CUI DEVICES

date 04/24/2020

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

FEATURES

- unidirectional
- 9.7 mm diameter
- solder pads





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 | 3) | | 1.5 | | Vdc |
| max operating voltage | | | | 10 | Vdc |
| output impedance (Zout) | f = 1 kHz, 1 Pa | | 680 | | Ω |
| sensitivity reduction (ΔS-Vs) | $f = 1 \text{ kHz}, 1 \text{ Pa, Vs} = 2.0 \sim 1.5 \text{ Vdc}$ | | -3 | | dB |
| frequency (f) | | 70 | | 20,000 | Hz |
| current consumption (IDSS) | 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 | ves | | | | |

Notes:

SOLDERABILITY

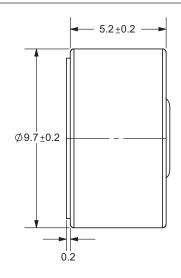
| parameter | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for 2 ± 0.5 seconds | 310 | 320 | 330 | °C |

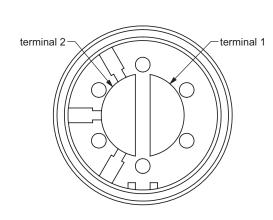
^{1.} We use the "Pascal (Pa)" indication of sensitivity as per the recomendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase

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 $5\sim35^{\circ}$ C, humidity at $45\sim85^{\circ}$, under $86\sim106$ kPa pressure, unless otherwise noted.

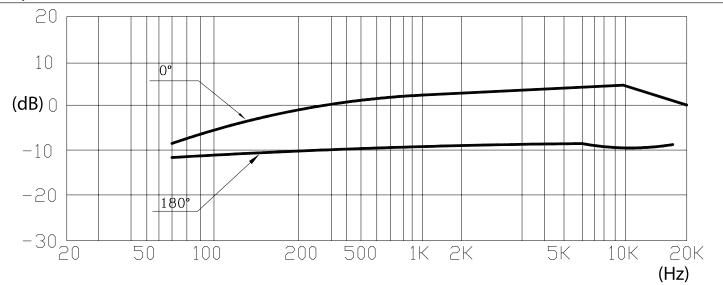
MECHANICAL DRAWING

units: mm

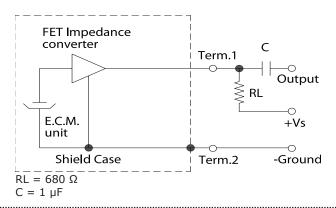




FREQUENCY RESPONSE CURVE



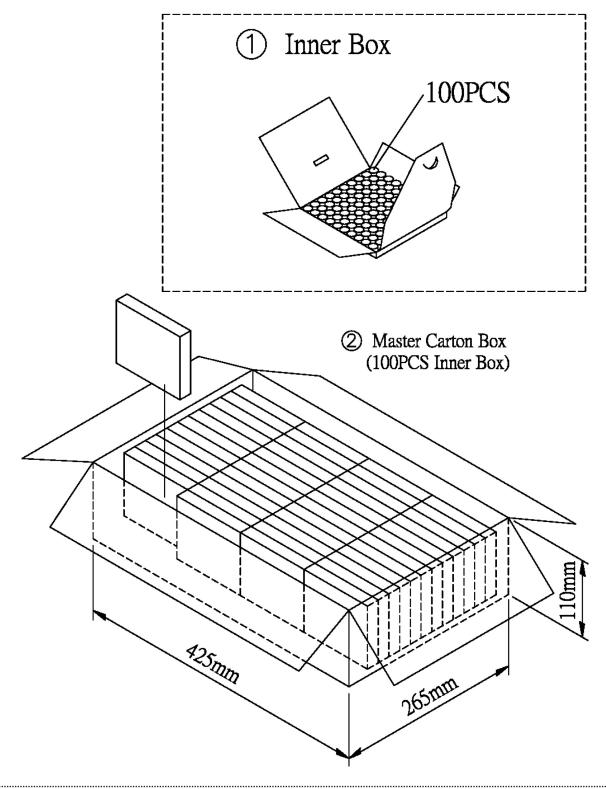
APPLICATION CIRCUIT



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



Additional Resources: Product Page | 3D Model

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REVISION HISTORY

| rev. | description | date |
|------|-----------------|------------|
| 1.0 | initial release | 06/01/2008 |
| 1.01 | brand update | 04/24/2020 |

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

CUI DEVICES

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

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