

date 08/05/2022

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MODEL: CMC-4015-25L100 | DESCRIPTION: ELECTRET CONDENSER MICROPHONE

FEATURES

- omnidirectional
- · -25 dB sensitivity rating
- low profile
- wide temperature range
- IP65





SPECIFICATIONS

| parameter | conditions/description | min | typ | max | units |
|---------------------------------|--|-----|-----|--------|-------|
| directivity | omnidirectional | | | | |
| sensitivity (S) | f = 1 kHz, 1 Pa, 0 dB = 1 V/Pa | -28 | -25 | -22 | dB |
| standard operating voltage (Vs) | | | 3 | | 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 = 3.0 ~ 1.0 Vdc | | -3 | | dB |
| frequency (f) | | 100 | | 20,000 | Hz |
| current consumption (IDSS) | Vs = 3.0 Vdc, RL = 2.2 k Ω | | | 0.5 | mA |
| signal to noise ratio (S/N) | f = 1 kHz, 1 Pa, A-weighted | | 62 | | dBA |
| dimensions | Ø4.0 x 1.5 | | | | mm |
| material | Al | | | | |
| terminal | wire leads | | | | |
| weight | | | | 0.25 | g |
| operating temperature | | -40 | | 70 | °C |
| storage temperature | | -40 | | 70 | °C |
| RoHS | yes | | | | |
| IP level | IP65 (IEC standard 529 edition 2.0 (1989)) | | | | |

Notes:

SOLDERABILITY

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

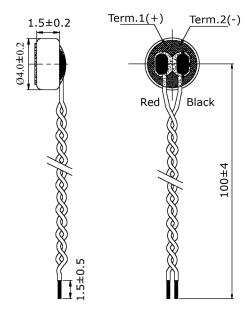
^{1.} We use the "Pascal [Pa]" indication of sensitivity as per the recomendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20 dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1V/Pa) 2. All specifications measured at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

MECHANICAL DRAWING

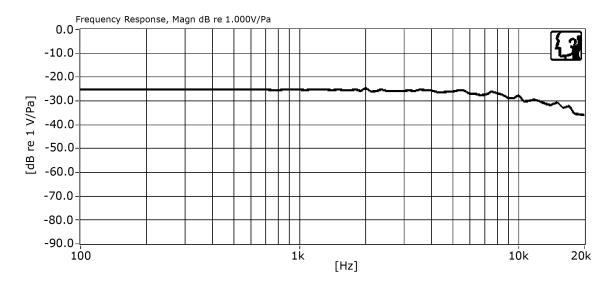
units: mm

tolerance: ±0.2 mm

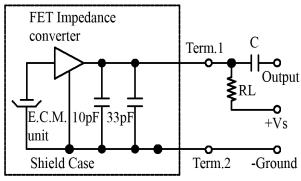
wire: UL1571 LF 30 AWG



FREQUENCY RESPONSE CURVE



MEASUREMENT CIRCUIT

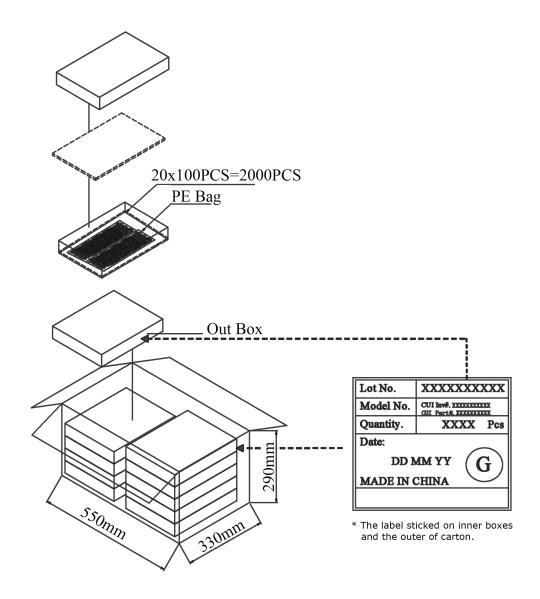


RL = 2.2 kΩ

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 carton



Additional Resources: Product Page | 3D Model

REVISION HISTORY

| rev. | description | date |
|------|------------------------------|------------|
| 1.0 | initial release | 11/28/2016 |
| 1.01 | brand update | 01/15/2020 |
| 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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