

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 _{DD}] | | 1.0 | 2.0 | 10 | V |
| current consumption | V _{DD} = 2.0 V, R _L = 2.2 k Ω | | | 0.5 | mA |
| sensitivity reduction | V _{DD} = 2.0 ~ 1.5 V | | | 3 | dB |
| frequency [f] | | 100 | | 10,000 | Hz |
| signal to noise ratio [S/N] | at 1 kHz, P _{in} = 1 Pa [A-weighted] | | 60 | | dB |
| 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 _{out}] | at 1 kHz | | | 2.2 | k Ω |

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 | % |
| hand soldering | for 1-3 seconds | 340 | 350 | 360 | $^{\circ}$ 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

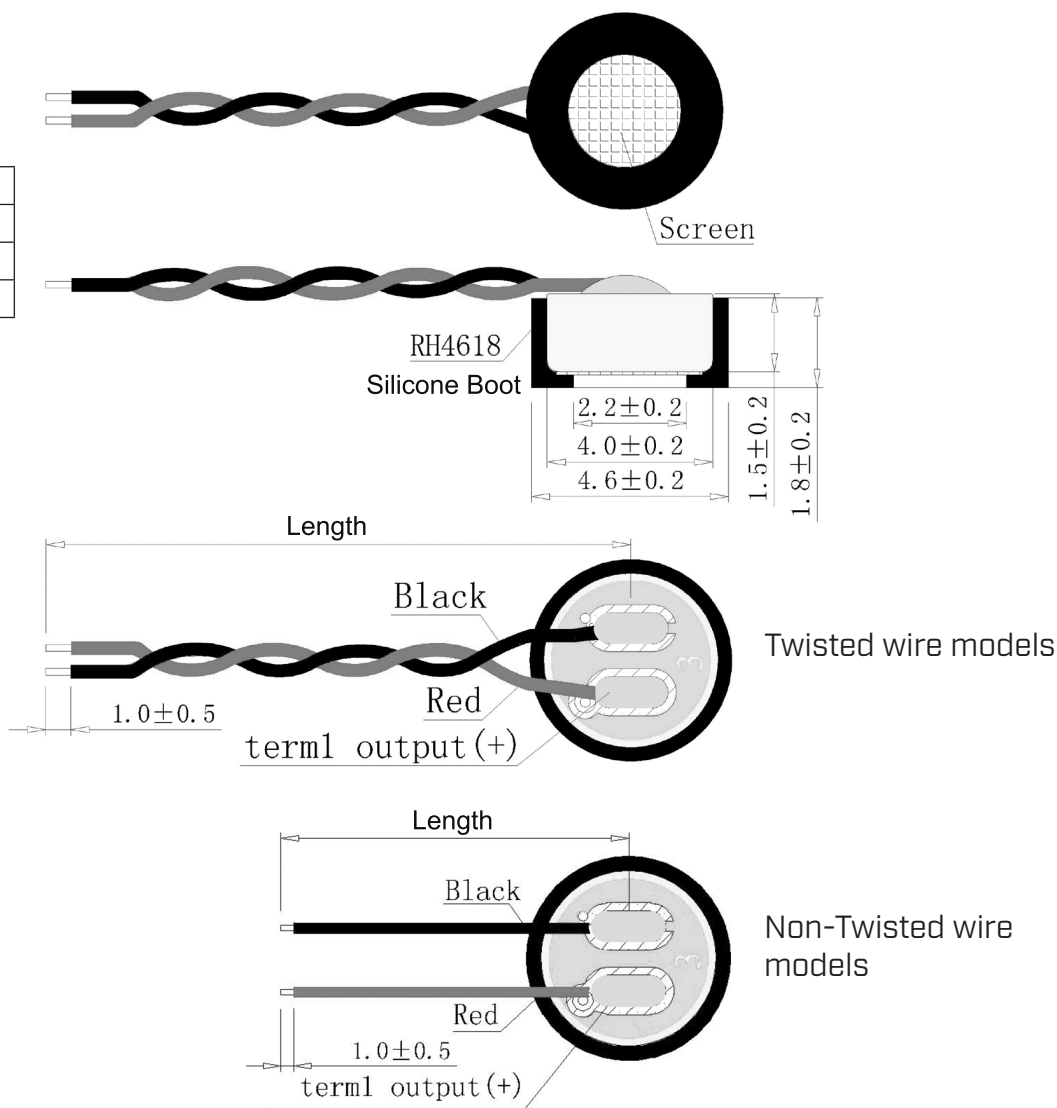
| parameter | conditions/description | min | typ | max | units |
|---------------|------------------------|-----|-----|-----|-------|
| dimensions | Ø4.6 x 1.8 | | | | mm |
| acoustic port | top | | | | |
| terminals | wire leads | | | | |

MECHANICAL DRAWING

units: mm
tolerance: ±0.2 mm

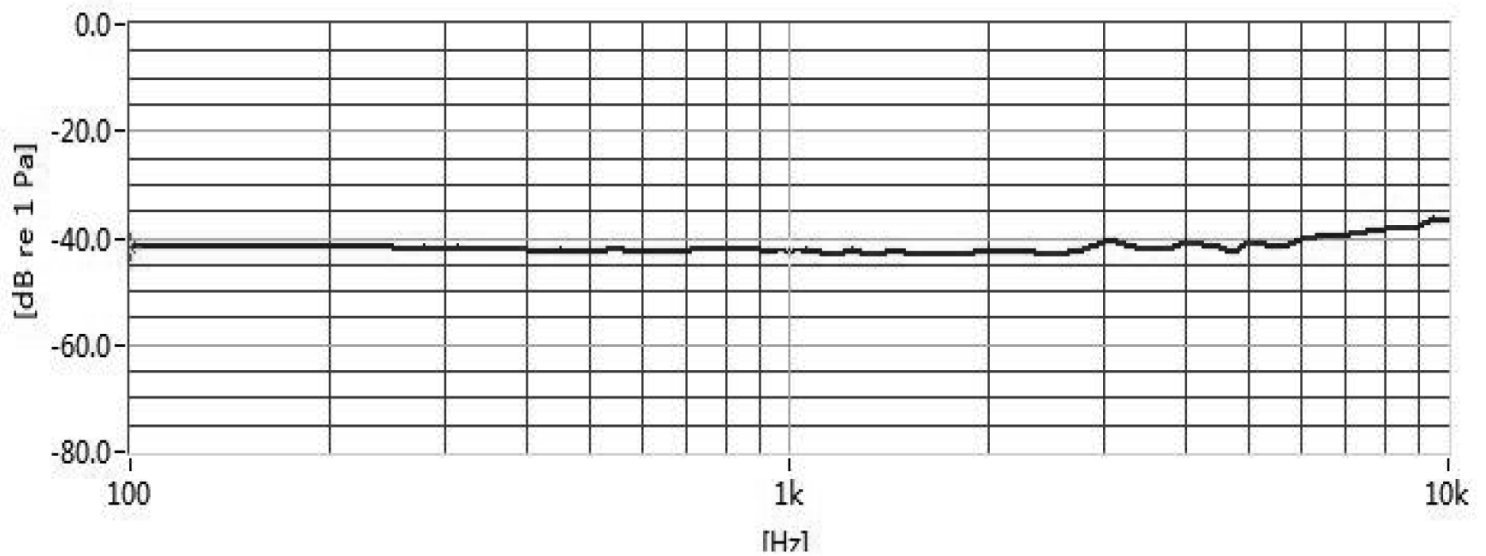
wire: UL 1571, 32 AWG

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

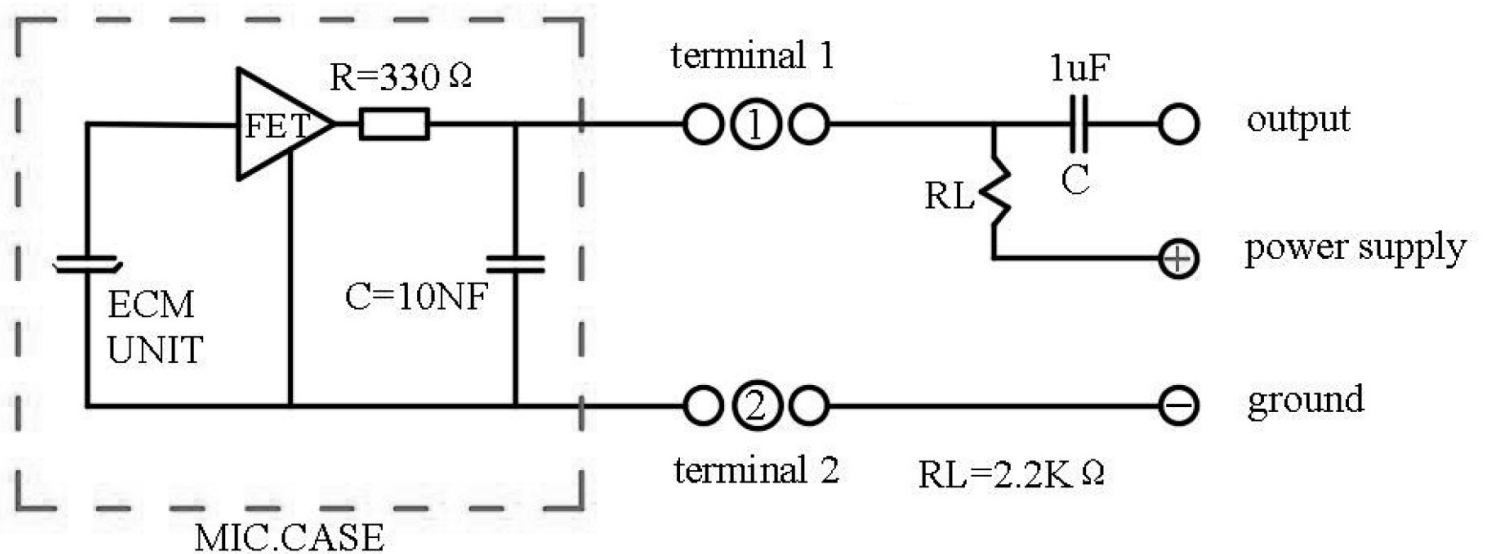


| MODEL NO. | LENGTH [mm] | TWISTED WIRES | WEIGHT [g] |
|-------------------|-------------|---------------|------------|
| CMEJ-4618-42-L008 | 8 ±1 | NO | 0.1 |
| CMEJ-4618-42-L010 | 10 ±1 | NO | 0.1 |
| CMEJ-4618-42-L012 | 12 ±1 | NO | 0.11 |
| CMEJ-4618-42-L015 | 15 ±1 | NO | 0.11 |
| CMEJ-4618-42-L120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

FREQUENCY RESPONSE CURVE

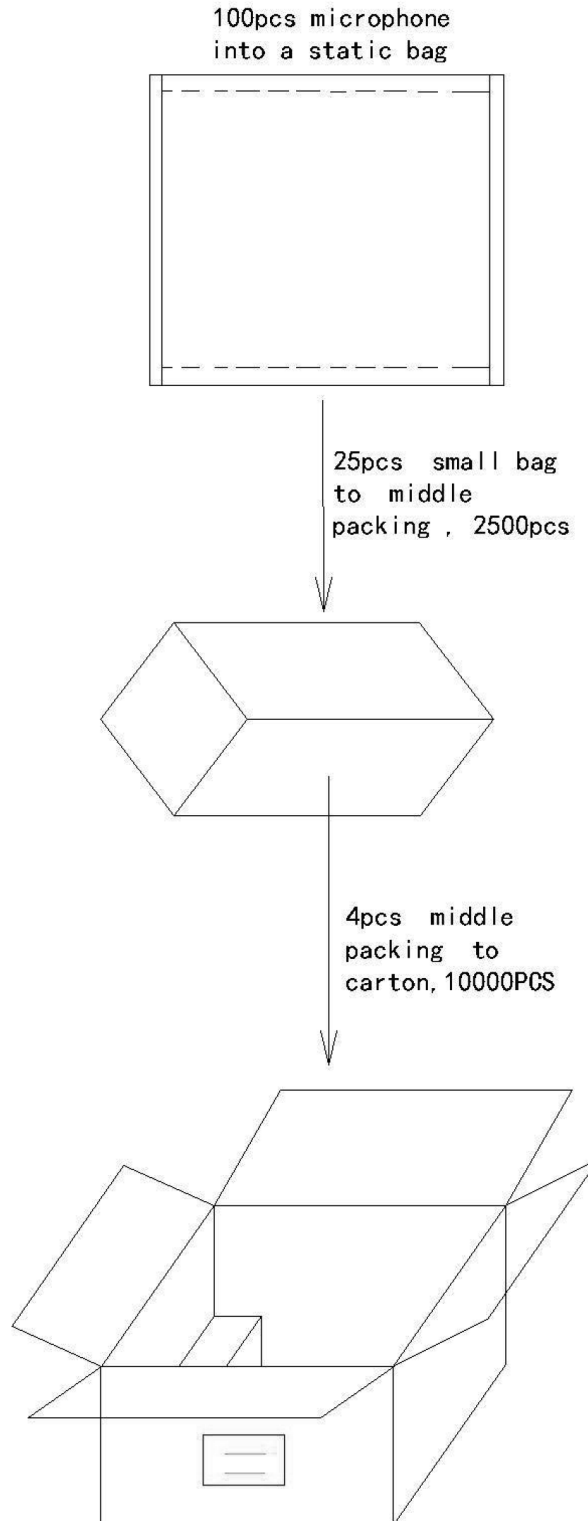


APPLICATION CIRCUIT



PACKAGING (NON-TWISTED WIRE MODELS)

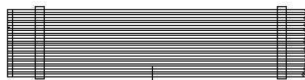
Carton QTY: 10,000 pcs



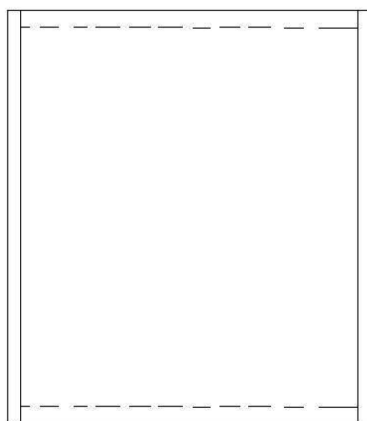
PACKAGING (TWISTED WIRE MODELS)

Carton QTY: 10,000 pcs

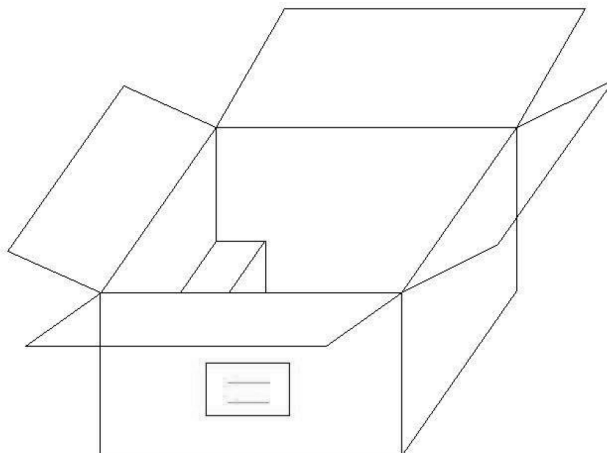
100PCS is 1 bundles,



20 bundles of 1 bags



5pcs bag packing
to carton,
10000PCS



REVISION HISTORY

| rev. | description | date |
|------|------------------------------|------------|
| 1.0 | initial release | 06/07/2019 |
| 1.01 | brand update | 01/23/2020 |
| 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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