

MODEL: CMR-4015-44-SP | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE

FEATURES

- noise cancelling
- 4 mm diameter
- solder pad


SPECIFICATIONS

| parameter | conditions/description | min | typ | max | units |
|--|---|-----|------|--------|--------|
| directivity | noise cancelling | | | | |
| sensitivity [S] | at 1 kHz, 0 dB = 1 V/Pa | -47 | -44 | -41 | dB |
| standard operating voltage [Vs] | | 1.0 | | 5.0 | V |
| current consumption [I _{OSS}] | V _s = 2.0 Vdc, R _L = 2.2 kΩ | | | 500 | μA |
| sensitivity reduction [ΔS-V _s] | V _s = 2.0 ~ 1.5 Vdc | | | -3 | dB |
| frequency [f] | | 100 | | 10,000 | Hz |
| signal to noise ratio [S/N] | f = 1 kHz, A-weighted | 55 | | | dB |
| total harmonic distortion [THD] | at 94 dB SPL, 1 kHz | | | 1 | % |
| acoustic overload point [AOP] | | | | 120 | dB SPL |
| output impedance [Z _{out}] | f = 1 kHz | | | 2.2 | kΩ |
| dimensions | Ø4.0 x 1.5 | | | | mm |
| material | Al-Mg alloy | | | | |
| terminal | solder pads | | | | |
| weight | | | 0.07 | | g |
| operating temperature | | -40 | | 85 | °C |
| storage temperature | | -40 | | 85 | °C |
| RoHS | yes | | | | |

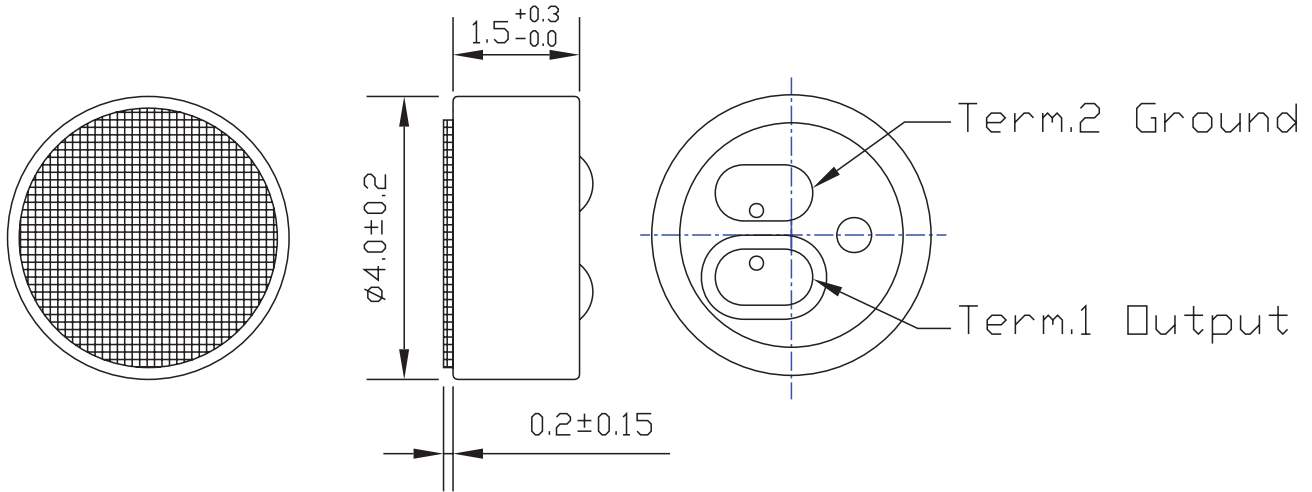
Notes: 1. We use the "Pascal [Pa]" indication of sensitivity as per the recommendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20 dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1 V/Pa)
 2. All specifications measured at 20±2°C, humidity at 65±5%, unless otherwise noted.

SOLDERABILITY

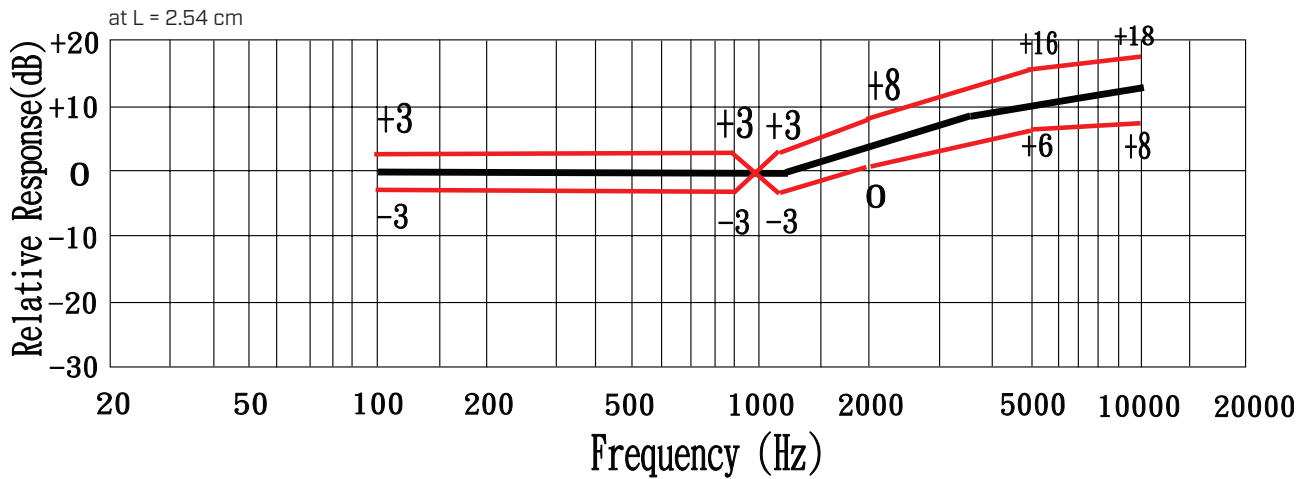
| parameter | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for 1~2 seconds | | | 320 | °C |

MECHANICAL DRAWING

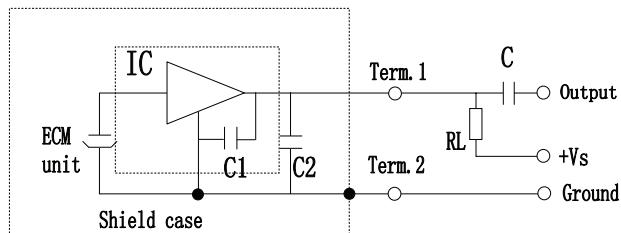
units: mm



FREQUENCY RESPONSE CURVE



APPLICATION CIRCUIT

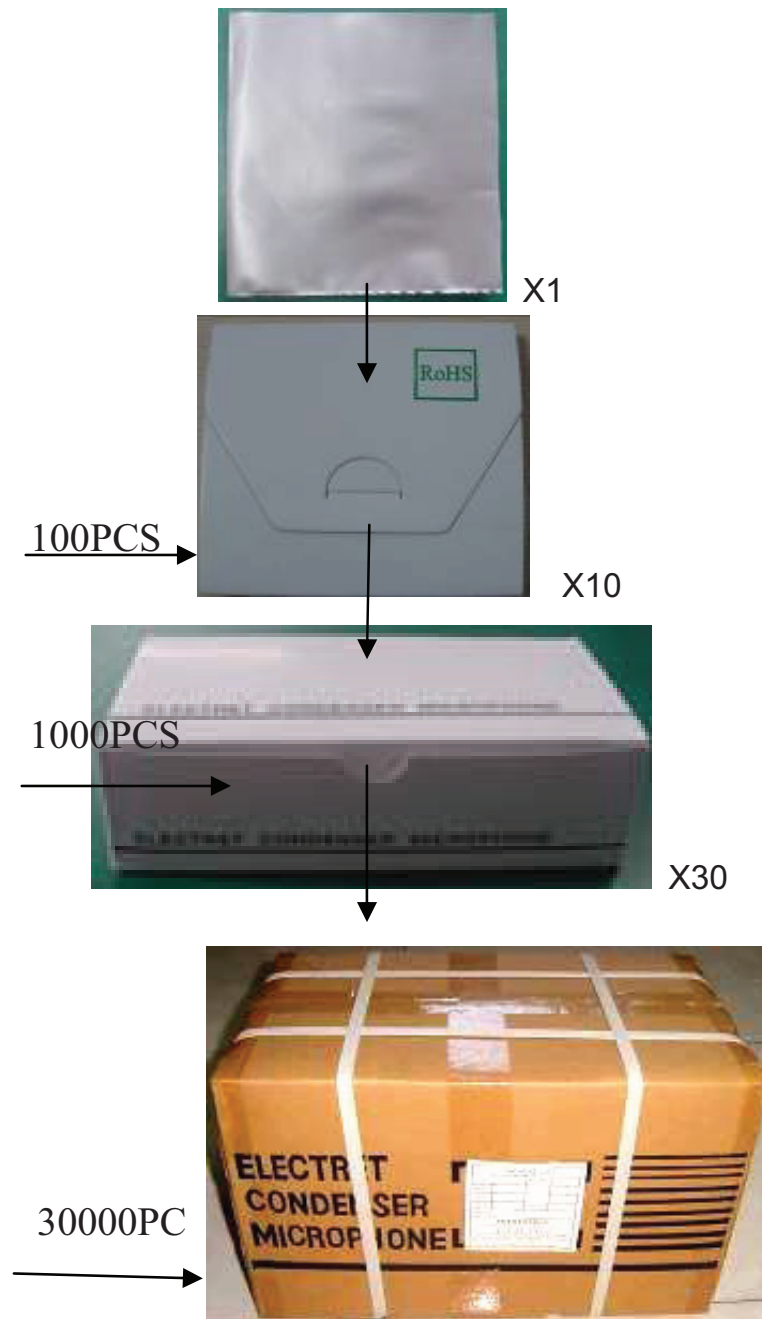


RL = 2.2 kΩ Vs=2.0 V C2=33 pF
 C = 1 μF C1=10 pF

PACKAGING

units: mm

Anti-Static Bag: 100 x 100 x 2 mm
Inner Box Size: 205 x 105 x 50 mm
Outer Box Size: 550 x 230 x 235 mm
Small Box QTY: 100 pcs per box
Inner Box QTY: 1,000 pcs per box
Outer Box QTY: 30,000 pcs per box



REVISION HISTORY

| rev. | description | date |
|------|-----------------|------------|
| 1.0 | initial release | 08/29/2022 |

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



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