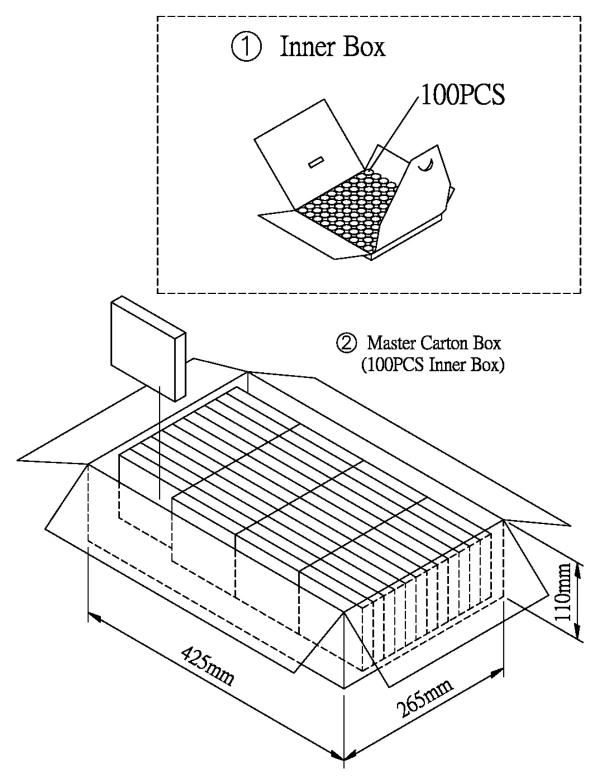
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#### PACKAGING

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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 |  |
| 1.03 | CUI Devices rebranded to Same Sky | 09/11/2024 |  |

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

Same Sky offers a one [1] year limited warranty. Complete warranty information is listed on our website.

# same sky

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