

**MODEL:** CMEJ-4618-38-L046 | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE

**FEATURES**

- omnidirectional
- low profile
- 46 mm lead wires


**ELECTRICAL**

| parameter                            | conditions/description                                   | min | typ | max    | units      |
|--------------------------------------|--|-----|-----|--------|------------|
| directivity                          | omnidirectional  |     |     |        |            |
| sensitivity [S]                      | at 1 kHz [0 dB = 1 V/Pa]                                 | -41 | -38 | -35    | dB         |
| supply voltage [V <sub>DD</sub> ]    |  | 1.0 | 2.0 | 10     | V          |
| current consumption                  | V <sub>DD</sub> = 2.0 V, R <sub>L</sub> = 2.2 k $\Omega$ |     |     | 0.5    | mA         |
| sensitivity reduction                | V <sub>DD</sub> = 2.0 ~ 1.5 V                            |     |     | 3      | dB         |
| frequency [f]                        |  | 100 |     | 10,000 | Hz         |
| signal to noise ratio [S/N]          | at 1 kHz, P <sub>in</sub> = 1 Pa [A-weighted]            |     | 60  |        | dBA        |
| total harmonic distortion [THD]      | at 94 dB SPL, 1 kHz                                      |     |     | 1      | %          |
|                                      | at 115 dB SPL, 1 kHz                                     |     |     | 3      | %          |
| acoustic overload point [ADP]        | at 1 kHz   |     |     | 115    | dB SPL     |
| output impedance [Z <sub>out</sub> ] | at 1 kHz   |     |     | 2.2    | k $\Omega$ |

Notes: 1. All specifications measured at 20 $\pm$ 2°C, humidity at 60-70%, unless otherwise noted.

**ENVIRONMENTAL**

| parameter             | conditions/description | min | typ | max | units |
|-----------------------|------------------------|-----|-----|-----|-------|
| operating temperature |                        | -40 |     | 70  | °C    |
| storage temperature   |                        | -40 |     | 85  | °C    |
| operating humidity    | non-condensing         | 30  |     | 85  | %     |
| storage humidity      | non-condensing         | 30  |     | 75  | %     |
| RoHS                  | yes                    |     |     |     |       |

## MECHANICAL

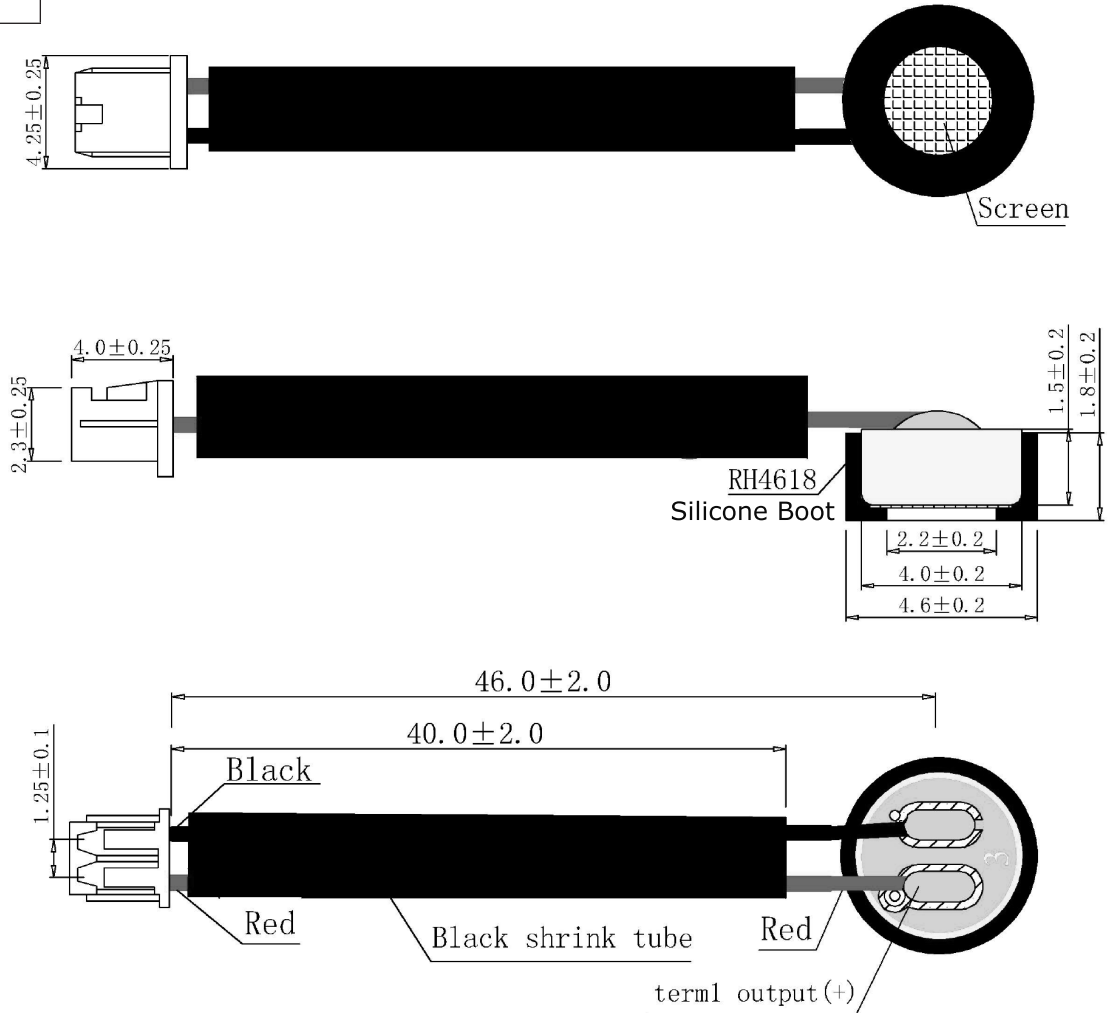
| parameter     | conditions/description   | min | typ  | max | units |
|---------------|--|-----|------|-----|-------|
| dimensions    | ∅4.6 x 1.8   |     |      |     | mm    |
| acoustic port | top  |     |      |     |       |
| terminals     | wire leads with connector; mates with CJT A1251 Series or equivalent |     |      |     |       |
| weight        |  |     | 0.29 |     | g     |

## MECHANICAL DRAWING

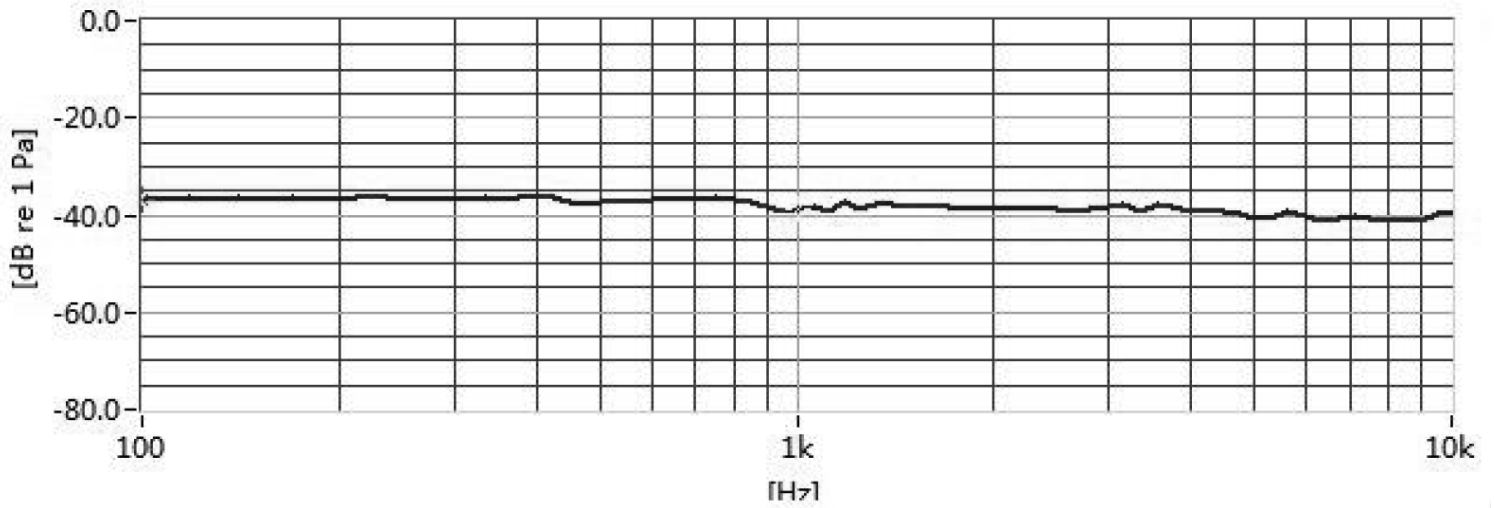
units: mm  
tolerance: ±0.2 mm

wire: UL 1571, 32 AWG  
connector: CJT A1251H-2P  
terminal: CJT A1251-TP

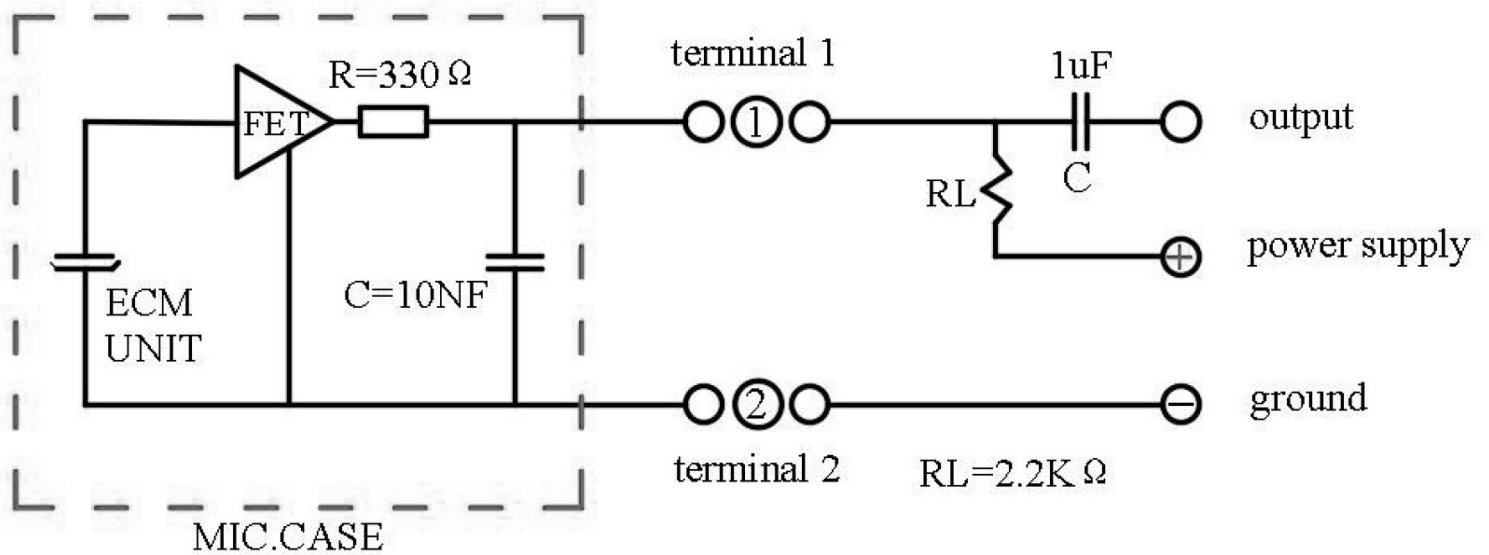
| WIRE CONNECTIONS |            |            |
|------------------|------------|------------|
| TERM.            | WIRE COLOR | FUNCTION   |
| 1                | Red        | Output (+) |
| 2                | Black      | GND (-)    |



## FREQUENCY RESPONSE CURVE

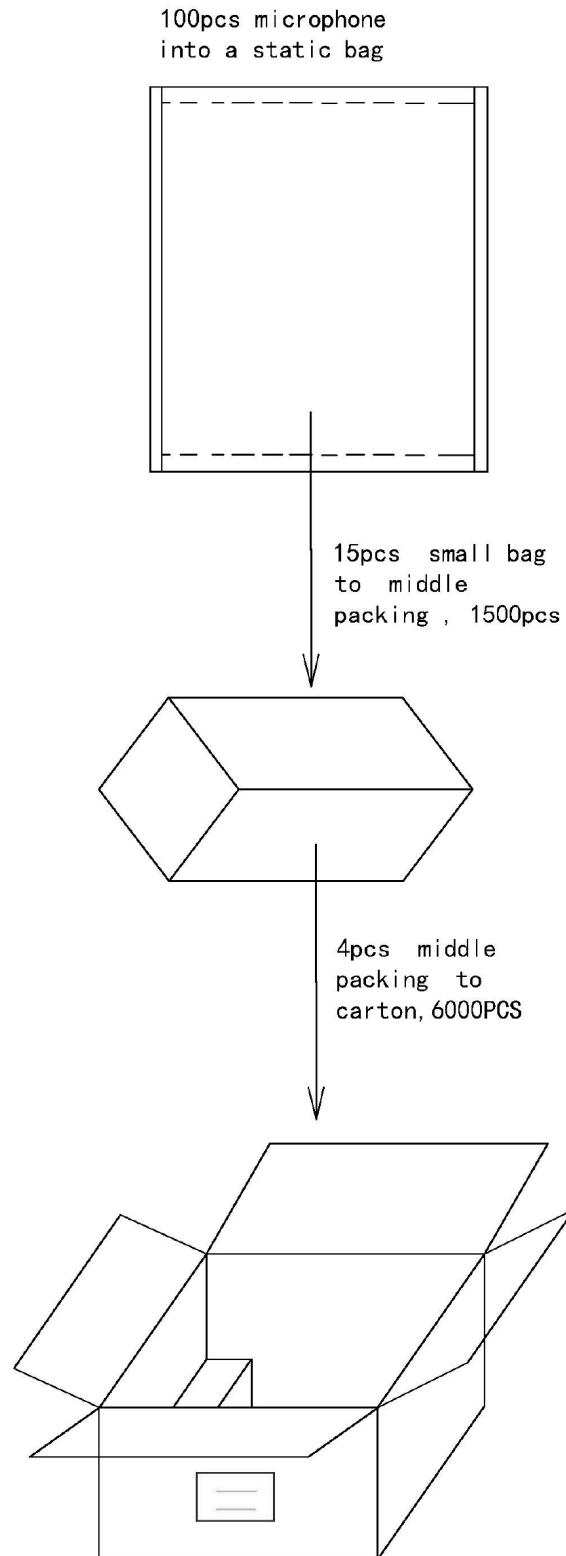


## APPLICATION CIRCUIT



## PACKAGING

Carton QTY: 6,000 pcs



## REVISION HISTORY

| rev. | description                  | date       |
|------|------------------------------|------------|
| 1.0  | initial release              | 06/12/2019 |
| 1.01 | brand update                 | 01/17/2020 |
| 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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