CUDEVICES

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

FEATURES

- omnidirectional
- low profile
- multiple lead wire lengths available



RoHS

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, RL = 2.2 kΩ			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, Pin = 1 Pa (A-weighted)		60		dBA
total harmonic distortion (THD)	at 94 dB SPL, 1 kHz at 115 dB SPL, 1 kHz			1 3	% %
acoustic overload point (AOP)	at 1 kHz			115	dB SPL
output impedance (Zout)	at 1 kHz			2.2	kΩ

Notes: 1. All specifications measured at 20±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

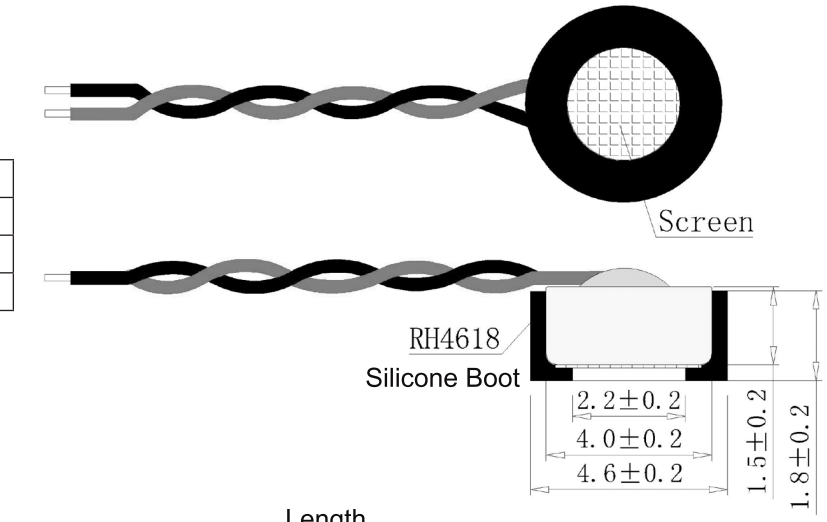
parameter	conditions/description	min	typ	max	units
dimensions	Ø4.6 x 1.8				mm
acoustic port	top				
terminals	wire leads				

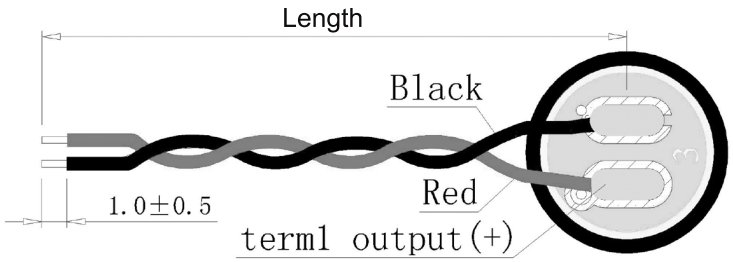
MECHANICAL DRAWING

units: mm
tolerance: ±0.2 mm

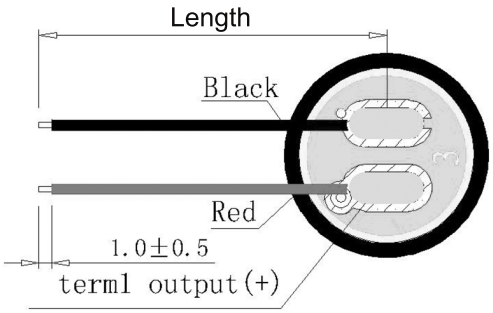
wire: UL 1571, 32 AWG

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





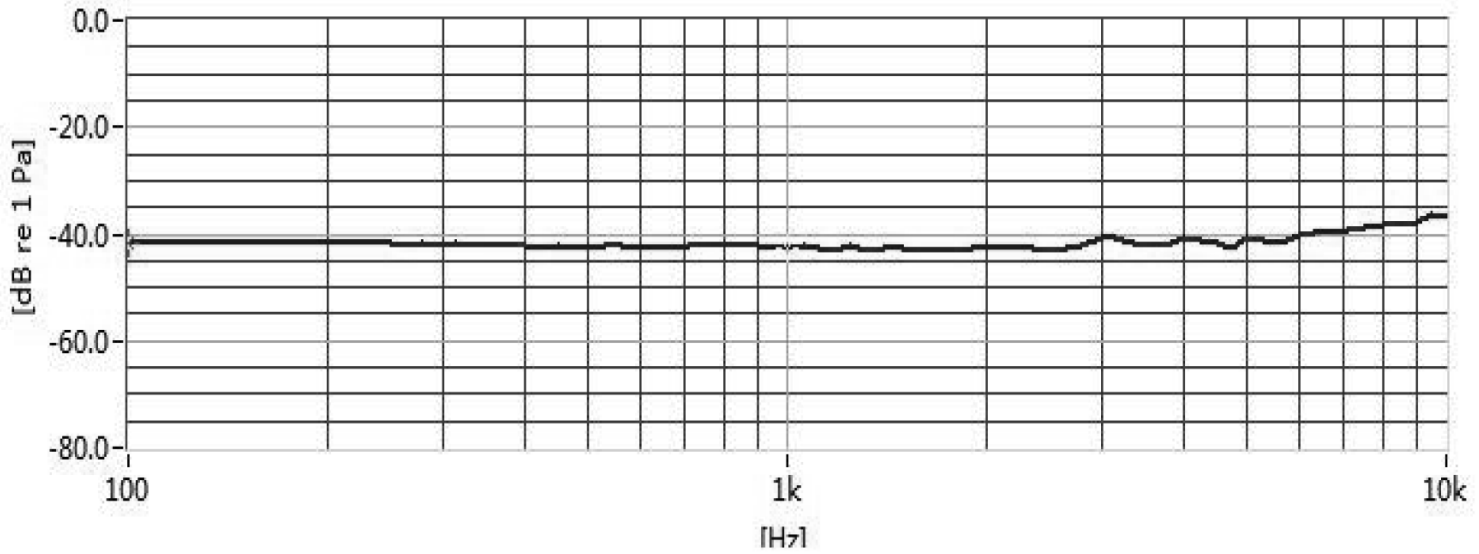
Twisted wire models



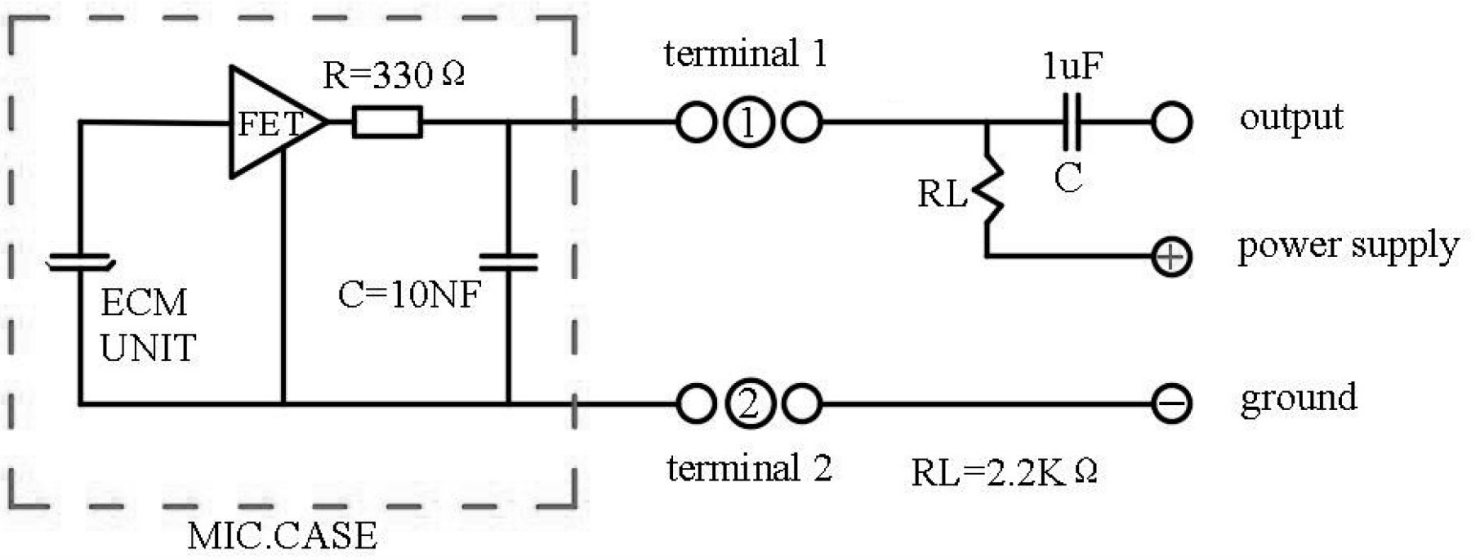
Non-Twisted wire models

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

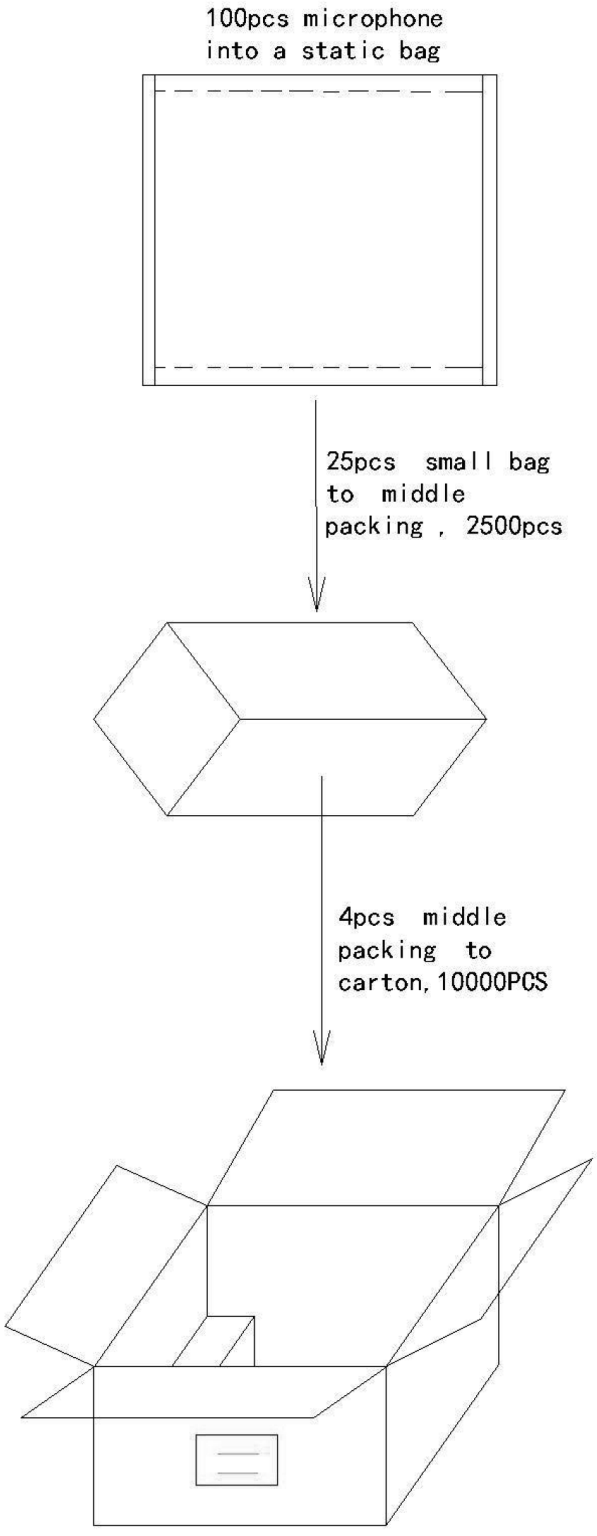


APPLICATION CIRCUIT



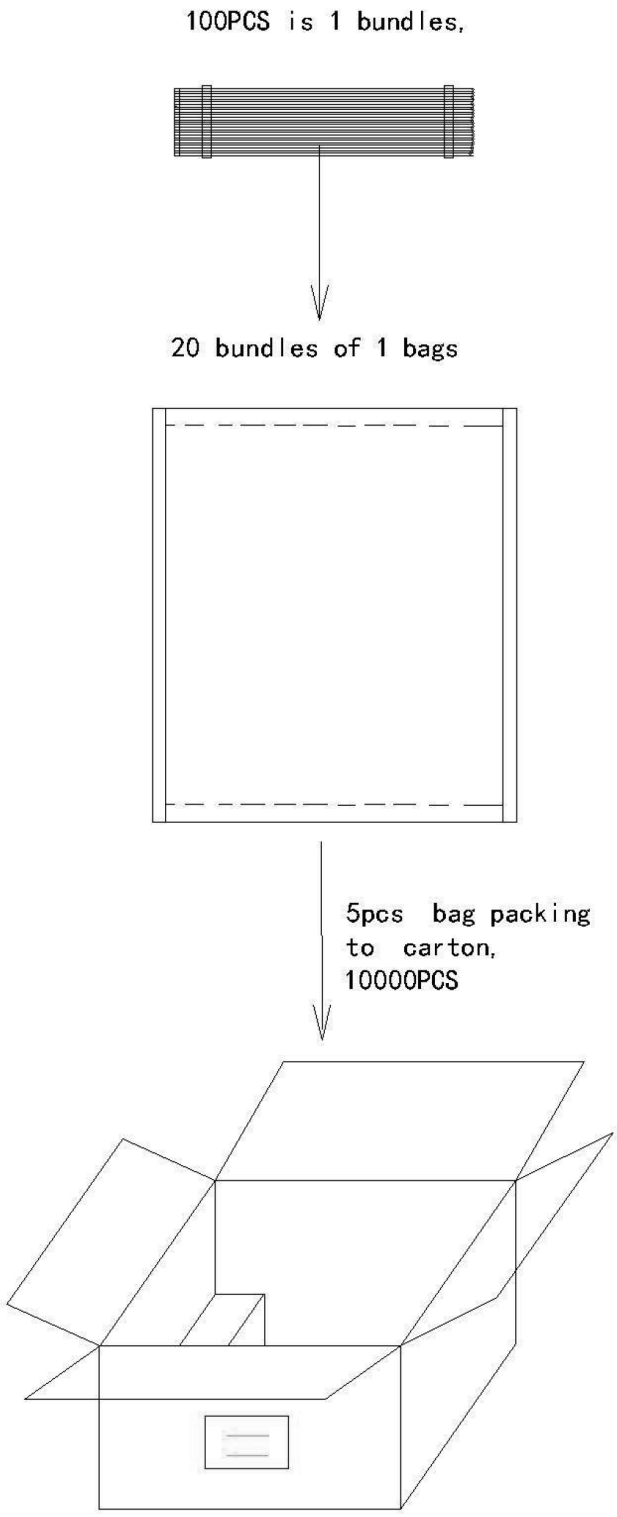
PACKAGING (NON-TWISTED WIRE MODELS)

Carton QTY: 10,000 pcs



PACKAGING (TWISTED WIRE MODELS)

Carton QTY: 10,000 pcs



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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