

**SERIES:** CMEJ-4618-42-LX | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE**FEATURES**

- omnidirectional
- low profile
- multiple lead wire lengths available

**ELECTRICAL**

| parameter                            | conditions/description                                   | min | typ | max    | units      |
|--------------------------------------|----------------------------------------------------------|-----|-----|--------|------------|
| directivity                          | omnidirectional                                          |     |     |        |            |
| sensitivity (S)                      | at 1 kHz (0 dB = 1 V/Pa)                                 | -45 | -42 | -39    | 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 (AOP)        | 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  | %     |
| hand soldering        | for 1~3 seconds        | 340 | 350 | 360 | °C    |
| RoHS                  | yes                    |     |     |     |       |

**PART NUMBER KEY****CMEJ-4618-42-L XXX**

Base Number

Wire Length:

008 = 8 mm

010 = 10 mm

012 = 12 mm

015 = 15 mm

120 = 120 mm

177 = 177 mm

## MECHANICAL

| parameter     | conditions/description | min | typ | max | units |
|---------------|------------------------|-----|-----|-----|-------|
| dimensions    | Ø4.6 x 1.8             |     |     |     | mm    |
| acoustic port | top                    |     |     |     |       |
| terminals     | wire leads             |     |     |     |       |

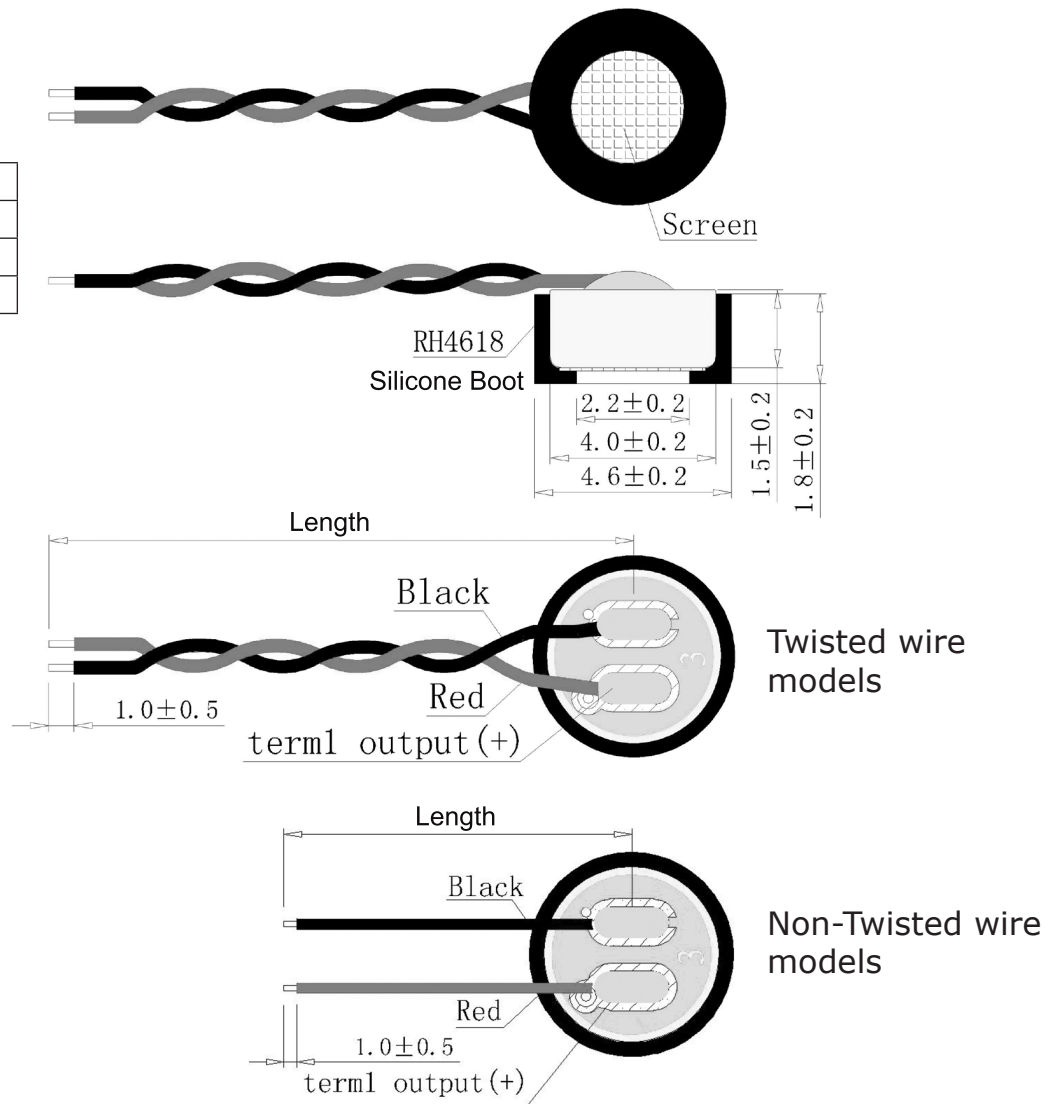
## MECHANICAL DRAWING

units: mm

tolerance:  $\pm 0.2$  mm

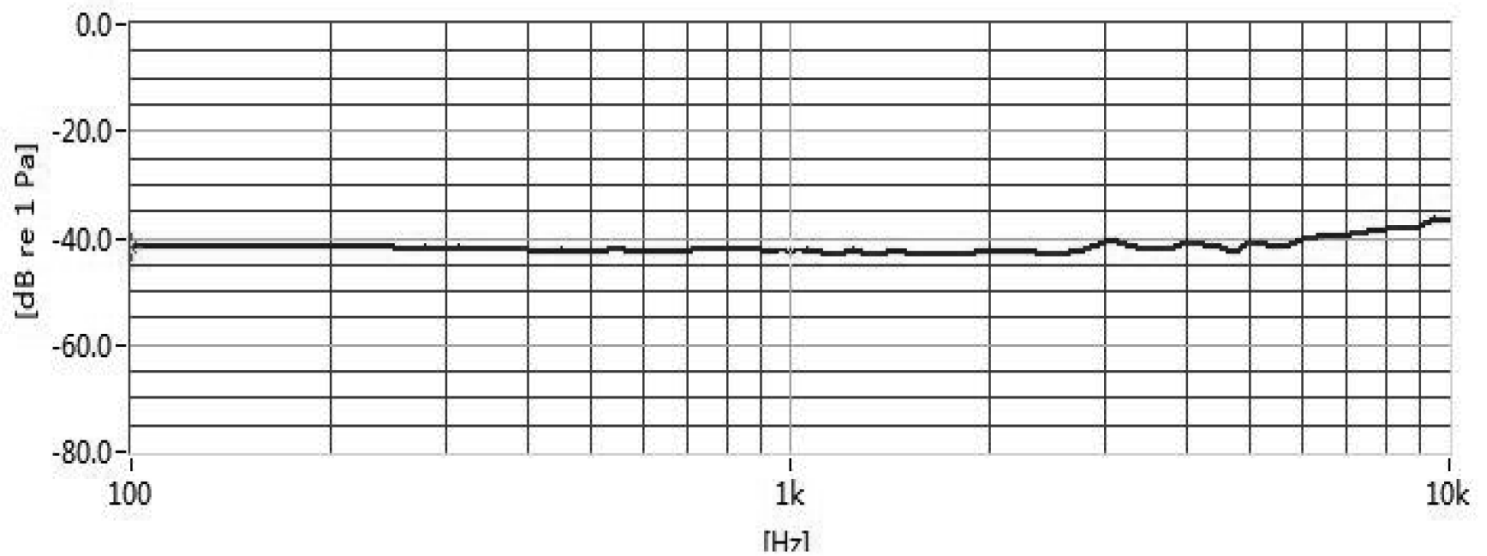
wire: UL 1571, 32 AWG

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

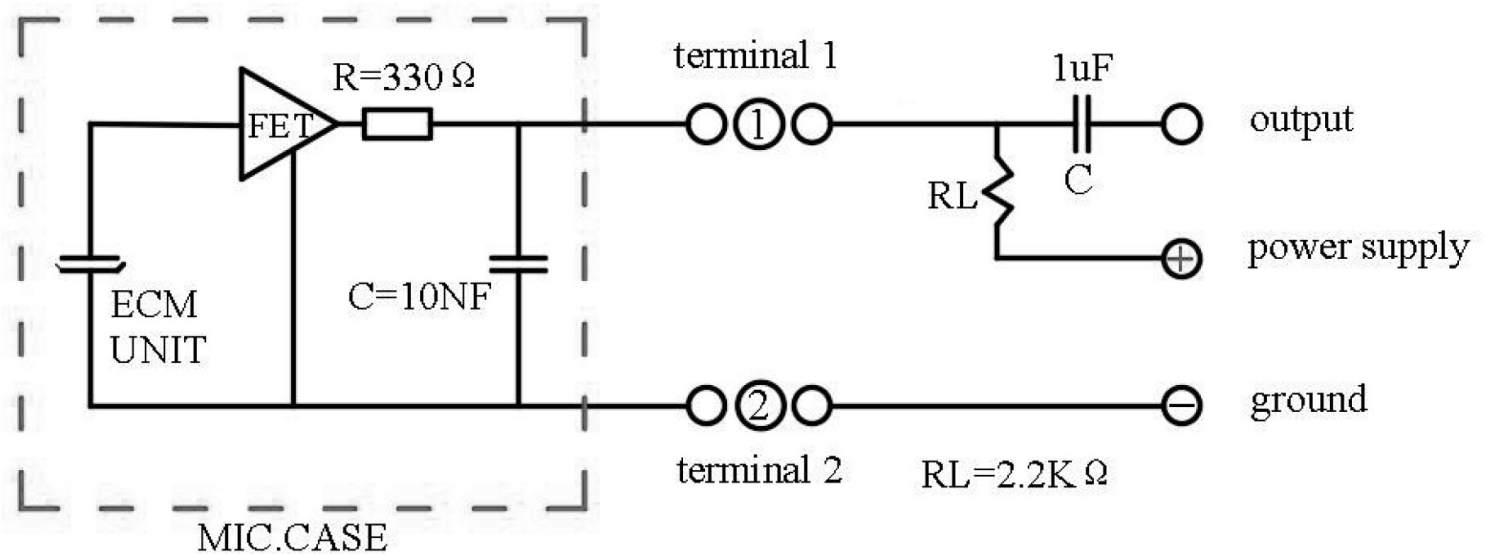


| MODEL NO.         | LENGTH (mm) | TWISTED WIRES | WEIGHT (g) |
|-------------------|-------------|---------------|------------|
| CMEJ-4618-42-L008 | 8 $\pm$ 1   | NO            | 0.1        |
| CMEJ-4618-42-L010 | 10 $\pm$ 1  | NO            | 0.1        |
| CMEJ-4618-42-L012 | 12 $\pm$ 1  | NO            | 0.11       |
| CMEJ-4618-42-L015 | 15 $\pm$ 1  | NO            | 0.11       |
| CMEJ-4618-42-L120 | 120 $\pm$ 5 | YES           | 0.26       |
| CMEJ-4618-42-L177 | 177 $\pm$ 6 | YES           | 0.33       |

## FREQUENCY RESPONSE CURVE

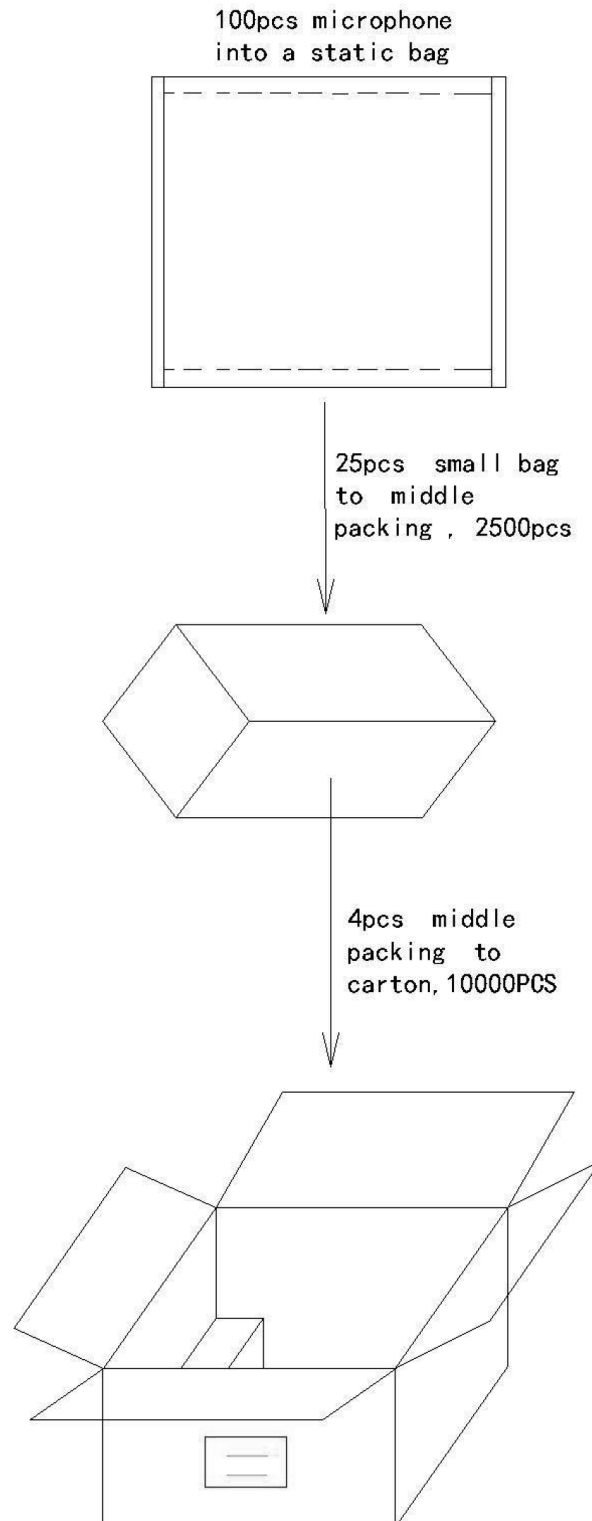


## APPLICATION CIRCUIT



## PACKAGING (NON-TWISTED WIRE MODELS)

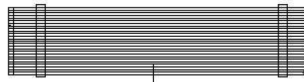
Carton QTY: 10,000 pcs



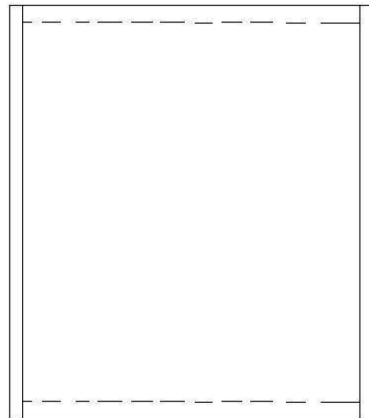
## PACKAGING (TWISTED WIRE MODELS)

Carton QTY: 10,000 pcs

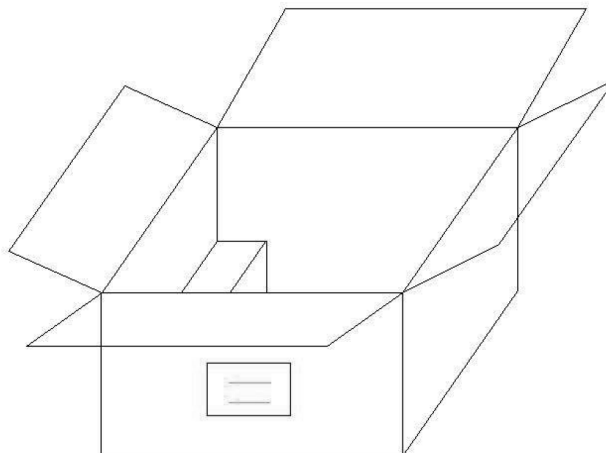
100PCS is 1 bundles,



20 bundles of 1 bags



5pcs bag packing  
to carton,  
10000PCS



## REVISION HISTORY

| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 06/07/2019 |

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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