CUI DEVICES

date 01/13/2020

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MODEL: CMC-6027-24L100 | DESCRIPTION: ELECTRET CONDENSER MICROPHONE

FEATURES

- omnidirectional
- high signal to noise ratio
- -24 dB sensitivity rating
- 100 mm lead wires





SPECIFICATIONS

| parameter | conditions/description | min | typ | max | units |
|---------------------------------|-------------------------------------|-----|----------|--------|-------|
| directivity | omnidirectional | | | | |
| sensitivity (S) | f = 1 kHz, 1 Pa, 0 dB = 1 V/Pa | -27 | -24 | -21 | dB |
| standard operating voltage (Vs) | | | 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) | | 100 | | 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 | | 70 | | dBA |
| dimensions | Ø6.0 x 2.7 | | | | mm |
| material | Al | | | | |
| terminal | wire leads | | | | |
| weight | | | | 0.4 | g |
| operating temperature | | -20 | | 70 | °C |
| storage temperature | | -20 | | 70 | °C |
| RoHS | yes | | <u> </u> | | |

Notes:

SOLDERABILITY

| parameter | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for maximum 2 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

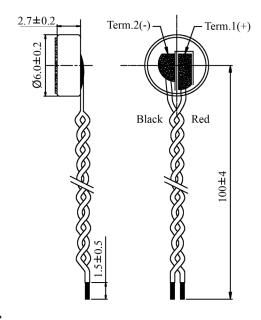
²⁰ dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1 V/Pa) 2. All specifications measured at $5\sim35^{\circ}$ C, humidity at $45\sim85^{\circ}$, under $86\sim106$ kPa pressure, unless otherwise noted.

MECHANICAL DRAWING

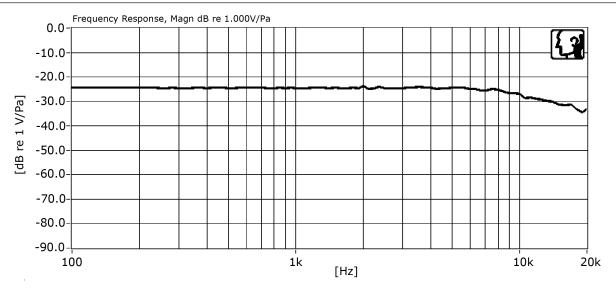
units: mm

tolerance: ±0.25 mm

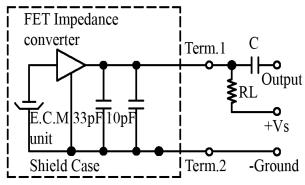
wire: UL1571 LF 30 AWG



FREQUENCY RESPONSE CURVE



MEASUREMENT CIRCUIT

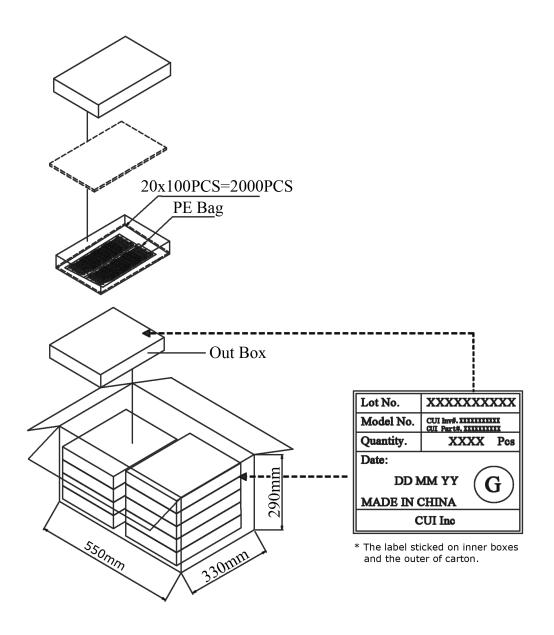


 $RL = 2.2 k\Omega$

PACKAGING

units: mm

Out Box Size: 310 x 248 x 49 mm Carton Box Size: 550 x 330 x 290 mm Out Box QTY: 2,000 pcs per box Carton Box QTY: 20,000 pcs per box



Additional Resources: Product Page | 3D Model

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REVISION HISTORY

| rev. | description | date |
|------|-----------------|------------|
| 1.0 | initial release | 11/28/2016 |
| 1.01 | brand update | 01/13/2020 |

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

CUI DEVICES

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