

**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		dB
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 $^{\circ}$ 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

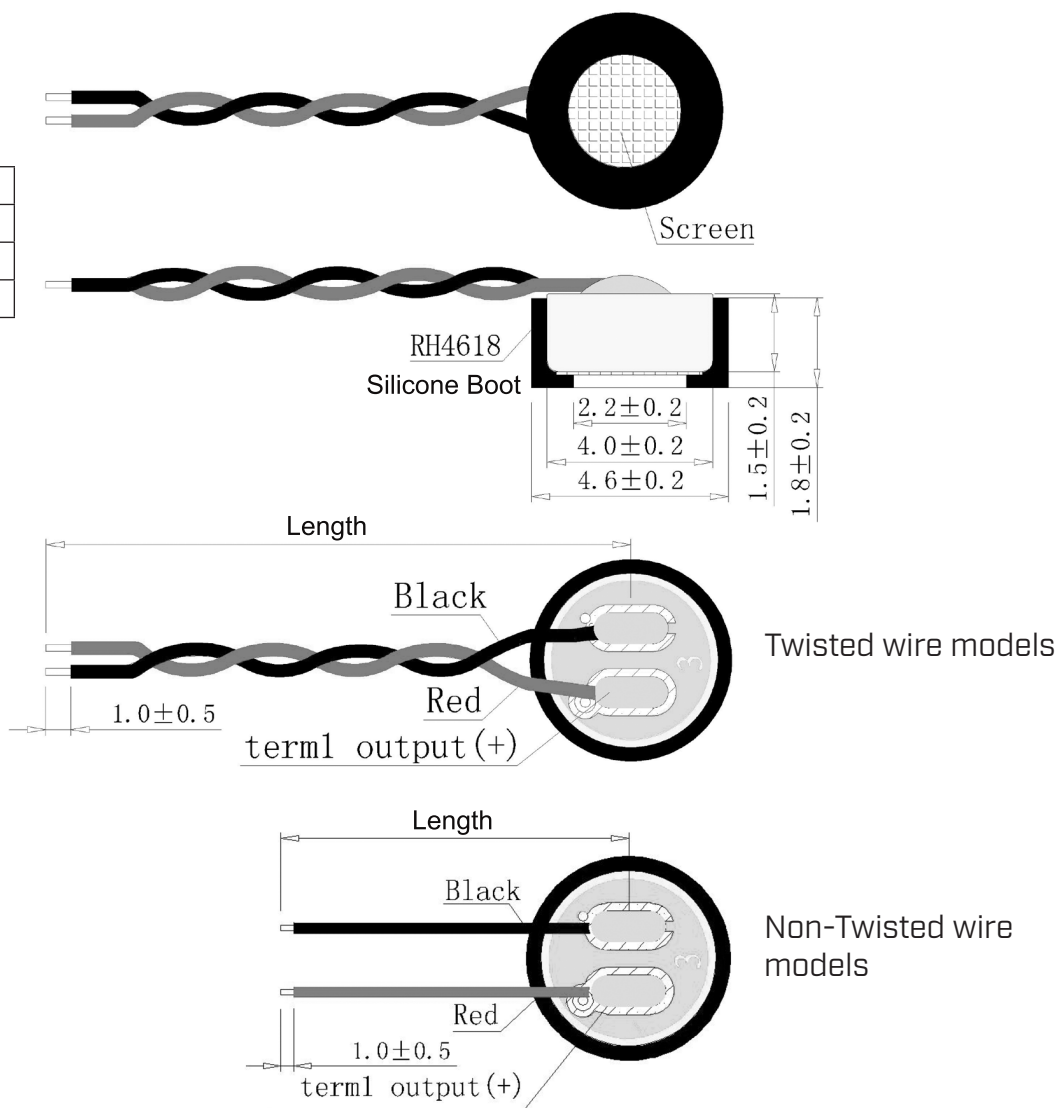
parameter	conditions/description	min	typ	max	units
dimensions	Ø4.6 x 1.8				mm
acoustic port	top				
terminals	wire leads				

## MECHANICAL DRAWING

units: mm  
tolerance: ±0.2 mm

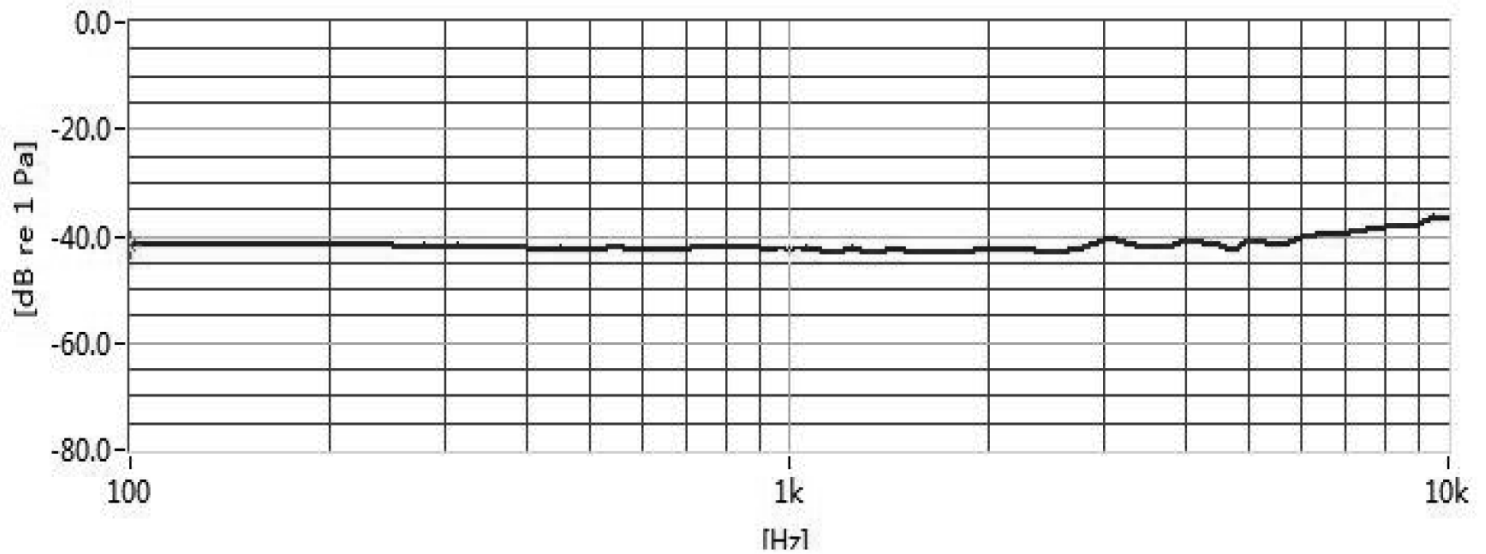
wire: UL 1571, 32 AWG

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

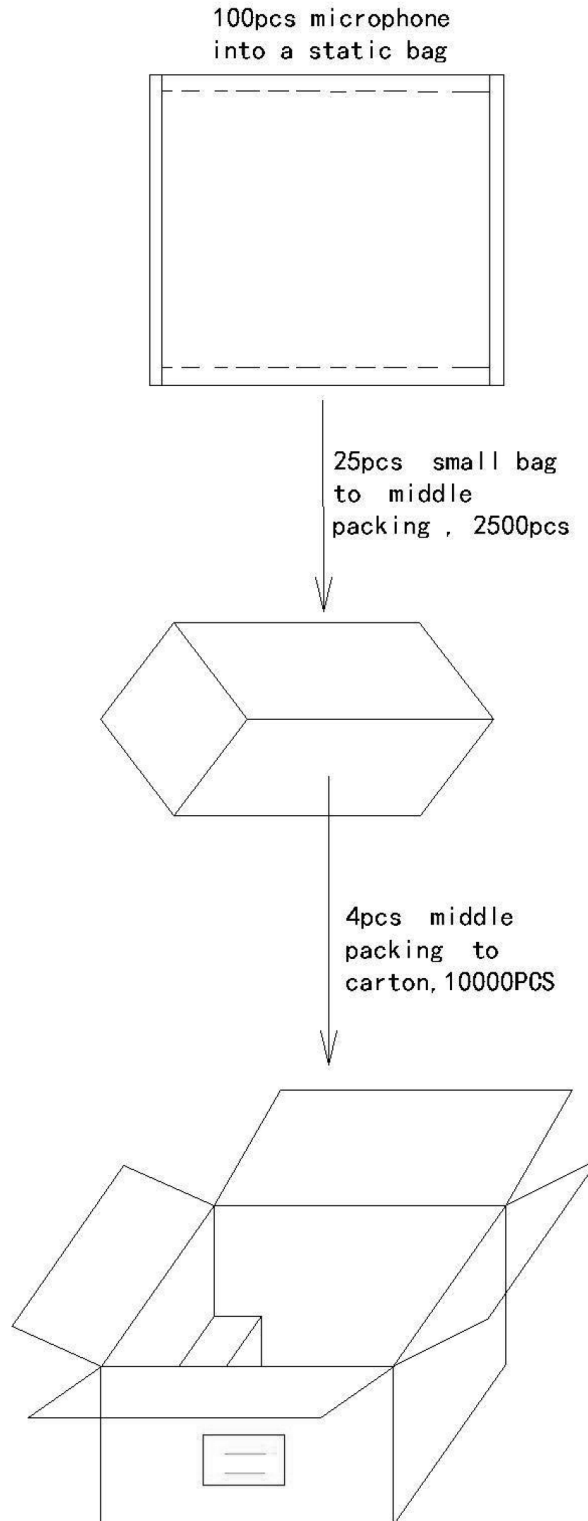


## APPLICATION CIRCUIT



## PACKAGING (NON-TWISTED WIRE MODELS)

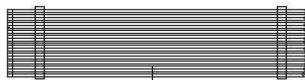
Carton QTY: 10,000 pcs



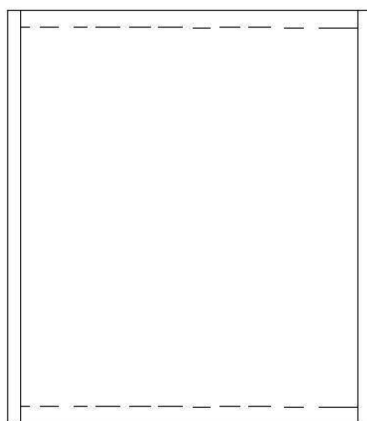
## PACKAGING (TWISTED WIRE MODELS)

Carton QTY: 10,000 pcs

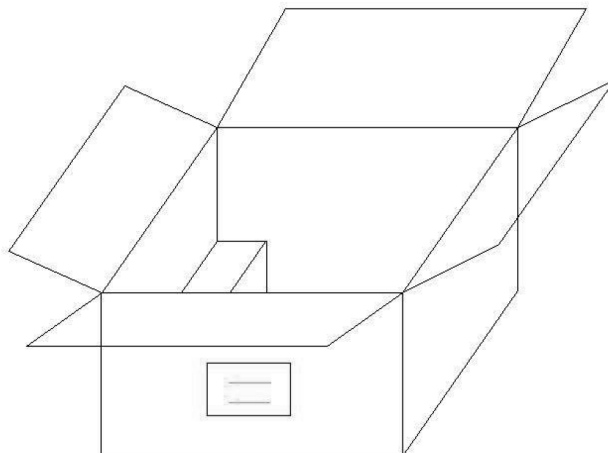
100PCS is 1 bundles,



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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