

**MODEL:** CMEJ-0502-25-L075 | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE

**FEATURES**

- omnidirectional
- high sensitivity
- 75 mm lead wires


**ELECTRICAL**

| parameter                            | conditions/description                                   | min | typ | max      | units           |
|--------------------------------------|--|-----|-----|----------|-----------------|
| directivity                          | omnidirectional  |     |     |          |                 |
| sensitivity (S)                      | at 1 kHz (0 dB = 1 V/Pa)                                 | -28 | -25 | -22      | dB              |
| supply voltage (V <sub>DD</sub> )    |  | 1.0 | 3.0 | 10       | V               |
| current consumption                  | V <sub>DD</sub> = 3.0 V, R <sub>L</sub> = 2.2 k $\Omega$ |     |     | 0.5      | mA              |
| sensitivity reduction                | V <sub>DD</sub> = 3.0 ~ 2.5 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  |          | dB <sub>A</sub> |
| total harmonic distortion (THD)      | at 94 dB SPL, 1 kHz<br>at 115 dB SPL, 1 kHz              |     |     | 1<br>3   | %<br>%          |
| acoustic overload point (AOP)        | at 1 kHz   |     |     | 115      | dB SPL          |
| output impedance (Z <sub>out</sub> ) | at 1 kHz   |     |     | $\infty$ | k $\Omega$      |

Notes: 1. All specifications measured at 20 $\pm$ 2 $^{\circ}$ C, humidity at 60~70%, unless otherwise noted.

**ENVIRONMENTAL**

| parameter             | conditions/description | min | typ | max | units        |
|-----------------------|------------------------|-----|-----|-----|--------------|
| operating temperature |                        | -40 |     | 70  | $^{\circ}$ C |
| storage temperature   |                        | -40 |     | 85  | $^{\circ}$ C |
| operating humidity    | non-condensing         | 30  |     | 85  | %            |
| storage humidity      | non-condensing         | 30  |     | 75  | %            |
| RoHS                  | yes                    |     |     |     |              |

## MECHANICAL

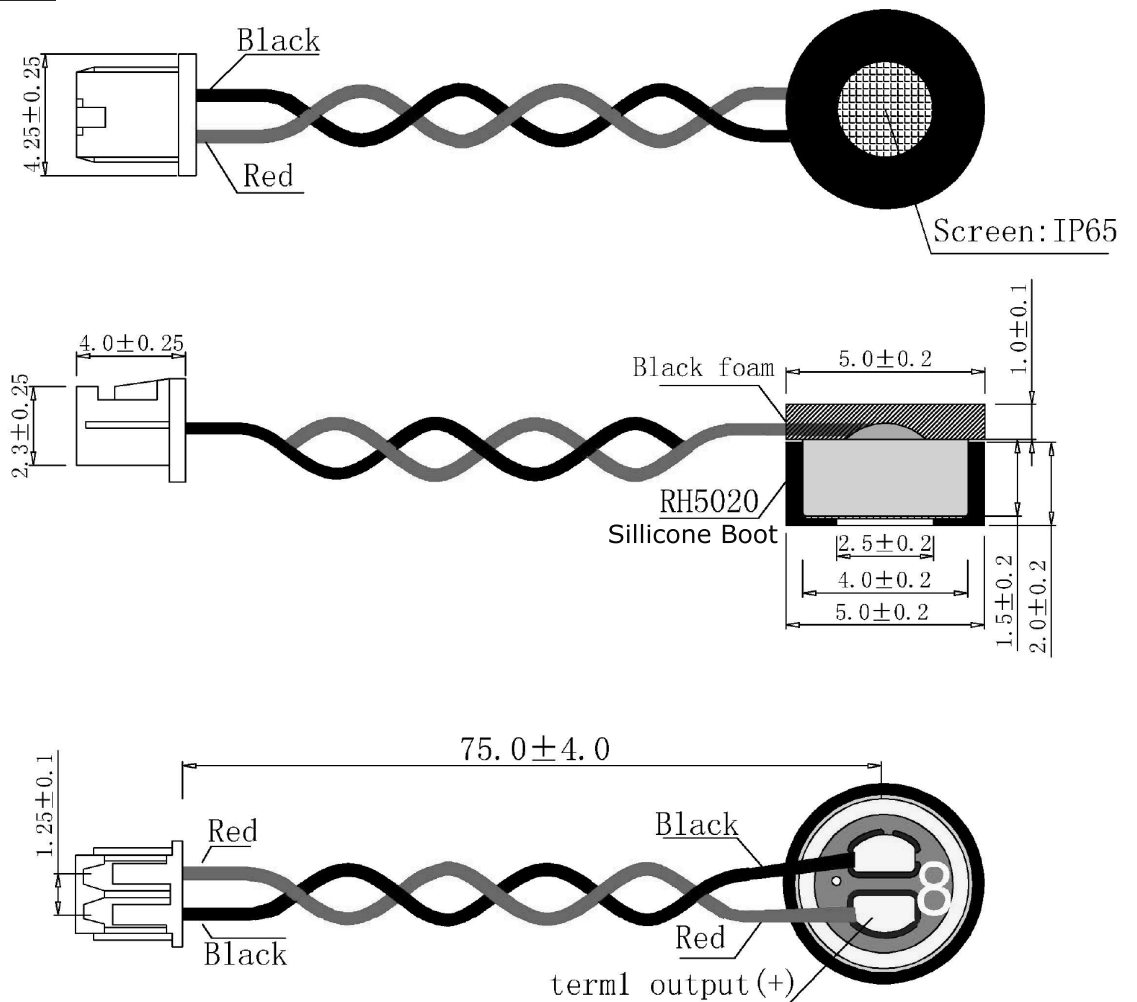
| parameter     | conditions/description   | min | typ  | max | units |
|---------------|--|-----|------|-----|-------|
| dimensions    | Ø5.0 x 2.0   |     |      |     | mm    |
| acoustic port | top  |     |      |     |       |
| terminals     | wire leads with connector; mates with CJT A1251 Series or equivalent |     |      |     |       |
| weight        |  |     | 0.28 |     | g     |

## MECHANICAL DRAWING

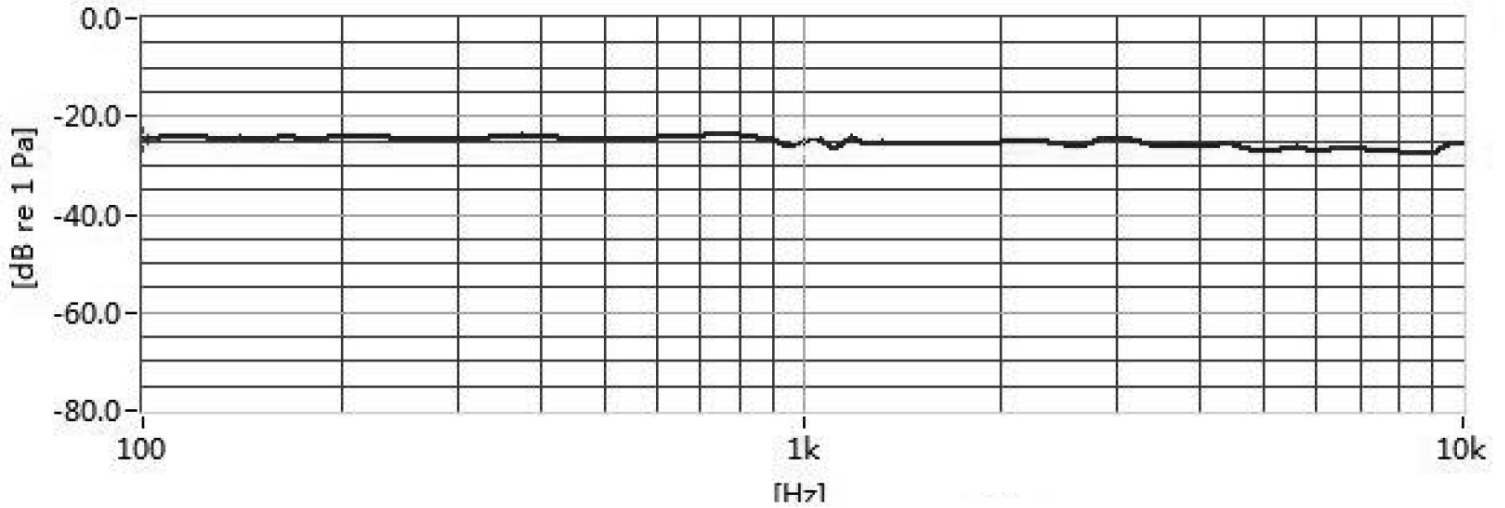
units: mm  
tolerance: ±0.2 mm

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

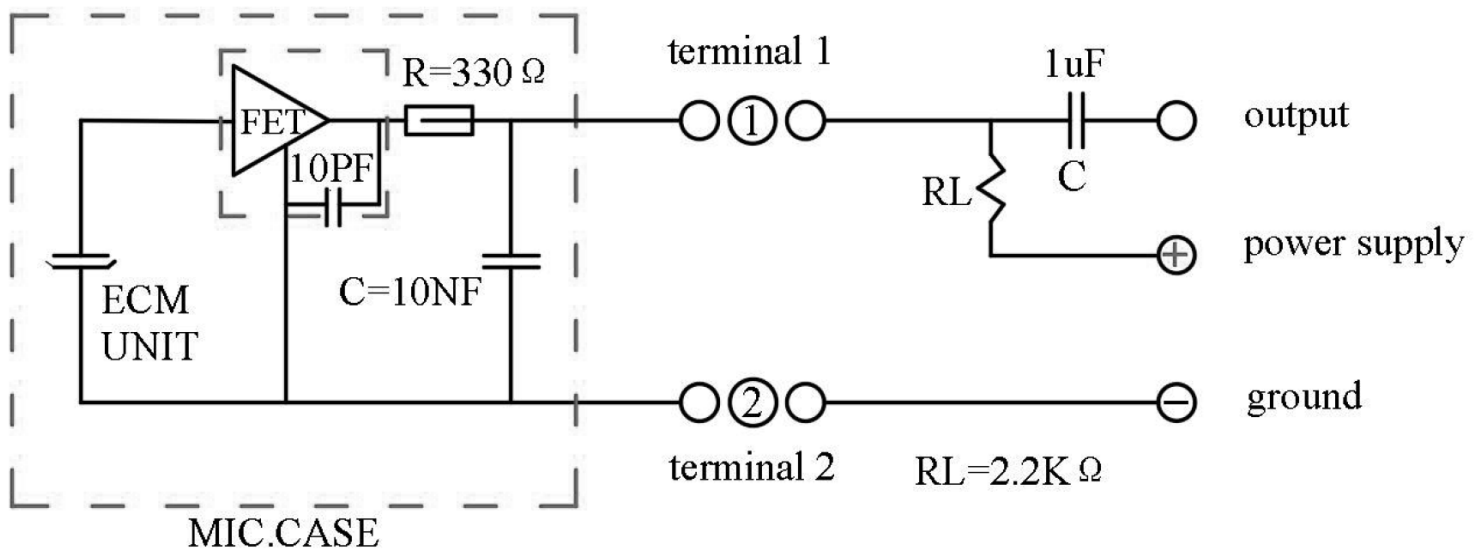
| WIRE CONNECTIONS |            |            |
|------------------|------------|------------|
| TERM.            | WIRE COLOR | FUNCTION   |
| 1                | Red        | Output (+) |
| 2                | Black      | GND (-)    |



## FREQUENCY RESPONSE CURVE



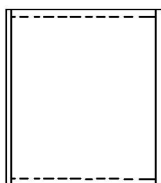
## APPLICATION CIRCUIT



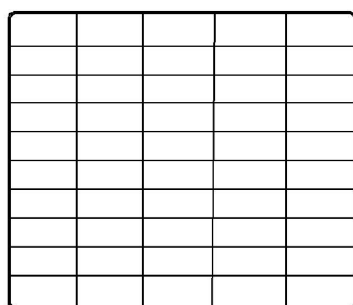
## PACKAGING

Carton QTY: 20,000 pcs

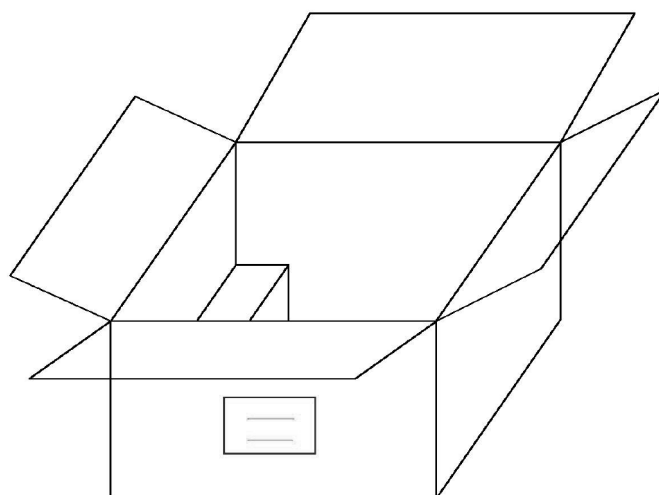
100pcs microphone into a static bag



Pack 100PCS small bags into the grid layer, 50 bags for each layer, 5000PCS for each layer



One box with 4 layers, totaling 20000PCS



## REVISION HISTORY

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| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 06/12/2019 |

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



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

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